



NORTHWEST ATLANTIC  
FISHERIES ORGANIZATION

# **Meeting Proceedings of the Commission**

1 September 2017–31 August 2018

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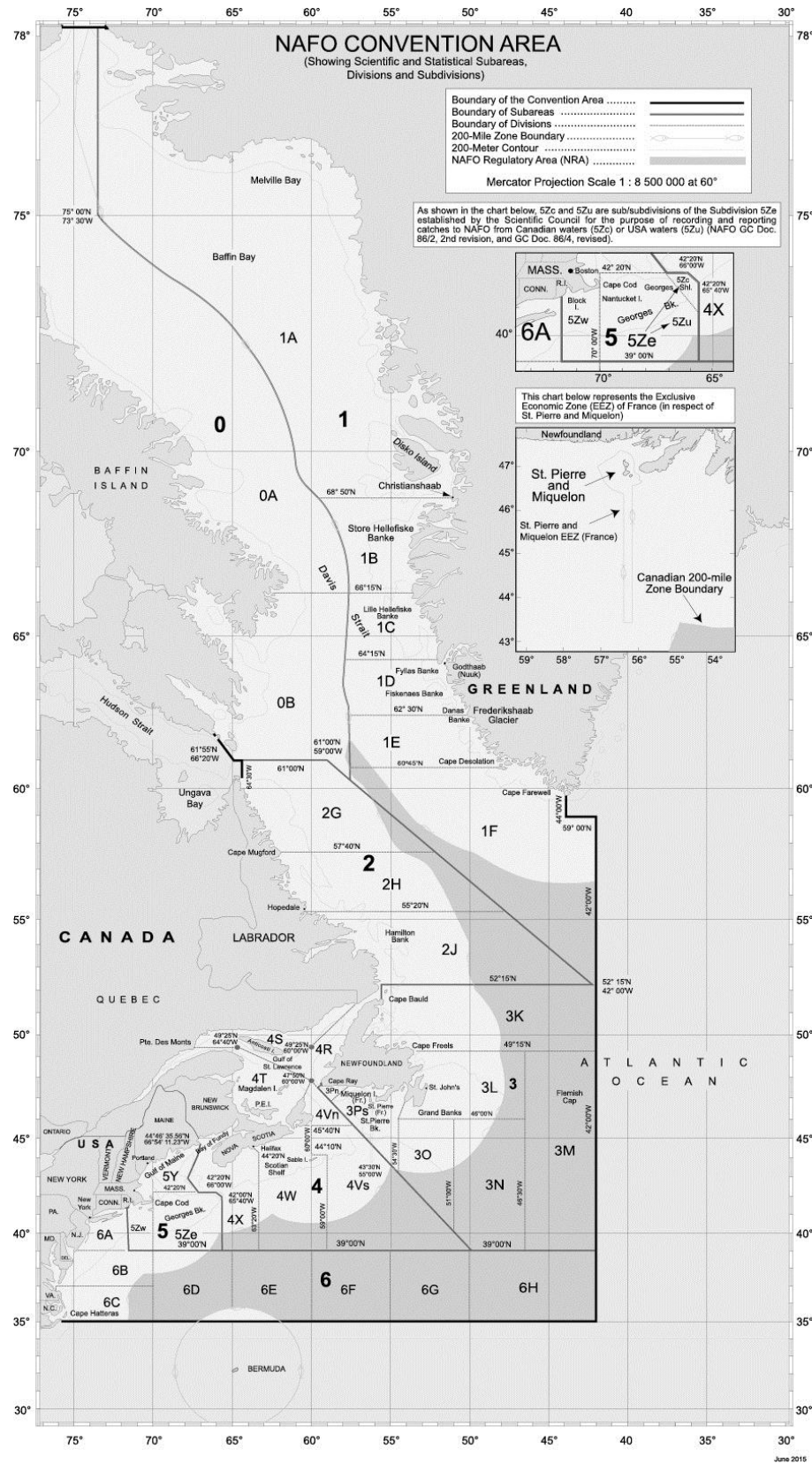


## Foreword

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 1 September 2017 to 31 August 2018. 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)

(1 September 2017 to 31 August 2018)

## 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 and United States of America (USA).

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Northwest Atlantic Fisheries Organization



**Report of the NAFO Joint Commission-Scientific Council Working Group on  
Risk-Based Management Strategies (WG-RBMS) Meeting**

15-17 September 2017  
Montreal, Quebec, Canada

NAFO  
Dartmouth, Nova Scotia, Canada  
2017

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## **Report of the NAFO Joint Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS) Meeting**

15-17 September 2017  
Montreal, Quebec, Canada

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## Report of the NAFO Joint Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS) Meeting

15-17 September 2017  
Montreal, Quebec, Canada

### 1. Opening of the meeting

The meeting was opened at 09:45 hours on 15 September 2017 in the Marriott Château Champlain, Montreal, Canada. The co-Chairs, Jacqueline Perry (Canada) and Carsten Hvingel (Norway) welcomed representatives from Canada, the European Union (Spain, Portugal, Estonia and the European Commission), Japan, the Russian Federation and the United States of America (Annex 2).

### 2. Appointment of Rapporteur

The NAFO Scientific Council Coordinator (NAFO Secretariat) was appointed as rapporteur.

### 3. Adoption of Agenda

The provisional agenda (Annex 3) previously circulated was adopted without any changes.

### 4. Selection of the Management Procedure and associated Harvest Control Rule

The results of the trials of six candidate management procedures (CMPs) specified at the July 2017 Dartmouth RBMS meeting (COM-SC doc 17-06) were reported for base case and robustness trials developed under SCAA and SSM based operating models (COM-SC RBMS-WP 17-17 and COM-SC RBMS-WP 17-18 respectively).

An important advance from the previous meetings was the addition under the SCAA model of a new CMP that combined slope and target based HCRs in the form:

$$TAC_{(y+1)} = \frac{TAC_{(y+1)}^{target} + TAC_{(y+1)}^{slope}}{2}$$

Given the similarity of the results amongst the alternative slope based CMPs variants under consideration, it was agreed that only one slope based variant (S2) should be taken forward. Thus, only three CMPs were included in subsequent trials: one slope, one target and one combination, with two alternative starting TACs (15 000 and 17 500 tonnes).

It was noted that the SSM trials resulted in a very high number of failures relative to the SCAA trials. Japan considered that this could be attributed to the different way that tuning had been applied for the SCAA and SSM models. Tuning parameters for proposed management procedures are chosen to ensure the resource meets pre-specified targets in a pre-specified year for a specified OM (e.g. the median spawning biomass projected equals  $B_{MSY}$  in the specified year). For the SSM, different tuning parameters were used for each OM, while for SCAA the tuning parameters for the base operating model (OM1) were used in all other robustness trials. To investigate this, Canada re-ran the SSM trials using the SSM OM1 tuning parameters for all runs.

It was also observed that in the SSM trials, the alpha parameters for the target-based CMPs were around 0.6, in contrast to being close to 1 for the corresponding SCAA based CMPs. This results in these SSM based CMPs being much more “aggressive”, i.e. tending to result in much higher TAC values. Given this large difference, it is important that each CMP associated with SCAA or SSM OMs be tested against the base OM for the other assessment method for a proper comparison to allow an assessment of the robustness of each CMP.

To apply this cross-check, the CMP settings and survey weightings used for each of the base OMs were run under the alternative base OM. The results of applying the SSM CMP settings to the SCAA base OM trial gave very low B values and very high values for F etc. Likewise, applying the SCAA settings to the base SSM trial gave high B values. Clearly changing the alpha parameter in the CMP originally tuned using SSM base OM gave much better outcomes (the results shown earlier gave a very high number of failures). The consensus was that the CMP settings (tunings) used under the SCAA model should be applied for both base case and robustness trials for both the SCAA and SSM based OMs.

The relative benefit of the three types of CMPs were summarized as follows:

Target superior to Slope

- Lower F values over most of the projection period
- Higher final spawning biomass
- Smoother time trends in TACs
- Lower average annual variation (AAV)

Slope superior to Target:

- Lower F values towards the end of the projection period
- Higher annual average catches
- Lesser ranges for average annual catch and for final exploitable biomass

Combination superior to both Slope and Target?

- AAV lower
- Less trend in catches over earlier years
- In other respects, at least the equal of both other CMP types
- Exceptions to previous bullet: less annual average catch and higher F towards the end of the projection period than for slope-based

It was observed that the target based CMPs gave greater inter-annual variability TAC than either the slope or combination, and lower average TACs in the long term. It was therefore agreed to remove the target based CMPs from further consideration.

Between the two remaining options, the combination CMP gives the greatest stability while the slope CMP gives the greater TAC increase in the early years and so better yields over the first 20 years. The combination CMP gives a marginally faster increase in biomass, but the difference is very small. Looking at the lower 10th percentile, there is a greater risk of catch going down in the short term with the slope based rules.

Looking at the superimposed plots, it was agreed that there was little difference between the combination and slope CMPs for almost all of the criteria. The only real exception was the yield, where it was noted that the slope based rule resulted in greater inter annual variability and a possible dip to low values in the earliest years. It was finally agreed that only the combination rules should go forward.

Regarding starting values, it was observed that the 17 500 tonnes starting TAC value led in many runs to median F going well above  $F_{msy}$  in the early years. This was not the case for the 15 000 tonnes starting TAC. Consensus was that 17 500 tonnes was too high and therefore further runs were conducted with a starting TAC of 16 500 tonnes.

With a starting TAC of 16 500 tonnes, for the base case (OM1) run, median  $F/F_{msy}$  was very close to 1 at its highest point. For some robustness tests,  $F$  goes above  $F_{msy}$ ; however these are relatively extreme scenarios so could be considered to have low plausibility. For some criteria, even a TAC of zero could result in failure for some of the robustness tests (e.g. those with low recruitment). The zero removals comparison proved useful for management decision making as it enabled a comparison of the 'cost of fishing' under specific rules, compared to a most-optimistic population growth scenario possible.

Based on this reasoning, the WG agreed a starting TAC of 16 500 tonnes.

The group considered a number of options for the implementation period to be covered by the management strategy and a potential schedule for update assessments. Suggested options for the length of the implementation period ranged from three to eight years; however most participants considered that a period between six and eight years would be more appropriate. It was noted that an Exceptional Circumstances

protocol would be required to determine under what circumstances the TAC recommendation output by the management procedure should be over-ruled or perhaps the management procedure reviewed earlier than planned. There was consensus that indicators of Exceptional Circumstances should be monitored annually with periodic assessments to allow recruitment to be monitored.

It was agreed that the management procedure should be implemented for an initial period of six years with an “update” assessment after three years. The assessment could be done any year if the circumstances included in the exceptional circumstances protocol occur. (Note that an “update” assessment involves only rerunning the previously agreed base case assessment unchanged except for the addition of data becoming available in subsequent years, whereas a full assessment would include consideration of alternative assessment assumptions and methods as well.)

## **5. Review of Recommendations from this meeting and from previous 2017 meetings to the Commission and Scientific Council.**

Recommendations were forwarded to the Commission for consideration and adoption at its Annual Meeting in September (COM-SC Doc. 17-10). The recommendations below are substantially the same with minor editorial clarifications.

### **i) Management procedure**

WG-RBMS recommends that the Commission should implement a model-free management procedure (MP), i.e. the MP does not include any assessment model, but instead calculates TACs to be implemented in the future directly from the biomass indices provided each year by five different surveys.

WG-RBMS further recommends that the harvest control rule (HCR) component of this MP should be a combination of a “target based” and a “slope based” rule. The “target-based” rule increases or decreases the TAC depending on whether an biomass index averaged over the 5 available surveys is above or below a target level, taken here to be a specified multiple ( $\alpha$ ) of its immediate past (in this case 5 years average) level. A “slope-based” rule considers the recent trend in this averaged biomass index, and increases or decreases the TAC depending on whether the overall trend is up or down.

The full formulation of the MP is set out in Annex I. A number control parameter values (such as  $\alpha$  above) were selected so that the MP achieves an appropriate trade-off amongst the various objectives for the fishery and resource that were pre-specified by WG-RBMS (NAFO/FC-SC Doc. 17-03) to be desirable. The values recommended for these control parameters are set out in Tables 1 and 2 of Annex I. These selections include that the TAC for the first year (2018) of application of the MP will be 16 500 tonnes, and that TACs may change by no more than 10% (either up or down) from one year to the next.

### **ii) Implementation**

The management procedure should be implemented initially for six years. It should be annually monitored by the Scientific Council to determine whether Exceptional Circumstances are occurring. Scientific Council should perform an “update assessment” after three years. If either the annual monitoring or the update assessment indicates that Exceptional Circumstances are occurring, the Exceptional Circumstances protocol will provide guidance on what steps should be taken.

### **iii) Exceptional Circumstances**

The Exceptional Circumstances protocol should consist of two elements: 1) a technical description that identifies when Exceptional Circumstances have occurred, and 2) what actions should then be taken.

To support the development of an Exceptional Circumstances protocol by WG-RBMS, the Commission should request the Scientific Council at its June 2018 meeting to develop criteria for the identification of Exceptional Circumstances, taking account *inter alia* of the following issues raised by the Working Group:

- Clear determination of how missing data points required for input to the HCR should be filled and specification of the number of missing surveys that would trigger Exceptional Circumstances.

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- Note elements that are based on data that are available to SC as part of its annual monitoring (survey results) as well as others that are based on less frequent update assessments, e.g. estimates recruitment, biomass or fishing mortality.
- Identify the indices that the MSE indicated to be more important to monitor in regard to the determination of Exceptional Circumstances, e.g. the factors that were indicated to have greater influence in the robustness trials. This links to the consideration of a suite of primary and secondary indicators.
- Consider an appropriate balance between specificity vs flexibility in defining Exceptional Circumstances.
- The robustness of the Exceptional Circumstances protocol should ensure that their application is triggered only when necessary.
- Evaluation of recruitment signals should be a key consideration, given some concern within the Working Group over poorer performance of the proposed rule under a low recruitment scenario.

WG-RBMS will meet in August 2018 to finalize the Exceptional Circumstances protocol.

## **6. Other Matters**

The Working Group discussed timing of the 3M cod benchmark assessment and subsequent MSE. It was noted that the 3M cod MSE would be less pressurized than that for Greenland halibut as it is scheduled to take place over two years, rather than only one year. The completion of the benchmark assessment in April 2018 will be the starting point to development of the new 3M Cod this MSE.

## **7. Adoption of Report**

The recommendations to the Commission were adopted as COM-SC WP 17-03 in order that the Commission should have the opportunity to consider WG-RBMS advice during the annual meeting.

The adoption of the full report was deferred to be completed via correspondence.

## **8. Adjournment**

The meeting was adjourned at 17:00 on 17 September 2017, one day later than scheduled.

## Annex I. A detailed technical specification of the Management Procedure (MP) recommended

As indicated in the main text of the report, the MP recommended is a combination of a target- and a slope-based approach. This Annex describes each of these approaches in turn, and then how the outputs from the two are combined to provide the final TAC recommendation.

### *Target based (t)*

The basic harvest control rule (HCR) is:

$$TAC_{y+1} = TAC_y \left( 1 + \gamma(J_y - 1) \right) \quad (1)$$

where  $TAC_y$  is the TAC recommended for year  $y$ ,  $\gamma$  is the “response strength” tuning parameter,  $J_y$  is a composite measure of the immediate past level in the abundance indices ( $I_y^i$ ) that are available to use for calculations for year  $y$ ; for this base case CMP five series have been used, with  $i = 1, 2, 3, 4$  and  $5$  corresponding respectively to Canada Fall 2J3K, EU 3M 0-1400m, Canada Spring 3LNO, EU 3NO and Canada Fall 3LNO:

$$J_y = \sum_{i=1}^5 \frac{1}{(\sigma^i)^2} \frac{J_{current}^i}{J_{target}^i} / \sum_{i=1}^5 \frac{1}{(\sigma^i)^2} \quad (2)$$

with  $(\sigma^i)^2$  being the estimated variance for index  $i$  (estimated in the SCAA model fitting procedure, see **Table 1**)

$$J_{current}^i = \frac{1}{q} \sum_{y'=y-q}^{y-1} I_{y'}^i \quad (3)$$

$$J_{target}^i = \alpha \frac{1}{5} \sum_{y'=2011}^{2015} I_{y'}^i \quad (\text{where } \alpha \text{ is a control/tuning parameter for the MP}) \quad (4)$$

Note the assumption that when a TAC is set in year  $y$  for year  $y+1$ , indices will not at that time yet be available for the current year  $y$ .

### *Slope based (s)*

The basic harvest control rule (HCR) is:

$$TAC_{y+1} = TAC_y [1 + \lambda_{up/down} (s_y - X)] \quad (5)$$

where  $\lambda_{up/down}$  and  $X$  are tuning parameters,  $s_y$  is a measure of the immediate past trend in the survey-based abundance indices, computed by linearly regressing  $\ln I_y^i$  vs year  $y'$  for  $y' = y - 5$  to  $y' = y - 1$ , for each of the five surveys considered, with

$$s_y = \sum_{i=1}^5 \frac{1}{(\sigma^i)^2} s_y / \sum_{i=1}^5 \frac{1}{(\sigma^i)^2} \quad (6)$$

with the standard error of the residuals of the observed compared to model-predicted logarithm of survey index  $i$  ( $\sigma^i$ ) estimated in the SCAA base case operating model.

### *Combination Target and Slope based (s+t)*

For the target and slope based combination:

- 1)  $TAC_{y+1}^{target}$  is computed from equation (1),
- 2)  $TAC_{y+1}^{slope}$  is computed from equation (5), and
- 3)  $TAC_{y+1} = (TAC_{y+1}^{target} + TAC_{y+1}^{slope}) / 2$

Finally, constraints on the maximum allowable annual change in TAC are applied, viz.:

$$\text{if } TAC_{y+1} > TAC_y (1 + \Delta_{up}) \text{ then } TAC_{y+1} = TAC_y (1 + \Delta_{up}) \quad (7)$$

and

$$\text{if } TAC_{y+1} < TAC_y(1 - \Delta_{down}) \text{ then } TAC_{y+1} = TAC_y(1 - \Delta_{down}) \quad (8)$$

The control parameters for the recommended MP: CMP16.5\_s+t are shown in Table 2.

**Table 1.** The weights given to each survey in obtaining composite indices of abundance are proportional to the inverse squared values of the survey error standard deviations  $\sigma^i$  listed below.

Survey	$\sigma^i$
Canada Fall 2J3K	0.22
EU 3M 0-1400m	0.21
Canada Spring 3LNO	0.49
EU 3NO	0.38
Canada Fall 3LNO	0.26

**Table 2.** Control parameter values for the MPs recommended. The parameters  $\alpha$  and  $X$  were adjusted to achieve a median biomass equal to  $B_{msy}$  for the exploitable component of the resource biomass in 2037.

$TAC_{2018}$	16 500 tonnes
$\gamma$	0.15
$q$	3
$\alpha$	0.972
$\lambda_{up}$	1.00
$\lambda_{down}$	2.00
$X$	-0.0056
$\Delta_{up}$	0.10
$\Delta_{down}$	0.10

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### **Annex 3. Agenda**

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2. Appointment of Rapporteur
3. Adoption of Agenda
4. Selection of the Management Strategy and Harvest Control Rule for MSE application to the 2+3KLMNO Greenland halibut among the candidate procedures and strategies
5. Review of Recommendations from this meeting and from previous 2017 meetings to the Commission and Scientific Council
6. Other matters
7. Adoption of report
8. Adjournment

Northwest Atlantic Fisheries Organization



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

39<sup>th</sup> Annual Meeting of NAFO  
18-22 September 2017  
Montréal, Québec, Canada

NAFO  
Dartmouth, Nova Scotia, Canada  
2017

## Report of the Commission and its Subsidiary Bodies STACTIC and STACFAD

39<sup>th</sup> Annual Meeting of NAFO, 18-22 September 2017  
Montréal, Québec, Canada

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## **PART I. Report of the Commission**

39<sup>th</sup> Annual Meeting of NAFO, 18-22 September 2017  
Montréal, Québec, Canada

### **I. Opening Procedure**

#### **1. Opening by the interim Chairperson, Stéphane Artano (France-SPM)**

The 39<sup>th</sup> Annual Meeting of NAFO was convened on Monday, 18 September 2017 at 10:10 hrs at the Marriott Château Champlain in Montréal, Québec, Canada with over 180 delegates present from 11 NAFO Contracting Parties (Annex 1). The NAFO interim President and interim Chairperson of the Commission, Stéphane Artano (France-SPM), welcomed all delegates to the Meeting (Annex 2).

The Chair invited Canada, as the host of the 39<sup>th</sup> NAFO Annual Meeting, to provide its opening statement verbally to Contracting Parties (Annex 3). Remaining opening statements from Contracting Parties were deferred at the opening session, but were provided in writing for inclusion in the report. Opening statements from Denmark (in respect of the Faroe Islands and Greenland), European Union, Japan, Russian Federation, Ukraine and the United States of America (USA) are attached (Annexes 4-9).

#### **2. Appointment of Rapporteur**

The NAFO Secretariat, Fred Kingston (Executive Secretary) and Jana Aker (Fisheries Information Administrator) were appointed as co-Rapporteurs. The summary of adopted working papers is available in Appendix I.

#### **3. Adoption of Agenda**

The agenda was adopted as circulated (Annex 10).

#### **4. Admission of Observers**

In accordance with the NAFO Rules for Observers and in advance of the meeting, the Executive Secretary formally invited the following States and intergovernmental organizations (IGOs) to attend:

- Government of Bermuda
- Convention on Biological Diversity (CBD) Secretariat
- Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)
- Permanent Commission for the South Pacific (CPPS)
- Food and Agriculture Organization of the United Nations (FAO)
- General Fisheries Commission for the Mediterranean (GFCM)
- International Commission for the Conservation of Atlantic Tunas (ICCAT)
- International Council for the Exploration of the Seas (ICES)
- International Monitoring, Control and Surveillance (IMCS) Network
- North Atlantic Marine Mammal Commission (NAMMCO)
- North Atlantic Salmon Conservation Organization (NASCO)
- North East Atlantic Fisheries Commission (NEAFC)
- North Pacific Anadromous Fish Commission (NPAFC)
- North Pacific Fisheries Commission (NPFC)
- North Pacific Marine Science Organization (PICES)



- Sargasso Sea Commission
- South East Atlantic Fisheries Organization (SEAFO)
- South Pacific Regional Fisheries Management Organisation (SPRFMO)
- South Indian Ocean Fisheries Agreement (SIOFA)
- United Nations - Division for Ocean Affairs and the Law of the Sea (UN-DOALOS)
- United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC), and
- Western Central Atlantic Fishery Commission (WECAFC).

The IGOs that attended were:

- Secretariat of the Convention on Biological Diversity (CBD) (Annex 11)
- Food and Agriculture Organization (FAO)
- Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) – represented by the USA, and
- South East Atlantic Fisheries Organisation (SEAFO) – represented by the European Union.

Non-governmental organizations (NGOs) accredited with NAFO Observer Status that attended the 39<sup>th</sup> Annual Meeting were:

- Conseil de Bande de la Nation Innue de Nutashkuan,
- Dalhousie University - Environment Information: Use & Influence Research Initiative (EIUI) (Opening Statement – Annex 12),
- Ecology Action Centre (EAC) (Opening Statement – Annex 13), and
- Sierra Club of Canada (SCC).

## 5. Publicity

The meeting agreed that no public statements would be made until after the conclusion of the meeting when a press release would be prepared by the Executive Secretary in collaboration 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 2016 Annual Meeting and is currently comprised of twelve (12) 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, and United States of America (USA).

### 7. Implementation of the Amendments to the NAFO Convention

#### a. Update of the NAFO Rules of Procedure, Financial Regulations and Staff Rules

This item was addressed by STACFAD (Part III, agenda item 10.a).

#### b. Establishment of a list of experts to serve as panelists under the NAFO Dispute Settlement provisions

The Executive Secretary reminded Contracting Parties about the correspondence that was circulated in NAFO 17-135 requesting that they nominate a list of experts to serve as possible panelists in a NAFO dispute settlement panel established under the dispute settlement provisions of the NAFO Convention (Art. XV and

Annex II). Contracting Parties nominated candidates throughout the meeting, and the latest list of candidates is presented in COM WP 17-28 (Rev. 3). This list will be maintained and updated on the NAFO Members Pages.

## **8. Administrative and Activity Report**

The Administrative Report and Financial Statements (COM Doc. 17-06) was referred to STACFAD.

## **9. NAFO Headquarters Agreement**

Canada reported that since the Headquarters agreement was endorsed in 2009, it has established a new domestic approach to treaties that includes certain safeguards. Canada has since proposed revisions to the agreement that reflect both current domestic practices and are consistent with the Convention on the Privileges and Immunities of the United Nations. Canada will continue to work with NAFO, via the Secretariat, to conclude a Headquarters Agreement.

The European Union expressed its hope that the upcoming relocation of the NAFO Headquarters will not have a negative impact on the continuity of the activities of the Secretariat.

## **10. 2017 Performance Review**

The interim Chair presented the Report of the NAFO Informal Working Group on Performance Review: Review of the Terms of Reference meeting, 20 June 2017 in COM WP 17-02. The interim Chair highlighted the proposed amendments to the Terms of Reference agreed last year, indicated in Annex 3 of the working paper, and invited Contracting Parties to provide comments on the proposed revisions. Contracting Parties provided comments and suggestions and the final version of the revised Terms of Reference were presented in COM WP 17-02 (Revised) and adopted by Contracting Parties.

It was **agreed** that:

- **The report and recommendations of the NAFO Informal Working Group on Performance Review: Review of the Terms of Reference, including the revised Terms of Reference presented in COM WP 17-02 (Revised), be adopted.**

## **11. Meeting Report and Recommendations of the NAFO Working Group on Improving Efficiency of NAFO Working Group Process**

The Executive Secretary presented the latest report from the NAFO Working Group on Improving Efficiency of NAFO Working Group Process (COM-SC Doc. 17-05) and highlighted the recommendations from the working group. The recommendations included setting aside 3 two-week periods during the NAFO year for possible intersessional meetings. It was explained that NAFO was not obliged to hold meetings only during these two-week periods, but the setting aside of these periods may help in the scheduling of intersessional meetings. Also recommended, was a change to the Rules of Procedure to clarify that STACTIC can receive input from, or provide input to, the Scientific Council and other NAFO subsidiary bodies, which was referred to STACTIC and STACFAD. Contracting Parties reviewed and adopted the report and recommendations with the understanding that the proposed two-week periods for the 2018 meetings were flexible, and that working group meetings will be scheduled in consultation with the NAFO Secretariat.

It was **agreed** that:

- **The report and recommendations of the NAFO Working Group on Improving Efficiency of NAFO Working Group Process (COM-SC Doc. 17-05) be adopted.**

## **12. Guidance to STACFAD necessary for them to complete their work**

No additional issues were raised. The Chair of STACFAD, Deirdre Warner-Kramer (USA), was invited to prepare a report for the closing session.

## **13. Guidance to STACTIC necessary for them to complete their work**

The Chair of STACTIC, Judy Dwyer (Canada), presented the report of the STACTIC at its intersessional meeting in May 2017 (FC Doc. 17-02). The Chair also highlighted proposals from the Editorial Drafting Group for harmonization within the NAFO CEM of measures adopted in 2016, and reported that some of the proposals adopted in 2016 have resulted in more clarification in interpreting areas of the NAFO CEM. The STACTIC Chair reported that STACTIC would continue deliberations on vessels that demonstrate repeat non-compliance of serious infringements in the NAFO Regulatory Area, revisions to the compliance review process, and revisions to the Joint Inspection and Surveillance Scheme and the Port State Control chapters of the NAFO CEM.

No additional issues were raised. The Chair of STACTIC was invited to prepare a report for the closing session.

# **III. Coordination of External Affairs**

## **14. Report of Executive Secretary on External Meetings**

The Executive Secretary referred to pages 5 to 7 of the Administrative Report (COM Doc. 17-06) and highlighted a few of the external meetings he participated in since the last Annual Meeting, including:

- The Centro de Investigaciones Pesqueras (CIP) in Havana, Cuba, 27 September 2016
- The offices of the Ecology Action Centre (EAC) in Halifax, 12 January 2017
- Areas Beyond National Jurisdiction (ABNJ) Deep Seas Project Steering Committee meeting, Rome, Italy, 7-9 Feb. 2017
- The Third and Fourth Sessions of the UN Biodiversity Beyond National Jurisdiction (BBNJ) Preparatory Committee in New York, New York, United States of America, 3-5 April & 17-19 July 2017; and
- The FAO First Meeting of the Parties to the 2009 FAO Agreement on Port State Measures, Oslo, Norway, 29-31 May 2017.

Other members of the Secretariat also participated in:

- Convention on Biological Diversity Meeting, Seoul, Korea, 26-29 September 2016
- The FAO BlueBRIDGE Global Record of Stocks and Fisheries (GRSF) meeting, in Rome, Italy, 28 February- 2 March 2017
- The 26<sup>th</sup> Meeting of the CWP Fisheries Subject Group in Copenhagen, Denmark, 19-22 June 2017
- The 10th Session of the FIRMS Steering Committee Meeting in Copenhagen, Denmark, 21-24 June 2017.

The Executive Secretary also presented COM WP 17-07 which highlighted the results of this year's meetings of the United Nations Preparatory Committee to study issues relating to the conservation and sustainable use of marine Biological Diversity Beyond Areas of National Jurisdiction (BBNJ). Contracting Parties thanked the Executive Secretary for the report.

## 15. International Relations

### a. Appointment of NAFO Members as Observers to External Meetings

At the last Annual Meeting (September 2016), it was agreed that the following NAFO Contracting Parties would represent NAFO at meetings of the following organizations during 2016/2017:

- Canada at NPFC;
- Denmark (in respect of the Faroe Islands and Greenland) at NEAFC;
- EU at ICCAT and SIOFA;
- Norway at SEAFO and NAAMCO;
- USA at CCAMLR, NPAFC and NASCO.

The reports by these Observers were presented (COM WP 17-16 to 17-17, and COM WPs 17-21 to 17-27). The interim Chair reflected on the importance of external relations, since the work of relevant organizations in other areas can impact the work of NAFO. The same Contracting Parties agreed to represent NAFO at the same meetings for 2018, with the exception that Canada will represent NAFO at NASCO in place of the United States.

### b. Areas Beyond National Jurisdiction (ABNJ) Deep-Seas Project

In 2013, NAFO was invited to be a partner in the FAO-Global Environment Facility (GEF) Project “*Sustainable fisheries management and biodiversity conservation of deep-sea living marine resources and ecosystems in the Areas Beyond National Jurisdiction (ABNJ) Deep Seas Project*”. NAFO’s participation will be guided by the activities table which was jointly prepared by FAO and the NAFO Secretariat and which may be modified as the project progresses. The NAFO support to the project would be an estimated in-kind contribution over the period of 2014-2018. This in-kind contribution represents staff time for activities and meeting expenses for work on deep sea fisheries, as well as administrative expenses for NAFO’s current core activities and operations which are of direct relevance to deep sea fisheries. Almost all the costs that are being implemented or planned are part of the regular work of NAFO.

The interim Chair invited Nicolas Gutierrez, a representative of the FAO, to present the latest project update from the ABNJ project (COM WP 17-18). Contracting Parties thanked Nicolas for the presentation of the work being done in the ABNJ Deep Seas Project.

### c. Relations with other International Organizations

At the last Annual Meeting, it was agreed that the NAFO Secretariat would maintain a dialogue with relevant organizations and explore mechanisms to improve the exchange of information. The Executive Secretary presented a progress report in COM WP 17-06. Contracting Parties thanked the Executive Secretary for the report, and invited the Executive Secretary to report on further developments in this area at the next Annual Meeting. The European Union added that it would like to see the Executive Secretary, in his contacts, include issues related to impact assessment methodologies but there was no decision taken by Contracting Parties to expand the current mandate in this way.

A representative of the Secretariat of the Convention on Biological Diversity (CBD) highlighted its efforts to reach out to regional organizations, including bringing together regional fisheries bodies and regional seas organizations through the Sustainable Ocean Initiative Global Dialogue, of which the next is scheduled in April 2018 in Seoul, Republic of Korea (Annex 11).

### d. NAFO expert to the NAMMCO Performance Review

It was agreed that at this Annual Meeting, NAFO would nominate an expert for NAMMCO’s proposed upcoming performance review, and the panel selection criteria are outlined in COM WP 17-08. The United States put

forward Mr. Russell Smith, United States of America, to serve as the NAFO expert. Contracting Parties were in full support of this nomination.

It was **agreed** that:

- **Mr. Russell Smith would serve as the NAFO expert to the NAMMCO Performance Review.**

## **16. Oil and Gas Activities in the NAFO Regulatory Area – Information Exchange Arrangement**

The Executive Secretary presented COM WP 17-05 on oil and gas activities in the NAFO Regulatory Area (NRA) and activities under the proposed information exchange arrangements, including an update on the use of the new provision to the CEM that were adopted at the 2016 Annual Meeting to allow a five-year monthly snapshot of fishing activity in the NRA on the basis of VMS data. The Executive Secretary also mentioned that, since the last Annual Meeting, Canada has sent four notifications to the NAFO Secretariat about petroleum-related activities on Canada's continental shelf in the NRA for onward transmission to Contracting Parties. The interim Chair thanked the Executive Secretary and opened the floor for comments. The European Union noted that it would be useful to have more information from Canada on how they ensure that oil and gas activities do not negatively impact marine ecosystems in the NRA. Canada agreed to provide additional information, noting its substantial review process and protocols in place for oil and gas exploration activities.

## **IV. Scientific Advice**

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

The Chair of Scientific Council, Katherine Sosebee (USA), presented this year's advice of the Scientific Council. The scientific advice on fish stocks and on other topics were mainly formulated during the June 2017 Scientific Council meeting (SCS Doc. 17-16). The multi-year advice provided in the previous year was also reviewed or updated at that meeting. The specific advice is outlined below.

#### **a. Scientific advice on fish stocks**

- **Northern shrimp in Divisions 3LNO:** Preliminary information on this stock indicates no change in current levels. The stocks will be assessed at the NIPAG meeting taking place from 27 September to 04 October 2017. If there are any updates from this meeting, the Secretariat will inform the Commission.
- **Northern shrimp in Division 3M:** Preliminary information on this stock indicates no change in current levels. The stocks will be assessed at the NIPAG meeting taking place from 27 September to 04 October 2017. If there are any updates from this meeting, the Secretariat will inform the Commission.
- **Cod in Divisions 3NO:** Advice deferred until 2018. Recommendation is that there is nothing to indicate a change in the advice from 2015. A full assessment will be conducted in 2018.
- **Cod in Division 3M:** TAC be no more than the catch corresponding to  $\frac{3}{4} F_{lim}$ , i.e. 8182 tonnes in 2018.
- **Redfish in Division 3M:** TACs should be set at values closer to the lower end of the range 7 000 to 12 000 tonnes.
- **American plaice in Division 3M:** There should be no directed fishery on American plaice in Div. 3M in 2018, 2019, and 2020.
- **Witch flounder in Divisions 3NO:** the exploitation rate in 2018 and 2019 should not exceed 2016 levels and therefore catch should not exceed 1116 tonnes and 1175 tonnes in 2018 and 2019 respectively.
- **White hake in Divisions 3NO:** Given the absence of strong recruitment, catches of white hake in 3NO should not increase.

- **Greenland halibut in Divisions 2+3KLMNO:** The advice for Greenland halibut was presented under agenda item 19.
- **Golden Redfish in Division 3M:** deferred until 2018.

Monitoring of stocks for which multiyear advice was provided in 2015 or 2016

- **Cod in Divisions 3NO:** No directed fishing on cod in 2016 to 2018 to allow for continued stock rebuilding.
- **American plaice in Divisions 3LNO:** there should be no directed fishing on American plaice in Div. 3LNO in 2017 and 2018.
- **Yellowtail flounder in Divisions 3LNO:** Based on recent catch levels, fishing mortality up to 85%  $F_{msy}$  corresponding to a catch of 26300 tonnes in 2016, 23600 tonnes in 2017 and 22000 tonnes in 2018 has low risk (5%) of exceeding  $F_{lim}$ , and is projected to maintain the stock well above  $B_{msy}$
- **Capelin in Divisions 3NO:** No directed fishery.
- **Redfish in Division 3O:** Scientific Council is unable to advise on an appropriate TAC for 2017, 2018 and 2019
- **Thorny skate in Divisions 3LNO:** The stock has shown little improvement at recent catch levels (approximately 4 700 tonnes, 2011 - 2015), therefore Scientific Council advises no increase in catches.
- **Witch flounder in Divisions 2J+3KL:** No directed fishery to allow for stock rebuilding. By-catches of witch flounder in other fisheries should be kept at the lowest possible level.
- **Northern short-finned squid in Subareas 3+4:** TAC of no more than 34 000 tonnes/yr
- **Splendid alfonsino in Subarea 6:** Due to lack of abundance or exploitation data, no reliable stock assessment can be conducted. To prevent extirpation of entire subpopulations of alfonsino, fishing should not be allowed to expand above current levels on Kükenthal Peak (Div. 6G, part of the Corner Rise seamount chain) unless it can be demonstrated that such exploitation is sustainable, and fisheries on other seamounts should not be authorized.

In the absence of a stock assessment TAC recommendation is based on recent catch history (2009 – 2014). Scientific Council recommends exploitation should not exceed recent average levels of approximately 200 tonnes or 16 days-on-ground (by a single standard vessel) on Kükenthal Peak, and no alfonsino fishery on all other seamounts in the NRA. The sustainability of this level of removals is unknown.

Scientific Council also reiterates its advice provided in 2013 in the context of the Sargasso Sea and the protection of seamounts (SC Report 2013, p310-315).

**b. Scientific advice on Risk-based Management Strategies, Ecosystem Approach Framework to Fisheries Management, and other topics**

- **Implement relevant steps in the workplan for Greenland halibut in SA2 + Divs. 3KLMNO:** SC has implemented the steps of the workplan and this work is described in the STACFIS report.
- **Continue risk assessments for impacts of trawl surveys on VMEs in closed areas:** SC recommends that scientific bottom trawl surveys in existing closed areas be avoided if possible and additional work be conducted as soon as possible to further evaluate the implications of excluding RV surveys in closed areas on stock assessment metrics.
- **Bycatch of cod, redfish and moratoria species from haul-by-haul data:** Scientific Council were not able to address this request during the June 2017 meeting due to lack of time. The Secretariat presented their analysis directly to WG-BDS in July.
- **Assessment of golden redfish in Div. 3M:** Due to lack of time, this request is deferred until 2018. A roadmap for a full assessment of this stock will be discussed in September. As in previous years, advice for this stock is given indirectly based on the 3M beaked redfish assessment.

- **Assessment of NAFO bottom fisheries:** In 2016 and 2017, Scientific Council made further progress on assessing the overlap of NAFO fisheries with VME, based on Daily Catch Reports. Continued work addressing the other parts of this request will be conducted in 2018, but given the current capacity of the Scientific Council, progress can only be achieved if Contracting Parties provide the necessary expertise.  
SC Recommends that the request relating to the “development and compilation of identification guides for fishes (e.g. sharks and skates)” be removed, as it was addressed last year (SC03-16 June 2016).
- **Continue review of the Precautionary Approach (PA) framework:** As a result of considerable workloads, Scientific Council was unable to make significant progress on its assessment of the PA Framework although some progress was made in the assessment of the PA Framework in the context of an ecosystem approach to management in 2016. Scientific Council will continue with its work but notes that given the current capacity of the Scientific Council, progress can only be achieved if Contracting Parties provide the necessary expertise.
- **Review information on Greenland sharks:** Information on biology, distribution, survey catches, and commercial bycatches were presented. More data will be presented in 2018 and advice given at that time.
- **Start working on a Strength, Weaknesses, Opportunities and Threats (SWOT) analysis:** The Scientific Council completed a preliminary SWOT analysis, the results of which are detailed in SCS Doc. 17-16.
- **Seamount boundary change.** The Scientific Council Chair noted that the Scientific Council had been reviewing the seamount boundary during this meeting and proposals would be discussed under agenda Item 24.

#### c. Other issues as determined by the Chair of the Scientific Council

The Chair of the Scientific Council, Katherine Sosebee (USA), highlighted the issue of the workload within the Scientific Council, noting the number of meetings attended by Scientific Council members in the past year, the requests that had to be deferred as a result of workload, and the need for further participation from Contracting Party scientists on the various NAFO working groups. The Scientific Council Chair also noted that the Council remains in need of a Vice-Chair for the Scientific Council, Chairs of STACREC and STACFEN, as well as a co-Chair for WG-ESA. Contracting Parties thanked the Scientific Council Chair for highlighting the concerns of the Scientific Council, and the United States provided the following statement:

*The United States heard the concerns of the Commission and the Scientific Council during our earlier discussion. We need to support the work and the people of the Scientific Council, as their efforts are the very foundation of our work here. We have all said how important valid and robust scientific advice is for the management of NAFO resources.*

*The Commission has recognized that there has been an increase in the number and complexity of the requests going to the Scientific Council. We are concerned that there is a very real possibility that the workload could jeopardize the ability of the Scientific Council to provide timely and effective advice.*

*The move to multi-year management, and the Scientific Council's work to set up a schedule to plan assessments in the coming years have been important steps. But we agree with what Canada said earlier [at this meeting] – the Organization as a whole needs to find ways to rethink how we approach this work, especially to be able to prioritize and balance our work.*

*As at least a first step, we suggest that the Scientific Council chair, with assistance from the Secretariat, develop a work plan for its 2019 efforts and present it at the next annual meeting. The plan should include the activities of subsidiary and joint working groups of the SC. This work plan should also include, as far as practicable, forecasted activities for 2020.*

*The Commission and the Scientific Council should discuss the work plan, with a view to both support and prioritize the work of the SC, at the 2018 Annual Meeting. This discussion should also take into account all*

*relevant recommendations from the Performance Review Panel, as well as the SWOT analysis from the Scientific Council.*

*We hope to have this suggestion reflected in the meeting report and to have a dedicated agenda item for it at the next annual meeting.*

The European Union said that the timing of the NIPAG meeting should be reconsidered. Currently the NIPAG meeting has been scheduled the week after the NAFO Annual Meeting, consequently there is no up-to-date scientific advice for NAFO's shrimp stocks for this meeting.

It was **agreed** that:

- **The Scientific Council Chair, with the assistance from the NAFO Secretariat, will develop a work plan for the work to be completed in 2019 for presentation to the Commission at the next Annual Meeting.**
- **The Scientific Council work plan for 2019 be added as a Commission agenda item for the 2018 Annual Meeting.**

#### **d. Feedback to the Scientific Council regarding the advice and its work during this meeting**

Questions relating to the scientific advice from the Scientific Council were submitted in writing from the Commission in COM WP 17-20, COM WP 17-31, and COM WP 17-32. The Scientific Council responded to these questions in COM WP 17-33.

### **18. Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 2019 and on other matters**

The steering committee for the formulation of requests from the Commission to the Scientific Council during the 2018 Annual Meeting was comprised of Sandra Courchesne (Canada), Martha Krohn (Canada), and Sebastian Rodriguez-Alfaro (EU). The draft requests were presented in COM WP 17-42, and the Scientific Council requested that the Commission prioritize the list of requests to facilitate the work planning of the Scientific Council. The Commission agreed that the priority items for 2018 should be the advice for fish stocks, a full assessment of 3LN redfish, the development of the Exceptional Circumstances protocol for 2+3KLMNO GHL, the 3M cod benchmark, and further research into Greenland sharks. Norway requested that splendid alfonsino be added the requests, and that advice be provided on a three-year basis, with initial advice being completed in 2018 for 2019-2021. The European Union requested a full assessment for 3M shrimp in 2018 rather than in 2019 as planned. The reasoning being that the recent survey showed female spawning stock biomass values close to  $B_{lim}$ , and there is a need for close monitoring of this stock. The final version of the requests for 2019, including the items prioritized by the Commission, was presented in COM WP 17-42 (Revised).

## **V. Conservation of Fish Stocks in the Regulatory Area**

### **19. Meeting Reports and Recommendations of the Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), 2017**

*The presentation of the report and the recommendations was done in a joint plenary session with the Scientific Council. The joint session was in an open-discussion format.*

Carsten Hvingel (Norway) and Jacqueline Perry (Canada), co-Chairs of the joint working group, presented the meeting reports from the various meetings of this working group from 2017 (FC-SC Doc. 17-02, FC-SC Doc. 17-03, COM-SC Doc. 17-06) and forwarded the recommendations addressed to the Commission and the Scientific Council for consideration and adoption in COM-SC WP 17-03 and COM-SC WP 17-06, which included the 3M Cod benchmark and the Greenland halibut MSE. The advice for Greenland halibut coming out of the work of the



WG-RBMS meeting was to set a TAC of 16 500 tonnes for 2018, with a change of no more than +/- 10% per year for six years. In addition, the working group intends to meet in August 2018 to finalize the Exceptional Circumstances protocol for adoption at the 2018 Annual Meeting. Contracting Parties thanked the co-Chairs and the working group for their efforts.

It was **agreed** that:

- **The reports and recommendations of the Working Group on Risk Based Management Strategies (FC-SC Doc. 17-02, FC-SC Doc. 17-03, COM-SC Doc. 17-06, COM-SC WP 17-06) be adopted by the Commission.**

## **20. Management and Technical Measures for Fish Stocks in the Regulatory Area, 2018**

The Quota Table and the Effort Allocation Scheme for the shrimp fishery in Division 3M for 2018, presented in Annex 13, incorporates the Total Allowable Catch (TAC) decisions and update of the relevant footnotes.

### **a. Cod in Division 3M**

The scientific advice for cod in Division 3M for 2018 was a reduction in the Total Allowable Catch from 13 931 tonnes to 8182 tonnes. Some Contracting Parties highlighted the uncertainty with the assessment, noting that the benchmark exercise was going to be completed in 2018, while other Contracting Parties felt it was necessary to set the TAC in accordance with the scientific advice.

Considering the divergence of views expressed by the Contracting Parties, the European Union made a compromise proposal that the TAC be set at 11 145 tonnes for 2018, and a footnote be inserted into the Quota Table with the following text:

*For 2019, the TAC will be reduced to 8182 tonnes. This TAC will be reviewed based on the available scientific advice for this stock.*

No consensus could be reached among Contracting Parties on this proposal, so the interim Vice-Chair called for a vote in accordance with Article XIII Paragraph 2 of the Convention. Of the 11 Contracting Parties present, eight voted in favour of the proposal by the European Union, and three were not in favour (Iceland, Norway, and the United States of America). Consequently, the proposal was adopted with the requisite two-thirds majority.

The TAC for cod in 3M was set as 11 145 tonnes for 2018 and the new footnote was inserted in the Quota Table.

### **b. Redfish in Division 3M**

Contracting Parties **agreed** on a TAC of 10 500 tonnes for 2018 and 2019.

### **c. American plaice in Division 3M**

Contracting Parties **agreed** to continue the moratorium for 2018, 2019 and 2020.

### **d. Shrimp in Division 3M**

Based on the absence of updated scientific advice, Contracting Parties **agreed** to maintain the moratorium for 2018 and review the updated advice when it becomes available.

Iceland expressed that, notwithstanding the moratorium, it maintains its objection against an effort allocation scheme applied to this stock.

**e. Pelagic *Sebastes mentella* (oceanic redfish) in the NAFO Convention Area**

Contracting Parties **agreed** to maintain the current level of the TAC, i.e. zero, and update as necessary, pending the decision of NEAFC as per footnote 3 of the Quota Table. The Russian Federation noted that their position on this stock is unchanged and provided the following statement (COM WP 17-37):

*The Russian Federation adheres to its position that there is a single stock of pelagic *Sebastes mentella* in the Irminger Sea and adjacent waters, including the NAFO Convention Area. Russia reiterates its standpoint that studies into the redfish stock structure should be continued using all available scientific and fisheries data as a basis. Until new data on the stock structure are available, Russia will continue to regulate the pelagic fishery for *Sebastes mentella* based on the concept of the single stock structure of this stock.*

**f. Splendid alfonsino (*Beryx splendens*)**

Discussions were held as to whether a Total Allowable Catch or effort -based management measures should be set for splendid alfonsino in the NAFO Regulatory Area. It was noted that current fishing levels are within the parameters outlined by the Scientific Council. There was no consensus reached among Contracting Parties and this discussion was deferred until the next Annual Meeting.

**21. Management and Technical Measures for Fish Stocks Straddling National Jurisdictions, 2018**

**a. Cod in Divisions 3NO**

Contracting Parties **agreed** to maintain the moratorium for 2018.

**b. Yellowtail flounder in Divisions 3LNO**

Contracting Parties **agreed** to rollover the TAC of 17 000 tonnes for 2018.

**c. Witch flounder in Divisions 3NO**

Contracting Parties **agreed** on a TAC of 1116 tonnes for 2018 and 1175 tonnes for 2019.

**d. White hake in Divisions 3NO**

Contracting Parties **agreed** to rollover the TAC of 1000 tonnes for 2018 and 2019, but remain mindful of the adjustment mechanism outlined in Article 5.13 and 5.14 of the NAFO CEM.

**e. Greenland halibut in Subarea 2 and Divisions 3KLMNO**

Contracting Parties **agreed** to a TAC of 16 500 tonnes for 2018, of which, 12 227 tonnes is allocated to the fishery in Divisions 3LMNO, consistent with the MSE as recommended by COM-SC WG-RBMS (see agenda item 19).

**f. Shrimp in Divisions 3LNO**

Based on the absence of updated scientific advice, Contracting Parties **agreed** to maintain the moratorium for 2018 and review the updated advice when it becomes available.

**22. Other matters pertaining to Conservation of Fish Stocks**

Norway and Iceland presented a joint proposal for STACTIC to review the feasibility of introducing policies to minimize or eliminate discards in NAFO (COM WP 17-41). Following discussions, several Contracting Party

representatives worked together on revising the proposal, and dividing some tasks between the WG-BDS and STACTIC, and the final proposal was agreed to in COM WP 17-41 (Rev. 2).

It was **agreed** that:

- **STACTIC and the WG-BDS would prepare plans for evaluating the feasibility of introducing policies to minimize or eliminate discards in NAFO as outlined in COM WP 17-41 (Rev. 2).**

## **VI. Ecosystem Considerations**

### **23. Meeting Report and Recommendations of the Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), July 2017**

*The presentation of the report and the recommendations was done in a joint plenary session with the Scientific Council. The joint session was in an open-discussion format.*

The co-Chair of the Working Group, Andy Kenney (European Union), presented the report of the Working Group (COM-SC Doc. 17-07). Highlights from the Working Group included discussions around the extension of existing seamount closures, the risks associated with scientific surveys occurring in VME areas, as well as ongoing discussions on the reassessment of NAFO bottom fisheries, the identification and mapping of VMEs, the Ecosystems Approach to Fisheries (EAF) Framework, and splendid alfonsino. Contracting Parties thanked the co-Chair for his report.

It was **agreed** that:

- **The report and recommendations of the Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM) (COM-SC Doc. 17-07) be adopted by the Commission.**

### **24. Other matters pertaining to Ecosystem Considerations**

The United States presented a joint proposal from the United States and Canada, with input from the Scientific Council, to revise the boundary of the New England Seamounts. The revision allowed for the protection of all seamounts in the New England Seamounts chain from the USA's 200-mile limit to the southern limit of the NRA that are 2000m or less in depth to be protected from bottom fishing activities. This proposal, as outlined in COM WP 17-19 (Revised), was adopted.

The European Union proposed a revision to Articles 22 and 23 of the CEM to clarify the process of deciding on measures for VME protection. Contracting Parties provided comments and the final proposal was adopted in COM WP 17-39 (Rev. 2).

The European Union also proposed a draft Resolution of Contracting Parties on the communication of measures taken to protect VMEs in the NRA to other national authorities regulating industries other than fishing. Contracting Parties adopted this Resolution (COM WP 17-40).

It was **agreed** that:

- **The proposal to modify the boundaries of the New England Seamount VME Closure outlined in COM WP 17-19 (Revised) be adopted.**
- **The proposed revision to Articles 22 and 23 of the NAFO CEM presented in COM WP 17-39 (Rev. 2) be adopted.**
- **A Resolution on communicating measures taken to protect VMEs in the NRA to other national authorities regulating industries other than fishing (COM WP 17-40) be adopted.**

Canada also made the following statement:

*Canada remains strongly committed to the protection of the marine environment. Annex 1 of COM Working Paper 17-05 circulated at this meeting is a copy of the information exchange arrangement regarding oil and gas activities in the NAFO Regulatory Area that Canada provided to Contracting Parties in 2015. In an effort to reduce overlapping activities and avoid conflict between fishery activities in the NAFO regulatory area and resource exploration and extraction activities on Canada's continental shelf, Canada has, since 2014, been providing NAFO and its Contracting Parties with information and data regarding these exploration and extraction activities on a voluntary basis. Canada intends to continue to share this information with NAFO and its Contracting Parties on a voluntary basis. This arrangement also emphasizes the importance of the reciprocal exchange of information. Under Section 3.2 of the arrangement, Contracting Parties were encouraged to share fishing plans, including the number of vessels, planned fishing area and anticipated period of operation. To date, however, no fishing plans have been provided and we strongly encourage Contracting Parties to provide this information to continue to improve the exchange of information.*

## **VII. Conservation and Enforcement Measures**

### **25. Review of Chartering Arrangements**

The NAFO Secretariat presented COM WP 17-04 outlining the details of the two chartering arrangements from 2016 and the one chartering arrangement to date in 2017.

### **26. Meeting Reports and Recommendations of the Joint Commission-Scientific Council Ad hoc Working Group on Catch Reporting (WG-CR) and of the Catch Data Advisory Group (CDAG), 2017**

*The presentation of the report and the recommendations was done in a joint plenary session with the Scientific Council. The joint session was in an open-discussion format.*

The Chair of the Scientific Council reported on the meeting report and recommendations from the Working Group on Catch Reporting (WG-CR) and the Catch Data Advisory Group (CDAG). The reports were presented in FC-SC Doc. 17-01 and COM-SC Doc. 17-08. Canada noted that they had been working on addressing the first recommendation from COM-SC Doc. 17-08 and presented COM-SC WP 17-07 (Revised), which outlined the proposed Terms of Reference for the merged group entitled the Catch Estimation Strategy Advisory Group (CESAG). Contracting Parties agreed with the proposal for the creation of this new group to replace WG-CR and CDAG to continue to support the application and refinement of the Catch Estimation Strategy.

The European Union presented COM WP 17-36 outlining the Terms of Reference for a Catch Estimates Methodology Study proposed by the European Union. Contracting Parties agreed that the study could be initiated.

It was **agreed** that:

- **The Working Group on Catch Reporting (WG-CR) and the Catch Data Advisory Group (CDAG) would merge to form one group, the Catch Estimation Strategy Advisory Group (CESAG), as outlined in the proposed Terms of Reference in COM-SC WP 17-07 (Revised).**
- **The Catch Estimates Methodology Study outlined in COM WP 17-36 be initiated.**
- **The reports and recommendations of the WG-CR and CDAG (FC-SC Doc. 17-01 and COM-SC Doc. 17-08) be adopted by the Commission.**

## **27. Meeting Report and Recommendations of the Ad hoc Working Group on Bycatches, Discards, and Selectivity (WG-BDS), July 2017**

The interim Commission Vice-Chair and the Chair of the Ad hoc Working Group on Bycatches, Discards, and Selectivity (WG-BDS) presented the report of the working group (COM Doc. 17-05) and noted that the Draft Action plan for the Working Group had been referred to the Commission for further discussion and possible adoption. The European Union presented COM WP 17-35 in response to the recommendation from the Working Group report, and Contracting Parties agreed to adopt the Action Plan.

It was **agreed** that:

- **The report and recommendation of the Ad hoc Working Group on Bycatches, Discards, and Selectivity (WG-BDS) in COM Doc. 17-05 be adopted.**
- **The Draft Action Plan for the Ad hoc Working Group on Bycatches, Discards, and Selectivity (WG-BDS) outlined in COM WP 17-35 be adopted.**

## **28. Report of STACTIC at this Annual Meeting**

The Chair of STACTIC presented the report from this meeting (Part II), and highlighted the following amendments to the NAFO CEM that were forwarded to the Commission for adoption:

- **STACTIC WP 17-09: Reformatting Article 12 for consistency with the NAFO CEM**
- **STACTIC WP 17-10: Reformatting Article 29.10 for consistency with the NAFO CEM**
- **STACTIC WP 17-15 (Revised): Amendment of Article 45 – Obligations of the Master of a Fishing Vessel**
- **STACTIC WP 17-19 (Rev. 3): Proposed amendment to the NAFO CEM Chapter VI Joint Inspection and Surveillance Scheme**
- **STACTIC WP 17-20 (Rev. 2): Proposed amendment to the NAFO CEM Chapter VIII – Port State Control**
- **STACTIC WP 17-30: Changes to the NAFO CEM for 2018 following the entry into force of the Amended NAFO Convention**
- **STACTIC WP 17-36 (Revised): Clarifying Access to Information in the NAFO CEM**
- **STACTIC WP 17-41 (Revised): Reinstatement of footnote 21 of the 2015 NAFO CEM quota table**

The Chair of STACTIC also highlighted the recommendations where STACTIC agreed that:

- **The Annual Compliance Review outlined in STACTIC WP 17-27 (Rev. 2) be forwarded to the Commission for adoption.**
- **The revised Terms of Reference for the STACTIC Observer Program Review Working Group (WG-OPR) as outlined in STACTIC WP 17-40 (Rev. 2) be forwarded to the Commission for adoption.**
- **The changes in the NAFO Rules of Procedure presented in STACTIC WP 17-35 be forwarded to the Commission for adoption.**

The Contracting Parties expressed thanks to the STACTIC Chair and STACTIC members for their work intersessionally and at this meeting.

It was **agreed** that:

- **The reports and recommendations of STACTIC (FC Doc. 17-02 and Part II of this report) be adopted by the Commission.**

## **29. Other matters pertaining to Conservation and Enforcement Measures**

Following the adoption of the recommendation for Greenland halibut from the WG-RBMS (COM-SC WP 17-06), it was noted that there would be required changes to the NAFO CEM as a result. The co-Chairs of the WG-RBMS drafted the proposed changes in COM WP 17-38.

It was **agreed** that:

- **The changes to the NAFO CEM presented in COM WP 17-38 be adopted.**

## **VIII. Finance**

### **30. Report of STACFAD at the Annual Meeting**

The report of STACFAD (Part III) was presented by the Chair, Deirdre Warner-Kramer (USA). The report contained recommendations for the adoption of the budget for 2019, the Auditor's Report for 2017, financial matters, personnel matters, and an update on the NAFO Secretariat classification scheme review.

### **31. Adoption of the Budget and STACFAD recommendations for 2018**

**STACFAD recommends that the Secretariat work with the auditors intersessionally to achieve the following:**

- **Use Not-for-Profit accounting standards from the current International Financial Reporting Standards (IFRS) accounting framework;**
- **Develop language, to be adopted by the Commission via an e-mail vote prior to 31 December 2017, to modify the NAFO Financial Regulations to state that the Organization will follow Not-for-Profit accounting standards and to describe the specific departures from the generally accepted accounting practices**
- **Complete the current year's audit on the basis of the modified financial regulations, once approved.**

**STACFAD recommends that:**

- **NAFO Contracting Parties strongly encourage additional participation in the Ad hoc virtual Working Group, in particular individuals from a broader range of Contracting Parties, and especially those with familiarity in either the technical and administrative aspects of NAFO.**
- **The Ad hoc virtual Working Group continue to work intersessionally, in consultation with the STACFAD and STACTIC Chairs, to further develop standards and guidelines of access to documentation contained in the NAFO forums for consideration at the 2018 Annual Meeting of NAFO.**
- **The Ad hoc virtual Working Group is empowered to make decisions on moving information that is clearly of a non-sensitive nature that can be migrated immediately from the restricted section of the NAFO website to the public pages, or from a more limited to a broader access within the restricted section, with the view to be as transparent as possible.**
- **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 2018, and**

of which \$85,000 would be a contingency fund available to be used for unforeseen and extraordinary expenses.

- The internship period be maintained for six (6) months during 2018.
- The NAFO Secretariat is encouraged to utilize the entire allocation for the internship program annually to fully achieve the benefits of the program.
- The NAFO Rules of Procedure (COM Working Paper 17-09 Revised); NAFO Financial Regulations (COM Working Paper 17-10) and NAFO Staff Rules (COM Working Paper 17-11) be adopted by the Commission.
- The NAFO Secretariat was requested, as per Rule 5 of the NAFO Financial Regulations, to report on the condition of the Scientific Research Fund, including the contributions received and their dispositions, beginning at the next Annual Meeting.
- Any difference in 2017 annual contributions either owing from or payable to Contracting Parties, resulting from the revised calculation versus the 2017 billing previously issued, will be applied against 2018 annual contributions. Any Contracting Party with a balance owing to the Organization may instead request an invoice from the Secretariat to remit payment prior to the end of the 2017.
- PRP Recommendation 7.2.3 be recognized as a stand-alone item, as this is the final PRP Recommendation to be completed from the first Performance Review of NAFO, and any resulting proposed changes to the Staff Rules be considered at the next Annual Meeting.
- The budget for 2018 of \$2,297,000 (Annex 3) be adopted.
- The Commission appoint the three Staff Committee nominees, Justine Jury (EU); Joanne Morgan (Canada) and Deirdre Warner-Kramer (USA), for September 2017–September 2018.
- The 2020 Annual Meeting to be held (to be held in Halifax, Nova Scotia, Canada, unless an invitation to host is extended by a Contracting Party and accepted by the Organization) to be as follows:

**21-25 September 2020**

All of STACFAD's report and recommendations were adopted by the Commission and the work and report by STACFAD and the Secretariat were commended.

## **IX. Closing Procedure**

### **32. Other Business**

The interim Vice-Chair gave the floor to the Executive Secretary who expressed his appreciation for the service of John Bullard, Head of Delegation for the United States of America, to NAFO in light of his impending retirement. Contracting Parties expressed thanks to John for his collaboration and leadership throughout the years. John was presented with a NAFO pennant.

The Chair of the Scientific Council announced the upcoming retirement of Don Power, a Canadian representative who was attending his final Scientific Council meeting this year. Don has been an integral part of the Scientific Council for over 30 years and his expertise and valued contribution to the Council will be deeply missed. During the September Scientific Council meeting, Don was presented with a Scientific Merit Award for his achievements.

### **33. Election of Chairperson and Vice-Chairperson**

At the last Annual Meeting, it was agreed that, should the amended NAFO Convention come into force before the next Annual Meeting, in the interim, the Chair of the former General Council would become the Chairperson of the new Commission with the Chair of the former Fisheries Commission becoming the Vice-Chairperson. The Amended Convention came into force on 18 May 2017, and as agreed Stéphane Artano (France-SPM) and

Report of the Commission, 18-22 Sept 2017

Temur Tairov (Russian Federation) served as Interim Chairperson and Vice-Chairperson of the Commission for this meeting.

Following the entry into force of the Amended Convention, an election was required for Chairperson and Vice-Chairperson for the Commission. Stéphane Artano (France-SPM) was elected as the Commission Chairperson, and NAFO President for a two-year term and Temur Tairov (Russian Federation) was elected as Vice-Chairperson for the Commission for a two-year term.

### **34. Time and Place of Next Annual Meeting**

An invitation to host the next Annual Meeting was extended by the European Union and accepted by the Organization. The 40<sup>th</sup> Annual Meeting will be held in Tallinn, Estonia during the dates of 17-21 September 2017.

### **35. Press Release**

The Press Release of the meeting was developed by the Executive Secretary and Scientific Information Administrator through consultations with the Chairs of the Commission and Scientific Council. The agreed Press Release (Annex 15) was circulated and posted to the NAFO website at the conclusion of the meeting on Friday, 22 September 2017.

### **36. Adjournment**

The interim Vice-Chair thanked Contracting Parties for their collaboration and contributions through the course of the meeting. He also expressed his thanks to Canada for hosting the meeting and to the NAFO Secretariat for their support throughout the week.

The meeting adjourned 10:30 hrs on 22 September 2017.



**Appendix I. Summary of Adopted Working Papers from the 39<sup>th</sup> Annual Meeting of NAFO**

<b>Working Paper</b>	<b>Title</b>	<b>Document</b>
COM WP 17-02 Revised	Second Performance Review of NAFO: Revised Terms of Reference	COM Doc. 17-21
COM WP 17-09 Revised; STACTIC WP 17-35 and SC WP 17-045 Revised	NAFO Rules of Procedure	COM Doc. 17-18
COM WP 17-10	NAFO Financial Regulations	COM Doc. 17-19
COM WP 17-11	NAFO Staff Rules	COM Doc. 17-20
COM WP 17-19 Revised	Revision of New England Seamounts Closure (Amendment to NAFO CEM Article 17.1)	COM Doc. 17-16
COM WP 17-35	Action Plan in the Management and Minimization of Bycatch and Discards	COM Doc. 17-26
COM WP 17-36	Catch Estimates Methodology Study	COM Doc. 17-25
COM WP 17-38	Changes to the NAFO CEM for 2018 following the adoption of the WG-RBMS Recommendations (Amendments to NAFO CEM Article 10, Annex I.F and I.G)	COM Doc. 17-17
COM WP 17-39 Rev. 2	Revisions to NAFO CEM Article 22 and 23 – Reinforcement of the provisions in case of encounter and bottom fishing assessment	COM Doc. 17-15
COM WP 17-40	Draft Resolution on communicating measures taken to protect Vulnerable Marine Ecosystems in the NAFO area to other national authorities regulating industries other than fishing	COM Doc. 17-28
COM WP 17-41 Rev. 2	To examine the feasibility of introducing policies to minimize or eliminate discards in NAFO	COM Doc. 17-23
COM WP 17-42 Revised	The Commission's Request for Scientific Advice on Management in 2019 and Beyond of Certain Stocks in Subareas 2, 3 and 4 and Other Matters	COM Doc. 17-22
STACTIC WP 17-09	Reformatting NAFO CEM Article 12 for consistency	COM Doc. 17-07
STACTIC WP 17-10	Reformatting NAFO CEM Article 29.10 for consistency	COM Doc. 17-08
STACTIC WP 17-15 Revised	Amendment to NAFO CEM Article 45 – Obligations of the Master of a Fishing Vessel	COM Doc. 17-09
STACTIC WP 17-19 Rev. 3	Amendment to the NAFO CEM Chapter VI – Joint Inspection and Surveillance Scheme	COM Doc. 17-10
STACTIC WP 17-20 Rev. 2	Amendment to the NAFO CEM Chapter VIII – Port State Control	COM Doc. 17-11
STACTIC WP 17-27 Rev. 2	Annual Compliance Review 2017	COM Doc. 17-27
STACTIC WP 17-30	Changes to the NAFO CEM for 2018 following the entry into force of the Amended NAFO Convention	COM Doc. 17-12
STACTIC WP 17-36 Revised	Clarifying Access to Information in the NAFO CEM (Amendment to NAFO CEM Article 30.A.7)	COM Doc. 17-13
STACTIC WP 17-40 Rev. 2	NAFO STACTIC Observer Program Review Working Group (WG-OPR): Revised Terms of Reference	COM Doc. 17-24
STACTIC WP 17-41 Revised	Reinstatement of footnote 21 of the 2015 NAFO CEM quota table	COM Doc. 17-14
COM-SC WP 17-06	Recommendations from 2017 WG-RBMS meetings relating to the Greenland Halibut Management Strategy Evaluation	COM-SC Doc. 17-10
COM-SC WP 17-07 Revised	Terms of Reference Catch Estimation Strategy Advisory Group (CESAG)	COM-SC Doc. 17-09

## Annex 1. Participant List

### CHAIRS

NAFO President/Chair of Commission – Artano, Stéphane (France in respect of St. Pierre et Miquelon). Président de la Collectivité Territoriale de Saint-Pierre et Miquelon, Place Monseigneur Maurer, B.P. 4208, 97500 St. Pierre et Miquelon

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## **Annex 2. Opening Statement by the Interim President**

I am very pleased to welcome all of you to Montreal and to the opening the 39<sup>th</sup> Annual Meeting of the Northwest Atlantic Fisheries Organization. First and foremost, I want to express my great appreciation to our Canadian hosts for the excellent preparations for this meeting.

This meeting is a significant milestone for NAFO. It is the first Annual Meeting after major amendments to modernize the NAFO Convention came into force on 18 May. It has taken almost 10 years to do this and I understand we will have some time to celebrate this achievement on Tuesday night.

The coming-into-force of these amendments, which confirms our commitment to ensuring the “long term and sustainable use of the fishery resources” and the safeguarding of “the marine ecosystems in which these resources are found”, are particularly timely given the recent developments related to international oceans governance. In this context, I should mention the results of the June Oceans Conference at the UN, the upcoming Our Ocean Conference in Malta and the completion of the work of the Preparatory Committee to establish an international legally binding instrument under UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction – the so-called BBNJ process. In this respect, I would submit that NAFO is a model for best practices in international regional fisheries governance and we can all be proud of what NAFO has already accomplished.

The coming-into-force of these amendments to the Convention also entail some extra housekeeping for us this week, such as adjusting the rules of procedure, establishing a list of experts to serve as panelists in a dispute settlement process and electing a new President and vice-President. For the most part, however, the transition from the old regime to the new seems to have been smooth.

Again, we have been very busy since our last Annual Meeting. We have met intersessionally about 24 times in various formats. That is over 2 meetings per month and all the results of all this activity will be put before us in the coming 5 days. Some of the less routine issues that we must address this week include:

- The relaunching of NAFO’s second Performance Review. As I stated last year, this Review is important to ensure that the Organization continues to live up to the objectives of the NAFO Convention and the other relevant international instruments addressing the conservation and management of living marine resources;
- The establishment of a Management Strategy Evaluation (MSE) for 2+3KLMNO Greenland halibut. As you are aware, this issue has kept many our officials and scientists extremely busy over the last year; and
- A revised work plan for a benchmark review of 3M Cod.

Finally, I would also like to take the opportunity to thank the Secretariat for all their work throughout the year and their preparations for this meeting.

We will be very busy this week. However, as always, I am confident that, with your good will and cooperation, we can finish all our business in an efficient and timely manner.

Thank you very much for your attention. I now declare the 39th Annual Meeting of NAFO officially open!

### **Annex 3. Opening Statement by Canada**

Canada welcomes Contracting Parties to Montreal for the 39th Annual Meeting of the Northwest Atlantic Fisheries Organization (NAFO). Canada last hosted the Annual Meeting in 1997 and is thrilled to be hosting this year on the occasion of its 150th anniversary. This year also marks Montreal's 375th anniversary.

NAFO has accomplished ground-breaking work to protect and conserve the Northwest Atlantic Ocean fish populations and habitats by taking an ecosystem approach to risk-based fisheries management. NAFO has also made important progress on the development and application of the Precautionary Approach Framework and the reassessment of bottom fishing impacts in the NAFO Regulatory Area. Canada commends Contracting Parties for their ongoing commitment to safeguarding the marine ecosystem within the vast NAFO Convention Area.

While the Convention amendments were agreed to 10 years ago (at the 29th Annual Meeting in Lisbon), this marks the first Annual Meeting since its coming into force on May 18, 2017. The amendments serve to update the 1978 NAFO Convention and reflect recent developments in international law, including the United Nations Fish Stocks Agreement, as well as incorporate precautionary and ecosystem-based approaches as a means of conserving biodiversity and minimizing the long-term impacts of fishing on the marine ecosystem. The reforms provide NAFO with a modern decision-making model and will contribute to its ongoing evolution as a regional fisheries management organization.

NAFO can be credited with a number of recent successes, including the recovery of 3LN Redfish and fisheries closures to enhance protection of vulnerable marine ecosystems in the Northwest Atlantic Ocean. These successes can be attributed to principled, science-based and precautionary approach to fisheries management. Canada acknowledges challenges on the horizon, including ecosystem changes and its impact on key fish stocks. Continuous improvement of conservation and enforcement measures is also essential to the good functioning of NAFO. Canada urges Contracting Parties to be mindful of history and continue to be driven by science when making management decisions.

The joint-dialogue between scientists and managers is instrumental and will contribute to the goal of sustainable fisheries in the NAFO Regulatory Area. Despite challenges, the days ahead afford the opportunity to build on NAFO's accomplishments to date and continue moving the organization forward.

Canada wishes to all a productive meeting and a pleasant stay in Montreal.



**Annex 4. Opening Statement by Denmark (in respect of the Faroe Islands and Greenland)**

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

The Faroe Islands and Greenland (DFG) would first of all like to thank Canada for their hospitality to host this Annual Meeting in Montréal, Québec. We appreciate the hard work you have put in the practical preparations of this meeting – the first under the amended convention.

For DFG it is a great pleasure to note that the amendments to the convention have now been implemented. The DFG would therefore like to express our satisfaction that the amended convention has been ratified and has come into force. We are confident that this will assist NAFO in performing even better than today in fulfilling the objectives of this organisation.

To undertake the second performance review is of significant importance in order to assist NAFO in achieving its long-term objectives. We will at this meeting review the Terms of Reference for the performance review and ensure the best composition of the review panel. The DFG will continue to work constructively with our NAFO partners in order to facilitate the election of candidates to carry out the Second Performance Review of NAFO.

The biological advice on NAFO stocks for the next year and beyond is, as usual, a mixed advice of stocks to be maintained under moratoria, of stocks in decline and of stocks that are healthy and growing. However, what has foremost come to our attention is the advice for the cod stock of 3M which is of high importance to the DFG. Therefore, we look forward to the full benchmark evaluation which will be performed in 2018 as well as the Management Strategy Evaluation for cod in 3M in the near future.

Working groups take important tasks on their shoulders. However, it is increasingly a challenge to find time to participate in the various numbers of working groups, especially for Contracting Parties with limited resources in terms of staff.

Our delegation would like to take this opportunity to convey our appreciation and warm thanks to the Secretariat for once again having prepared this annual meeting so well

The Faroe Islands and Greenland (DFG) can assure you that we are looking forward to working constructively with all delegations in the week ahead of us to bring the many points on our agenda to successful conclusion.

## **Annex 5. Opening Statement by the European Union**

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

First of all, I would on behalf of the EU delegation like to thank the Government of Canada for hosting the 39th Annual Meeting of NAFO in this beautiful city, at a historical moment, for this wonderful country as it celebrates a very respectable age.

Second, I would like to take a moment to recognise the important achievement we have all have contributed to by finalising the ratification process, which in turn has allowed us to have this meeting under the new, more modern NAFO Convention.

As you all know, the last year has been extremely busy for the NAFO community and the high number of inter-session meetings and videoconferences proves once again our common commitment towards a sustainable management of NAFO fisheries and Vulnerable Marine Ecosystems.

I would like to highlight, in particular, the great efforts invested in the Greenland Halibut Management Strategy Evaluation process and we strongly hope we can finalise this work at this session. This work has showed once again that better science is the key for better management and the need to continue the ongoing dialogue between the fisheries managers and scientists. In this context, I would like to highlight our strong hope that we can build on this precedent and pave the way for a more sustainable and predictable management of the stock of cod in the Flemish Cap next year.

In the meantime, the EU remains fully committed in setting TACs that follow scientific advice, while hoping that NAFO will promote responsible decisions that also balance environmental, economic and social considerations.

The EU will continue supporting the protection of VMEs and will strive to ensure that NAFO's VMEs protection policy is based on the latest and best science available. To this end, the EU has, for example, substantially contributed to the NEREIDA seabed mapping project, which aims at improving knowledge about the sea bottom, and it will continue funding this project. We strongly believe that this policy should be based on a coherent process that ensures that decisions are clear, consistent and fit-for-purpose. In addition, we also believe that NAFO should lead the way and engage with the other relevant operators in the area in order to ensure a consistent approach and that conservation efforts are supported by all stakeholders, not only by the fisheries community.

The EU is would also like to thank all the parties around the table for the efforts made in getting closer to the finalisation of the by-catch, discards and selectivity Action Plan. We hope we can all agree to it and then start implementing it in order to better understand the reasons behind discarding in the NRA.

Regarding control and enforcement, the EU will continue to promote compliance of its 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 just as we will work closely with other Parties in this area.

Last and not the least, the EU believes that at the end of this meeting we should also be in a position to launch a new Performance Review exercise for the organisation. Regular performance reviews are an important element to ensure that the organisation follows best practices and is well managed.

Finally, 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 a joint success.

## **Annex 6. Opening Statement by Japan**

Mr. Chairman, Distinguished Delegates, Observers, Ladies and Gentlemen,

On behalf of the Japanese Delegation, I would like to express my deepest gratitude to the Government of Canada for hosting the 39<sup>th</sup> Annual meeting of NAFO in this beautiful city, Montreal. We also thank the NAFO Secretariat staff for the excellent preparation and arrangements, and wish all the best to our Chair, Mr. Artano.

As the Japanese delegation expressed in the past meetings, NAFO has played an important role for fisheries management. NAFO, as the historic and leading RFMO, should develop conservation and management measures for sustainable use of fishery resources and the measures should be based on scientific advice. We should bear in mind that NAFO measures would be taken into account by other RFMOs.

Mr. Chairman, on this occasion, I would like to address two concrete issues and explain our thought for this NAFO annual meeting, namely Management Strategy Evaluation (MSE) for Greenland Halibut and measures to address non-compliance of serious infringements in the Regulated Area.

At the last Annual meeting, the revised timeline for 2+3 KLMNO Greenland halibut MSE review was agreed to adopt a new MSE at the 2017 Annual meeting. In accordance with the timeline, the Scientific Council and the working group on Risk-Based Management Strategies (WG-RBMS) have devoted their resources on developing candidate management procedures for the stock, which are to be on the table of the Commission. I would like to express our gratitude for their hard work on this issue, and hope that the management procedures will be adopted at this Annual meeting based on the recommendation by WG-RBMS.

I would now like to express our concern about serious infringements to conservation measures of NAFO. At the intersessional meeting of Standing Committee on International Control (STACTIC), it is reported that apparent infringements were detected for last 5 years. Among them are several serious infringements including mis-recording of catches contrary to Conservation and Enforcement Measures (CEM) Article 28, that is defined as serious infringement in CEM Article 38. These activities can reduce the effectiveness of NAFO conservation and management measures. As Article X.1. (c) of the amended NAFO Convention stipulates, each Contracting Party shall take necessary actions to ensure the effectiveness of CEM. Contracting parties expressed their keenness to develop effective enforcement measures to address serious infringements at the last annual meeting and intersessional meeting of STACTIC. I would like to cooperate closely with those contracting parties as much as possible so that non-compliance, especially serious infringements, will be tackled more effectively in NAFO Regulated Area.

Mr. Chairman, the Japanese Delegation is ready to work closely and cooperatively with other delegations to find good solutions and sincerely hopes that this Annual meeting will be successfully and fruitfully concluded.

Thank you.

### **Annex 7. Opening Statement by the Russian Federation**

I am honored to represent the Russian Federation at the 39th Annual Meeting of NAFO. On behalf of the Russian Delegation I would like to thank the Government of Canada for hosting this meeting in the beautiful city of Montreal. I would also like to thank the NAFO Secretariat for all their preparatory work they have done to set up this meeting.

We respect the ever-increasing NAFO effort in conservation of stocks and management of fisheries, with all the NAFO bodies working in accord and the ongoing trend towards systematizing methods of data processing and developing management measures. Implementation of the amended Convention will become a definite achievement in the working process between the Organization and the Contracting Parties.

We do highlight the NAFO approach to collecting, processing and presenting of fisheries data, both for scientific and management purposes. Despite the limited fishing effort, we put our best into acquiring and submitting as much data from fishing vessels and observers as possible. We highly commend the work by the NAFO Secretariat at developing the new user-friendly website design and search engine.

We have reached an important milestone in developing the management strategy for the Greenland halibut stock in Divisions 3LMNO, despite all the uncertainties as to its assessment. We respect the sheer amount of work already done and hope for a sustainable and productive solution to be found during this meeting.

We also would like to keep the spirit of efficiency in deliberations on the issue of cod fishery in Division 3M. In view of high variability between the current and advised TAC levels, we would rather avoid a sharp decline in the TAC and mitigate the immediate impact on fisheries.

In line with our position on making well-justified decisions, especially those entailing long-term consequences, the protection of vulnerable bottom areas requires complete clarification in all cases. Currently, the areas covered by closures are near-optimal, although, in our opinion, still somewhat excessive. Establishing any new closures or expanding the existing ones, though effective, becomes progressively less necessary, given the lack of fishing effort in the areas in question. Thus, such drastic measures cannot, in our opinion, be implemented without additional justification and fulfilling any requests that may surface.

In conclusion, we are assured that the work during this meeting will be efficient, despite the workload increasing from year to year and the same five days given.

We hope for a fruitful cooperation between all the Contracting Parties based on joint efforts by managers, scientists and observers.

### **Annex 8. Opening Statement by Ukraine**

Dear Mr. Kingston,

This year due to a number of reasons the State Agency of Fisheries of Ukraine could not participate at the regular 39th session of the NAFO.

However, this does not mean that Ukraine is not interested in its participation in the NAFO. Ukraine, as a responsible fishing country and a member of several international fisheries organizations and bilateral international agreements, is trying to coordinate its efforts with other countries in accordance with the maritime law.

Amid the traditional Ukrainian fishing in the Atlantic Ocean, including its northern waters, and the participation of Ukrainian fishermen in the discovering and development of certain types of fishing in the ocean, I address to you with the request to keep our fishing opportunities in the NAFO regulation area. In case of restoration of some stocks of these waters - please take into account our interest in its usage.

We expect that this will provide an opportunity to carry at least one industrial voyage under the Ukrainian flag in 2018. We take measures to use Ukraine's industrial opportunities provided in 2017.

I avail myself of this opportunity to renew the assurances of my highest consideration and would highly appreciate your consideration of the issue above.

Yours sincerely,  
Andriy Shevchenko

## **Annex 9. Opening Statement by the United States of America**

The United States is pleased to be meeting in beautiful Montreal, and we extend our warm gratitude to the government of Canada for hosting the 39th NAFO Annual Meeting. We would also like to thank the NAFO Secretariat for their efforts in ensuring that our meetings are efficient and successful.

I am sad to report that this will be my final year as the U.S. Commissioner to NAFO. Over the past few years, I've been pleased to see this organization move towards more transparent processes, and increasing reliance on science and ecosystem-based decision making. The United States hopes that we can build upon that momentum at this meeting, in particular as we move into a new era under our revised convention.

We must hold ourselves accountable to this new mandate, and with that in mind, the United States participated in the virtual working group meetings in preparation for a second NAFO performance review. It is imperative that we come to a resolution at this meeting on the terms of reference for that process, and I believe that we are close to final agreement. This review will highlight the great progress we've made in implementing the recommendations of the first review panel, and those areas NAFO still needs to address. We look forward to discussing the findings of this second panel at next year's annual meeting.

The panel will be able to note the impressive body of work arising from the Scientific Council. Last year, we acknowledged the increasingly complex and numerous issues the Commission has requested the Council to address. NAFO needs to ensure that the SC has the necessary resources and personnel. This challenge remains, and we call upon the Commission to consider the necessary actions to guarantee our Council, and its subsidiary bodies, are enabled to continue its groundbreaking work.

As we look towards our agenda for this week, it is imperative that we base our actions here in the Commission on Scientific Council advice, even when—and perhaps especially when—we are dealing with difficult decisions. The United States underscores our commitment to a precautionary, ecosystem-based, and scientific approach to decision making. We are concerned about some of the findings, and potential trends, arising from the Scientific Council report regarding the health of a number of stocks. We hope to learn more this week about any possible causes and what the Commission might need to consider to address these cross-cutting issues.

In addition to the Scientific Council, the United States is pleased with robust intersessional efforts of several bodies, including STATIC, the Working Group on Risk Based Management Strategies, and the Joint Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management. The efforts of the EAFFM Working Group is reflected in NAFO's continued progress to protect vulnerable marine ecosystems, and was recognized in discussions at the United Nations General Assembly last year. The United States, in partnership with Canada, is pleased to offer a proposal strengthening NAFO's measures to protect seamounts in the Convention Area, while balancing the need to allow fishing in areas that are currently closed, where there is no or limited potential harm to VMEs.

I am pleased that I have had the opportunity to be a part of this body, and to work side-by-side with such dedicated scientists and managers. As I stated above, NAFO has made progress, but significant challenges remain. We have an opportunity under our new Convention to move away from outdated decision-making paradigms, and to ensure more equitable and transparent access to NAFO fisheries resources. In my time as Commissioner, I am pleased to see the U.S. fishing presence double in NAFO.

But we remain frustrated that, in spite of our clear commitment as a coastal State to NAFO as a vital mechanism for sustaining fisheries in the Northwest Atlantic, our legitimate interests in NAFO fisheries have been virtually ignored when it comes to National allocations of fishing opportunities.

We will continue to insist that Contracting Parties, and particularly coastal States, should have appropriate access to relevant NAFO stocks that reflects the realities and interests of today, not just a static slice of history that happens to favor some contracting parties, and disadvantages others.

I look forward to our work this week in our first meeting to begin the new era of NAFO. It has been an honor and a pleasure to serve alongside my fellow Commissioners during these last few years. I've been enormously impressed by your dedication and appreciative of your camaraderie. Certainly, the friendships that are formed among the NAFO delegations continue well beyond retirement dates.

## **Annex 10. Provisional Agenda**

### **I. Opening Procedure**

1. Opening by the interim Chairperson, Stéphane Artano (France-SPM)
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. Implementation of the Amendments to the NAFO Convention
  - a. Update of the NAFO Rules of Procedure, Financial Regulations and Staff Rules
  - b. Establishment of a list of experts to serve as panelists under the NAFO Dispute Settlement provisions
8. Administrative and Activity Report
9. NAFO Headquarters Agreement
10. 2017 Performance Review
11. Meeting Report and Recommendations of the NAFO Working Group on Improving Efficiency of NAFO Working Group Process
12. Guidance to STACFAD necessary for them to complete their work
13. Guidance to STACTIC necessary for them to complete their work

### **III. Coordination of External Affairs**

14. Report of Executive Secretary on External Meetings
15. International Relations
  - a. Appointment of NAFO Members as Observers to External Meetings
  - b. Areas Beyond National Jurisdiction (ABNJ) Deep-Seas Project
  - c. Relations with other International Organizations
  - d. NAFO expert to the NAMMCO performance review
16. Oil and Gas Activities in the NAFO Regulatory Area – Information Exchange Arrangement

### **IV. Scientific Advice**

17. Presentation of scientific advice by the Chair of the Scientific Council
  - a. Scientific advice on fish stocks
  - b. Scientific advice on Risk-based Management Strategies and Ecosystem Approach Framework to Fisheries Management, and other topics
  - c. Other issues as determined by the Chair of the Scientific Council
  - d. Feedback to the Scientific Council regarding the advice and its work during this meeting



18. Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 2019 and on other matters

#### **V. Conservation of Fish Stocks in the Regulatory Area**

19. Meeting Reports and Recommendations of the Joint Commission–Scientific Council Working Group on Risk-based Management Strategies (WG-RBMS), 2017
20. Management and Technical Measures for Fish Stocks in the Regulatory Area, 2018
  - a. Cod in Division 3M
  - b. Redfish in Division 3M
  - c. American plaice in Division 3M
  - d. Shrimp in Division 3M
  - e. Pelagic *Sebastes mentella* (oceanic redfish) in the NAFO Convention Area
  - f. Splendid alfonsino (*Beryx splendens*)
21. Management and Technical Measures for Fish Stocks Straddling National Jurisdictions, 2018
  - a. Cod in Divisions 3NO
  - b. Yellowtail flounder in Divisions 3LNO
  - c. Witch flounder in Divisions 3NO
  - d. White hake in Divisions 3NO
  - e. Greenland halibut in Subarea 2 and Divisions 3KLMNO
  - f. Shrimp in Divisions 3LNO
22. Other matters pertaining to Conservation of Fish Stocks

#### **VI. Ecosystem Considerations**

23. Meeting Report and Recommendations of the Joint Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management (WG-EAFFM), July 2017
24. Other matters pertaining to Ecosystem Considerations

#### **VII. Conservation and Enforcement Measures**

25. Review of Chartering Arrangements
26. Meeting Reports and Recommendations of the Joint Commission–Scientific Council Ad hoc Working Group on Catch Reporting (WG-CR) and of the Catch Data Advisory Group (CDAG), 2017
27. Meeting Report and Recommendations of the Ad hoc Working Group on Bycatches, Discards, and Selectivity (WG-BDS), July 2017
28. Report of STACTIC at this Annual Meeting
29. Other matters pertaining to Conservation and Enforcement Measures

#### **VIII. Finance**

30. Report of STACFAD at the Annual Meeting
31. Adoption of the Budget and STACFAD recommendations for 2018

**IX. Closing Procedure**

- 32. Other Business
- 33. Election of Chairperson and Vice-Chairperson
- 34. Time and Place of Next Annual Meeting
- 35. Press Release
- 36. Adjournment

## **Annex 11. Opening Statement by the Convention on Biological Diversity (CBD)**

*Mr. President,  
Distinguished Delegates,*

I am pleased to have this opportunity to address the 39<sup>th</sup> Annual Meeting of the Northwest Atlantic Fisheries Organization (NAFO). As you may know, this is the first time the Secretariat of the Convention on Biological Diversity (CBD) has participated in this forum and we very much look forward to continuing our engagement in this process.

The Convention on Biological Diversity has 196 Parties and three objectives: (i) the conservation of biodiversity, (ii) the sustainable use of its components and (iii) the fair and equitable sharing of benefits arising from genetic resources. Sustainable fisheries is a critical aspect of achieving the objectives of the Convention.

Parties to the Convention on Biological Diversity have recognized the central role of fisheries in implementing the Convention, including in the context of the Aichi Biodiversity Targets, adopted in 2010, and in particular, Aichi Biodiversity Target 6. Target 6 calls for, by 2020, having all fish and invertebrate stocks and aquatic plants being managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

The adoption of Aichi Target 6 has increased awareness of the link between fisheries and biodiversity. It has also provided a strong basis for increased dialogue and collaboration between the fisheries and biodiversity communities. The work of organizations like the Northwest Atlantic Fisheries Organization is essential to ensuring that increased awareness and dialogue leads to tangible on-the-ground action.

The critical need to enhance collaboration and coordination between the fisheries and biodiversity communities was a central topic of the UN Biodiversity Conference in December 2016, which focused on the theme of mainstreaming biodiversity for well-being. At the high-level segment of the Conference, ministers of environment and fisheries, among others, expressed their commitment, through the adoption of the *Cancun Declaration on Mainstreaming the Conservation and Sustainable use of Biodiversity for Well-being*, to work at all levels within governments and across sectors to mainstream biodiversity in fisheries. In doing so, they committed to support mainstreaming through actions such as incorporating biodiversity values into national accounting and reporting systems, and ensuring that sectoral and cross-sectoral policies, plans and programmes integrate the conservation, sustainable use, management, and restoration of biodiversity and ecosystems. Furthermore, the 13<sup>th</sup> meeting of the Conference of the Parties (also held during the UN Biodiversity Conference) adopted decision XIII/3, which outlined specific strategic actions to enhance the mainstreaming of biodiversity within and across the fisheries, forestry, agriculture and tourism sectors.

In this vein, the CBD Secretariat has worked closely over the years with the Food and Agriculture Organization of the United Nations (FAO), regional fishery bodies and other entities to support enhanced implementation by Parties to better address biodiversity considerations in the fisheries and aquaculture sectors. For example, FAO and the fisheries community have played a key role in the work under the CBD on ecologically or biologically significant marine areas (EBSAs). FAO and the CBD Secretariat have also worked together to provide guidance to governments on the achievement of Aichi Biodiversity Target 6. Recently, the CBD Secretariat initiated a process, together with FAO, UN Environment and various regional organizations, to enhance regional-scale dialogue and coordination for conservation and sustainable use of marine biodiversity. The first meeting of this process, the Sustainable Ocean Initiative Global Dialogue with Regional Seas Organizations and Regional Fishery Bodies on Accelerating Progress towards the Aichi Target and the Sustainable Development Goals, was held last year in Seoul. This meeting was hosted by the Ministry of Oceans and Fisheries of the Republic of Korea, and attracted more than 80 representatives of various regional and global organizations from around the world.

Report of the Commission, 18-22 Sept 2017

I am delighted to report that, with the kind support of the Republic of Korea, together with Government of Japan, the European Union and the Government of Sweden, the Sustainable Ocean Initiative Global Dialogue will become a biennial forum, and the second meeting will be held in April 2018, in which we encourage strong participation of NAFO.

*Ladies and Gentlemen,*

Objectives related to sustainable fisheries and biodiversity are closely intertwined. Biodiversity objectives can only be met if fishing is effectively managed, and objectives for productive fisheries can only be met if the ecosystems that support the fish stocks are healthy and resilient.

In closing, allow me to emphasize that the CBD Secretariat is ready to work closely with you to support your work and identify opportunities to achieve our common goals.

## **Annex 12. Opening Statement by Environmental Information: Use and Influence research program**

Chairman, Delegates, Fellow Observers:

The Environmental Information: Use and Influence research program (EIUI) thanks the Secretariat and Contracting Parties for approving our attendance as an Observer at this 39th NAFO annual meeting.

Our interdisciplinary research program is based in the Faculty of Management at Dalhousie University, Halifax, Nova Scotia. Since 2002 we have been studying the production and use of marine environmental and fisheries information. The aim of our research is to advance understanding of the complexities of information use at the science-policy interface. Our research leads to recommendations to strengthen use and influence of this information in policy and decision-making processes.

More recently, we have been working with the NAFO Secretariat and other fisheries governmental and intergovernmental organizations. Our research has focused on Canada as a Contracting Party to NAFO represented by the Department of Fisheries and Oceans (DFO). We are also partnering in research with local and international environmental NGOs about information use in marine conservation and fisheries management.

At the Scientific Council Meeting in June 2016 meeting we had the opportunity to present doctoral research results on the main drivers, enablers, and barriers to communication of information in NAFO. An important finding was the key role that the NAFO Fisheries Commission's Request for Advice plays in ensuring the production of credible, relevant, and legitimate information for decision-making. Structural changes within NAFO, such as the formation of joint Fisheries Commission and Scientific Council working groups, and overlapping membership of DFO and NAFO working groups, facilitate increased and ongoing communication between managers and scientists. Such changes also ensure that the organizations keep pace with the growing complexity of fisheries management recognizing the need to adopt ecosystem approaches to management. The Standing Committee on Research Coordination (STACREC) recommended that these research findings are presented at other NAFO meetings.

The interface in fisheries management is dynamic as it involves continuous interactions between scientific and decision-making groups and external stakeholders to enable efficient flow of information. Multiple interfaces exist within and among the many fisheries management organizations participating in NAFO.

Members of the EIUI team, including faculty and graduate students, continue to observe how scientific advice is communicated and how management advice is developed in NAFO and at this meeting. We look forward to continued collaboration with NAFO in promoting the use of the best available scientific information to inform decision-making related to management and conservation of the resources of the NAFO Convention Area.

Thank you.

Suzette Soomai, PhD, EIUI Team Member for Bertrum MacDonald (EIUI Team Lead)  
Environmental Information: Use and Influence research program ([www.eiui.ca](http://www.eiui.ca))  
Dalhousie University, Halifax, Nova Scotia, Canada

### **Annex 13. Opening Statement by the Ecology Action Centre**

Chair, Heads of Delegation, Delegates and fellow Observers, on behalf of the Ecology Action Centre and the two coalitions of which we are active members – the Deep Sea Conservation Coalition and the Shark League for the Atlantic and Mediterranean – we are pleased to be here this year, the tenth year we have engaged as observers to NAFO.

While every year, NAFO makes progress on further measures to better understand and protect the ecosystem upon which its fisheries depend – we note that it has also been over a decade since States agreed to protect vulnerable marine ecosystems or not allow bottom fishing to occur – as per UNGA Resolution 61/105. It is time to finish the job so that NAFO, its Contracting Parties and their hard-working scientists can focus on other urgent matters relating to the conservation and sustainable use of fish populations in the NAFO Regulatory Area.

We welcome the entrance of the amended NAFO Convention into force and note the additional responsibilities it places on Contracting Parties to sustainably manage NAFO fisheries.

We have provided a simple checklist this year to outline our recommendations to NAFO, and key actions include:

- Protect the remaining New England and Corner Rise Seamounts, as per science advice in 2014.
- Restrict bottom trawl surveys in closed areas, given that over 120,000 kgs of sponges has been recorded, placing science as the greatest threat to the closed areas.
- Prioritize analysis of haul-by-haul data for all bycatch species.
- Assess and regulate deep-sea fisheries, including Splendid Alphonso.
- Follow science advice in all quota decisions for NAFO regulated fisheries.
- Request scientific council for advice on the next steps in implementing multispecies assessments and an ecosystem approach to TAC advice.
- Request that climate change and climate vulnerability are incorporated into stock assessments and science advice.
- Improve cross-sectoral collaboration and information sharing, with a view towards greater protection of biodiversity and minimizing impacts on NAFO VME closures.
- To further transparency within NAFO, ensure that the NAFO performance review process is open to submissions by observers to NAFO.

We look forward to this week's discussions and deliberations and urge Contracting Parties to take into account the results of the UN Fish Stocks Review Conference and findings of included in the Secretary Generals' report as well as the 2016 World Ocean Assessment. Thank you.

**Annex 14. Quota Table 2018**

CATCH LIMITATIONS – Article 5. Total allowable catches (TACs) and quotas (metric tons in live weight) for 2018 of particular stocks in Subareas 1-4 of the NAFO Convention Area.

Species	Cod				Redfish					American plaice		Yellowtail
Stock Specification	COD 3L	COD 3M		COD 3NO	RED 3LN		RED 3M	RED 3O	REB 1F_2_3K (i.e. Sub-Area 2 and Divs. 1F+3K)	PLA 3LNO	PLA 3M	YEL 3LNO
% of TAC			% of 3M Cod TAC			% of 3LN Redfish TAC						
Contracting Party												
Canada		89	0.80	0	6 049	42.60	500	6 000	0 <sup>1</sup>	0	0	16 575
Cuba		412	3.70	-	1 392	9.80	1 750		0 <sup>1</sup>	-	-	-
Denmark (Faroe Islands and Greenland)		2491	22.35	-	-		69 <sup>10</sup>		0	-	-	-
European Union		6356 <sup>5</sup>	57.03	0 <sup>4</sup>	2 589 <sup>4</sup>	18.23	7 813 <sup>4</sup>	7 000	0 0 <sup>7</sup>	0	0 <sup>4</sup>	-
France (St. Pierre et Miquelon)		-		-	-		69 <sup>10</sup>		0 <sup>1</sup>	-	-	340
Iceland		-		-	-		-		0	-	-	-
Japan		-		-	-		400	150	0 <sup>1</sup>	-	-	-
Korea		-		-	-		69 <sup>10</sup>	100	0 <sup>1</sup>	-	-	-
Norway		1031	9.25	-	-		-		0	-	-	-
Russian Federation		721	6.47	0	4 085	28.77	9 137	6 500	0	-	0	-
Ukraine								150	0 <sup>1</sup>			
United States of America		-		-	-		69 <sup>10</sup>		0 <sup>1</sup>	-	-	-
Others		45	0.40	0	85	0.60	124	100	-	0	0	85
<b>TOTAL ALLOWABLE CATCH</b>	*	11 145 <sup>15, 16</sup>	100.0	*	14 200 <sup>17</sup>	100.0	10 500 <sup>8</sup>	20 000 <sup>8</sup>	0 <sup>3,9</sup>	* <sup>14</sup>	* <sup>11</sup>	17 000 <sup>12, 14</sup>



Report of the Commission, 18-22 Sept 2017

Species	Witch			White hake	Capelin	Skates	Greenland halibut	Squid ( <i>Illex</i> )	Shrimp	
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
% of TAC			% of 3NO Witch TAC							
Contracting Party										
Canada		670	60.00	294	0	1 167	1833	N.S. <sup>2</sup>	0	
Cuba		-			0		-	510	0	
Denmark (Faroe Islands and Greenland)		-			-		211	-	0	
European Union		148 <sup>4</sup>	13.27	588	0 <sup>5</sup>	4 408	7169 <sup>6</sup>	<u>N.S.<sup>2</sup></u> 611 <sup>5</sup>	0 <sup>6</sup>	
France (St. Pierre et Miquelon)		-			-		201	453	0	
Iceland		-			-		-	-	0	
Japan		-			0		1253	510	0	
Korea		-			-		-	453	0	
Norway		-			0		-	-	0	
Russian Federation		287	25.73	59	0	1 167	1560	749	0	
Ukraine							-		0	
United States of America		-			-		-	453	0	
Others		11	1.00	59	-	258		794	0	
<b>TOTAL ALLOWABLE CATCH</b>	<sup>*8</sup>	1 116 <sup>18</sup>	100.00	1 000 <sup>8</sup>	*	7 000 <sup>13</sup>	12 227	34 000 <sup>8</sup>	0	*





- \* Ban on fishing in force.
- <sup>1</sup> Quota to be shared by vessels from Canada, Cuba, France (St. Pierre et Miquelon), Japan, Korea, Ukraine and USA.
- <sup>2</sup> 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).
- <sup>3</sup> Should NEAFC modify its level of TAC, these figures shall be adjusted accordingly by NAFO through a mail vote.
- <sup>4</sup> 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.
- <sup>5</sup> 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.
- <sup>6</sup> Including allocations to Estonia, Latvia, Lithuania and Poland, as applied by NAFO since 2005 following their accession to the EU.
- <sup>7</sup> Allocation of 17.85% to Lithuania and 2.15% to Latvia following their accession to the European Union.
- <sup>8</sup> Applicable to 2018 and 2019.
- <sup>9</sup> 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.
- <sup>10</sup> 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.
- <sup>11</sup> Applicable to 2018, 2019 and 2020.
- <sup>12</sup> Following the NAFO Annual Meeting and prior to 1 January of the succeeding year, at the request of the USA, Canada will transfer 1,000 tonnes of its 3LNO yellowtail quota to the USA.
- <sup>13</sup> Should catches exceed 5 000 tonnes, additional measures would be adopted to further restrain catches in 2018.
- <sup>14</sup> In lieu of Article 6.3 of the NCEM, the following by-catch provisions for American plaice only in the 3LNO yellowtail fishery shall apply: Contracting Parties fishing for yellowtail flounder allocated under the NAFO allocation table will be restricted to an overall Am. plaice by-catch harvest limit equal to 15% of their total yellowtail fishery as calculated in accordance with Article 6.4. If a Scientific Council projection indicates that this rate is likely to undermine stock recovery or cause an unreasonable delay in reaching  $B_{lim}$ , this rate may be subject to a reassessment by the Commission.
- <sup>15</sup> For 2019, the TAC will be reduced to 8 182 tonnes. This TAC will be reviewed based on the available Scientific Advice on this stock.

### Historical statements

- <sup>16</sup> The allocation key of this stock is based on the 1998 Quota Table. In 1999, a moratorium on cod in Division 3M was declared.
- <sup>17</sup> The allocation key of this stock is based on the 1997 Quota Table. In 1998, a moratorium on redfish in Division 3LN was declared.
- <sup>18</sup> 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 Div. 3M, 2018**

<b>Contracting Party</b>	<b>Number of Fishing Days<sup>1</sup></b>	<b>Number of Vessels<sup>1</sup></b>
<b>Canada</b>	0	0
<b>Cuba</b>	0	0
<b>Denmark</b> – Faroe Islands – Greenland	0	0 0
<b>European Union</b>	0	0
<b>France (in respect of St. Pierre et Miquelon)</b>	0	0
<b>Iceland</b>	N/A	N/A
<b>Japan</b>	0	0
<b>Korea</b>	0	0
<b>Norway</b>	0	0
<b>Russia</b>	0	N/A
<b>Ukraine</b>	0	0
<b>USA</b>	0	0

<sup>1</sup> 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 15. Press Release**

### **NAFO MEETS FOR THE FIRST TIME UNDER MODERNIZED CONVENTION**

FOR IMMEDIATE RELEASE

MONTREAL, QC, 22 SEPTEMBER 2017- The 39th Annual Meeting of the Northwest Atlantic Fisheries Organization (NAFO) took place from 18 to 22 September in Montréal, Canada. Over 180 delegates from 11 NAFO Contracting Parties were welcomed to Montréal by NAFO President, Stéphane Artano, and the Honourable Dominic LeBlanc, Minister of Fisheries, Oceans and the Canadian Coast Guard. The meeting marked a NAFO milestone, being the first Annual Meeting held under the amended NAFO Convention, which came into force 18 May 2017. These amendments to the Convention modernize NAFO, particularly by incorporating an ecosystem approach to fisheries management. This approach includes safeguarding the marine environment, conserving marine biodiversity and minimizing the risk of long term adverse effects of fishing activities on the marine ecosystem. The amendments also streamline NAFO's decision-making process, strengthen the obligations of Contracting Parties, Flag States and Port States, and institute a formal dispute settlement mechanism. In addition, to the traditional total allowable catch (TAC)\* and quota decisions, significant decisions were made regarding the following:

- **NAFO agreed to a management strategy for Greenland halibut.** This management plan shall be in force from 2018 to 2023 and the TAC for this stock will be adjusted annually depending on the agreed Harvest Control Rule (HCR).
- **NAFO agreed to relaunch its second performance review.** This performance review will be completed by the next Annual Meeting in September 2018 and will address: conservation and management; compliance and enforcement; governance; science; international cooperation; financial and administrative issues. The previous NAFO performance review took place in 2011, with all of its recommendations having been addressed.
- **NAFO agreed to protect the entire New England Seamount chain,** amending the boundary of the area closed to bottom fishing to include all peaks in the chain. The protection of the entire chain as a whole will help in sustaining the biological connectivity and function of seamount communities at all depths. In addition, procedures leading to these closures were further streamlined.
- **NAFO agreed to a benchmark assessment of cod on the Flemish Cap in 2018.** This benchmark assessment will explore the robustness of the current assessment model and evaluate alternatives including multi-species models, with a number of international experts being invited to review. This assessment aims to improve confidence in future assessments of this stock.
- **NAFO re-elected current President, Stéphane Artano** (France in respect of Saint Pierre and Miquelon), for his second term, and Temur Tairov (Russian Federation) was elected as vice-Chair.

For further inquiries, please contact:  
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E-mail: [dbell@nafo.int](mailto:dbell@nafo.int)



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

39<sup>th</sup> Annual Meeting of NAFO, 18-22 September 2017  
Montréal, Québec, Canada

**1. Opening by the Chair, Judy Dwyer (Canada)**

The Chair opened the meeting at 13:00 hours on Monday, 18 September 2017 at the Marriott Château Champlain, in Montréal, Québec, Canada. The Chair welcomed representatives from the following Contracting Parties (CPs) – Canada, Denmark (in respect of Faroe Islands and Greenland), the European Union, Iceland, Japan, Norway, the Russian Federation, and the United States of America (Annex 1).

**2. Appointment of Rapporteur**

Matthew Kendall (NAFO Secretariat) was appointed as rapporteur.

**3. Adoption of Agenda**

The following additions were made to the agenda under agenda Item 14 – Other Business:

- a) NAFO Working Group on Improving Efficiency of NAFO Working Group Process
- b) Catch and Fishing Effort Reporting in Article 28.8. (a)
- c) Joint Advisory Group on Data Management (JAGDM) Update
- d) Recommendations from the Ad hoc virtual NAFO Website Re-design Working Group

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

**4. Compliance review 2017 including review of reports of Apparent Infringements**

The NAFO Secretariat noted that the compliance review working papers that were discussed at the Intersessional meeting have been revised with comments received from Contracting Parties following the meeting (STACTIC WP 17-01 (Rev. 2), STACTIC WP 17-02 (Rev. 2), and STACTIC WP 17-03 (Rev. 3)).

The NAFO Secretariat presented the draft Annual Compliance Review in STACTIC WP 17-27, and highlighted the inclusion of an analysis of compliance with the provision for 15% port inspections in Article 43.10 of the CEM. Contracting Parties discussed several omissions, additions and edits and the NAFO Secretariat agreed to revise the Working Paper with the suggested changes. Representatives from Canada, the European Union, the United States, and the NAFO Secretariat volunteered to complete Part 4: Trends, Conclusions and Recommendations. This was merged with the agreed changes into STACTIC WP 17-27 (Rev.). Contracting Parties provided additional comments that were incorporated into STACTIC WP 17-27 (Rev. 2) that was agreed to be sent to the Commission for adoption. Contracting Parties requested that the Secretariat conduct further analysis on the compliance with fishing activities in and around the VME closed areas, including fishing speed analysis by fishery.

Canada presented STACTIC WP 17-42 which was a proposal for a revised compliance review outline based on a previous discussion paper (STACTIC WP 17-38). Contracting Parties discussed the outline and the final version (STACTIC WP 17-42 (Rev. 2)) was created and agreed to be used as a template for the 2018 draft Annual Compliance Review.

It was **agreed** that:

- **The Annual Compliance Review outlined in STACTIC WP 17-27 (Rev. 2) be forwarded to the Commission for adoption.**
- **The revised compliance review outline presented in STACTIC WP 17-42 (Rev. 2) be used as a template for the 2018 draft Annual Compliance Review.**

## **5. Measures concerning repeat non-compliance of serious infringements in the NAFO Regulatory Area**

Canada presented STACTIC WP 17-37, a discussion paper on measures concerning vessels demonstrating repeat non-compliance as demonstrated by serious infringements in the NAFO regulatory area, including a proposal for an “IUU like list”. It was a continuation of the discussion at the 2016 Annual Meeting. Following discussions of the three options and the tabulated information presented in the Working Paper. Contracting Parties agreed to submit and/or clarify outstanding domestic legislation/authorities/policies to Canada for inclusion in the table found in STACTIC WP 17-37. Canada expressed its commitment to deal with this issue and presented STACTIC WP 17-43, a proposal on establishing a NAFO Contracting Party “IUU List” to help deal with repeated non-compliance of serious infringements. Several Contracting Parties had reservations about this approach, although they confirmed their eagerness to promote deterrence and transparency. Canada withdrew the Working Paper. The European Union stated they will propose for the 2018 Intersessional meeting an amended format of the compliance review material regarding the apparent infringements issued considered intersessionally, to be included in the annual compliance report. The NAFO Secretariat was also asked to investigate what other RFMO’s are now doing to combat issues of repeated serious non-compliance and report results at the 2018 Intersessional meeting.

It was **agreed** that:

- **Contracting Parties will submit and/or clarify outstanding domestic legislation/authorities/policies to Canada for inclusion in the table found in STACTIC WP 17-37 before the 2018 Intersessional meeting.**
- **The NAFO Secretariat would report at the 2018 STACTIC Intersessional meeting on what other RFMO’s are doing to combat repeated serious infringements.**
- **The European Union would propose an amended format for the compliance review material related to apparent infringements, to be included in the Annual Compliance Report for the 2018 STACTIC Intersessional meeting.**

## **6. Review and evaluation of Practices and Procedures**

The NAFO Secretariat presented STACTIC WP 17-28 and noted that the presentation that Iceland made at the 2017 Intersessional meeting has been added to the Practices and Procedures webpage.

The European Union thanked Iceland for sharing this presentation but wondered if they could get a live demonstration as they found the technology very interesting. The Chair agreed with the European Union on the value of a demonstration and Iceland agreed to provide one at the 2018 Intersessional meeting. Denmark (in respect of Faroe Islands and Greenland) also offered to provide a demonstration of their quota monitoring system for the 2018 Intersessional meeting.

## **7. Review of current IUU list**

The Secretariat noted that there have not been any updates to the NAFO IUU List that was presented at the 2017 Intersessional meeting in STACTIC WP 17-05.

## 8. NAFO Monitoring, Control and Surveillance (MCS) Website

The NAFO Secretariat presented STACTIC WP 17-29 highlighting the recent historical uploading project to digitize and post historic inspection and observer reports on the NAFO MCS Website.

The NAFO Secretariat presented STACTIC WP 17-34 highlighting a demonstration of the catch data query addition to the NAFO MCS website. Contracting Parties thanked the Secretariat for their work and approved the addition of the catch data query option to the NAFO MCS Website. The European Union also wondered if any of the other suggested enhancements presented at the 2017 Intersessional meeting in STACTIC WP 17-08 could be revisited, including Quota Monitoring. The NAFO Secretariat provided a demonstration of their Quota Monitoring webpage and Contracting Parties agreed to incorporate it into the MCS website.

Contracting Parties agreed that as they all in effect have inspection responsibilities at port States, the further access to some types of information on the MCS website currently restricted to those with an inspection presence at-sea, would be of benefit to their strategic control operations. After some discussion between Contracting Parties the European Union agreed to bring a proposal to address this to the 2018 Intersessional meeting.

It was **agreed** that:

- **The NAFO Secretariat would proceed with adding the catch data query tool to the NAFO MCS website as outlined in STACTIC WP 17-34.**
- **The NAFO Secretariat would begin work developing a quota monitoring enhancement to the MCS website as first detailed in STACTIC WP 17-08.**
- **The European Union would develop a proposal to enable Contracting Parties without an inspection presence access to further information on the MCS website for presentation at the 2018 STACTIC Intersessional meeting.**

## 9. Editorial Drafting Group (EDG) of the NAFO CEM

The Chair presented STACTIC WP 17-30, which highlighted editorial changes in the CEM that were necessary following the entry into force of the amendments to the NAFO Convention. The Secretariat noted that these changes were reviewed by the EDG via correspondence since the 2017 Intersessional meeting. Contracting Parties agreed to forward these changes to the Commission for adoption.

The United States presented STACTIC WP 17-41 a proposal on the reinstatement of footnote 21 of the 2015 NAFO CEM quota table. After some discussion an updated STACTIC WP 17-41 (Revised) was created. Contracting Parties agreed to recommend to the Commission that former footnote 21 be re-instated as it appeared in the 2015 NAFO CEM, with Canada and the European Union noting there are differences in interpretation of the footnote. The reinsertion of former footnote 21 will be done without prejudice to NAFO's ability to review the footnote. Canada and the European Union put forward their view that the 15% was a bycatch limit, as is currently reflected in Article 6, and cannot be considered as a quota.

It was **agreed** that:

- **The changes to the NAFO CEM as a result of the entry into force of the amendments to the NAFO Convention presented in STACTIC WP 17-30 be forwarded to the Commission for adoption.**
- **STACTIC recommends that the proposal presented in STACTIC WP 17-41 (Revised) to reinstate footnote 21 from the 2015 NAFO CEM be forwarded to the Commission for adoption.**

## 10. New and Pending Proposals on Enforcement Measures – possible revisions of the NAFO CEM

The NAFO Secretariat noted that at the 2017 Intersessional meeting it was agreed that the proposals presented in STACTIC WP 17-09, STACTIC WP 17-10, and STACTIC WP 17-15 (Revised) be forwarded to the Commission for adoption.

The United States presented STACTIC WP 17-33, a discussion paper on the need to clarify provisions related to the definition of directed fishing as well as on how to apply “move along” provisions to fixed gear, most notably longline fisheries. Contracting Parties discussed this paper, but no consensus was reached. The European Union and Canada oppose a revision of the definition of directed fishing, but agreed to consider new wording for the “move along” provisions when referring to fixed gear. The United States agreed to bring a proposal to the 2018 Intersessional meeting to address the applicability of the “move along” provision to fixed gear.

The European Union presented STACTIC WP 17-19 (Revised) on a proposed amendment to the NAFO CEM Chapter VI Joint Inspection and Surveillance Scheme. This was originally presented at the 2017 Intersessional meeting where it was agreed to have participants provide comments that would be incorporated into this revised version to be discussed at this meeting.

The objective of this Working Paper was to streamline and modernize the at-sea inspection and surveillance scheme. Contracting Parties discussed the comments and the resulting STACTIC WP 17-19 (Rev. 3) was presented highlighting these changes. After some discussion, Contracting Parties agreed to forward this Working Paper to the Commission for adoption.

The European Union also presented STACTIC WP 17-20 (Revised) proposing amendments to the NAFO CEM Chapter VII - Port State Control. This was also originally presented at the 2017 Intersessional meeting where it was also agreed to have participants provide comments that would be incorporated into this revised version to be discussed at this meeting.

Contracting Parties discussed these comments and the resulting STACTIC WP 17-20 (Rev. 2) was presented by the European Union. Contracting Parties agreed to forward this Working Paper to the Commission for adoption.

It was **agreed** that:

- **The United States would bring a proposal to the 2018 Intersessional meeting to address the applicability of the “move along” provisions to fixed gear, including longline gear.**
- **The proposed changes to Chapter VI of the NAFO CEM found in STACTIC WP 17-19 (Rev. 3) be forwarded to the Commission for adoption.**
- **The proposed changes to Chapter VIII of the NAFO CEM found in STACTIC WP 17-20 (Rev. 2) be forwarded to the Commission for adoption.**

## 11. Report and recommendations of the STACTIC Observer Program Review Working Group (WG-OPR)

The STACTIC Chair noted that the Working Group last met in May 2017 and highlighted the decisions and important items from the report (FC Doc. 17-04). The Chair also presented a draft Terms of Reference in STACTIC WP 17-40. After discussions by Contracting Parties suggested edits were compiled into STACTIC WP 17-40 (Rev. 2) and it was agreed to forward this to the Commission for adoption. Contracting Parties discussed timelines for the revision of Article 30 of the NAFO CEM and Contracting Parties agreed to have a final version completed for the 2018 Annual Meeting. Contracting Parties agreed to meet via WebEx later in 2017 to consider the feedback expected from the Scientific Council about the potential utility of observer data for scientific purposes and to decide on a way forward.

It was **agreed** that:

- **The revised Terms of Reference for the STACTIC Observer Program Review Working Group (WG-OPR) as outlined in STACTIC WP 17-40 (Rev. 2) be forwarded to the Commission for adoption.**
- **The Working Group would report at the 2018 Annual Meeting with a final version of a new Article 30 of the NAFO CEM.**
- **A WebEx meeting of the Working Group be scheduled for October 2017 following the receipt of the survey results from the Scientific Council.**

## **12. Confidentiality measures in the NAFO CEM**

Canada presented STACTIC WP 17-36 on clarifying access to information in the NAFO CEM, specifically proposing changes to the CEM to address access rights to the list of observers, as well as to reflect the current practice of the access to at-sea inspection reports on the NAFO MCS website. The European Union highlighted that STACTIC WP 17-19 (Rev. 3) discussed earlier at this meeting may already address the availability of at-sea Inspection Reports. Canada then presented STACTIC WP 17-36 (Revised) removing the references to access rights for at-sea inspection reports. Contracting Parties then agreed to forward this to the Commission for adoption.

It was **agreed** that:

- **The proposal on clarifying access to information in the NAFO CEM presented in STACTIC WP 17-36 (Revised) be forwarded to the Commission for adoption.**

## **13. Information Security Management System (ISMS)**

The NAFO Secretariat presented STACTIC WP 17-31 outlining an alternative option for the storage of the NAFO Secretariat backup tapes. Contracting Parties agreed with the suggested course of action. The Secretariat also confirmed that the backup tapes are encrypted.

The NAFO Secretariat also presented STACTIC WP 17-32 which provided an update on the enhanced security project within the NAFO Secretariat.

It was **agreed** that:

- **The NAFO Secretariat proceed with the tape storage plan detailed in STACTIC WP 17-31 and that this decision be sent to STACFAD for the allocation of appropriate resourcing.**

## **14. Other Matters**

### **a. NAFO Working Group on Improving Efficiency of NAFO Working Group Process**

The Chair highlighted STACTIC WP 17-35 which was drafted as a response to a recommendation from the NAFO Working Group on Improving Efficiency of NAFO Working Group Process to facilitate intersessional discussions between NAFO bodies, specifically by inserting a new rule 5.2 to the NAFO Rules of Procedure. After some discussion by Contracting Parties it was agreed to forward the Working Paper to the Commission for adoption.

It was **agreed** that:

- **The changes in the NAFO Rules of Procedure presented in STACTIC WP 17-35 be forwarded to the Commission for adoption.**



## **b. Catch and Fishing Effort Reporting in Article 28.8. (a)**

Japan presented STACTIC WP 17-39, a discussion paper to clarify Article 28.8 (a) of the NAFO CEM on monthly catch and fishing effort reporting. It appears that there are some inconsistencies in how Contracting Parties are fulfilling this reporting obligation. There is also some question about the utility of the Article 28.8(a) reports, in the context of the availability of daily catch reports which can be used to automatically generate reports. Contracting Parties discussed this paper with the input of the NAFO Secretariat on how this data is used. It was agreed that the Secretariat report back at the 2018 Intersessional meeting on whether the data collected in the monthly provisional catch reports is available from other sources. It was also agreed that the Secretariat would look into other catch reporting provisions in the NAFO CEM that may have been made redundant by CATs. It was also agreed to add this topic to the agenda of the next Intersessional meeting.

It was **agreed** that:

- **The NAFO Secretariat would report back at the 2018 STACTIC Intersessional meeting with a review of the utility of the Provisional Monthly Catch Reports as per Article 28.8 (a).**
- **The NAFO Secretariat would look at the NAFO CEM to see if there are any provisions relating to catch reporting that may no longer be relevant due to having CATs, and report their findings at the 2018 STACTIC Intersessional meeting.**
- **This topic be added to the agenda of the 2018 STACTIC Intersessional meeting.**

## **c. Joint Advisory Group on Data Management (JAGDM) Update**

The JAGDM Chair Lloyd Slaney (Canada) highlighted the latest developments with JAGDM, including that they will be meeting next in October 2017 with a NEAFC only agenda. The main topic for this meeting is updating the NEAFC's ISMS to the latest standard. He also noted that the referral of topics from NAFO has slowed, but JAGDM will meet again in Spring 2018 to address issues of concern to both NAFO and NEAFC.

## **d. Recommendations from the Ad hoc virtual NAFO Website Re-design Working Group**

The NAFO Secretariat presented COM WP 17-29 and COM WP 17-30 on recommendations from the Ad-hoc virtual NAFO Website Re-design Working Group, highlighting the three phases of the NAFO website redesign and particularly Phase II on data classification. STACTIC agreed to provide feedback on Table 1.c of COM WP 17-29 regarding the distribution of information between the public and members pages and identify if any changes should be made, and provide an updated version to the working group following the 2018 Intersessional meeting. Contracting Parties agreed to empower the Working Group to continue their work.

It was **agreed** that:

- **The Ad hoc virtual NAFO Website Re-design Working Group be empowered to continue their work.**
- **STACTIC would provide feedback on Table 1.c of COM WP 17-29 to the working group following the 2018 Intersessional meeting.**

## **15. Election of Chair and vice-Chair**

At the 2015 Annual Meeting, Judy Dwyer (Canada) was elected as Chair and Aronne Spezzani (European Union) was re-elected as vice Chair. The Chair noted that the two-year period has ended and opened the floor for nominations for the Chair and vice-Chair. Contracting Parties agreed that Judy Dwyer (Canada) and Aronne Spezzani (European Union) remain as Chair and Vice Chair respectively for a further two years.

It was **agreed** that:

- **That Judy Dwyer (Canada) would remain as STACTIC Chair and that Aronne Spezzani (European Union) remain Vice Chair for a further two years.**

#### **16. Time and Place of next meeting**

The next STACTIC Intersessional meeting will be held at the NAFO Secretariat in Halifax, Canada the week of 08 May 2018.

#### **17. Adoption of Report**

The report was adopted on 21 September 2017, prior to the adjournment of the meeting.

#### **18. Adjournment**

The meeting was adjourned at 13:00 hours on 21 September 2017. The Chair thanked Canada for hosting the meeting and the NAFO Secretariat for their support during the meeting. She also thanked the meeting participants for their cooperation and input. The participants likewise expressed their thanks and appreciation to the Chair for her leadership.

**Annex 1. List of Participants**

Judy Dwyer (Chair) Natasha Barbour Kerry Bungay Christopher French Mike Hurley Lloyd Slaney	<b>Canada</b>
Meinhard Gaardlykke Petur Jacobsen Mads T. Nedergaard	<b>Denmark (in respect of the Faroe Islands and Greenland)</b>
Carlos Chamizo Carlos Ferreira Justine Jury Tomas Kazlauskas Epp Meremaa Glenn Quelch Aronne Spezzani	<b>European Union</b>
Björgólfur H. Ingason Hrannar M. Asgeirsson	<b>Iceland</b>
Masahiro Akiyama Masatsugu Nagano	<b>Japan</b>
Hilde Ognedal	<b>Norway</b>
Ilya Skryabin	<b>Russian Federation</b>
Kathy Cyr Elizabeth Etrie Mike Henry Susan Gardner Moir Kelly Gene Martin Richard Usher	<b>United States of America</b>
Jana Aker Matt Kendall DJ Laycock	<b>NAFO Secretariat</b>

## **Annex 2. Agenda**

1. Opening by the Chair, Judy Dwyer (Canada)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Compliance review 2017 including review of reports of Apparent Infringements
5. Measures concerning repeat non-compliance of serious infringements in the NAFO Regulatory Area
6. Review and evaluation of Practices and Procedures
7. Review of current IUU list
8. NAFO Monitoring, Control and Surveillance (MCS) Website
9. Editorial Drafting Group (EDG) of the NAFO CEM
10. New and Pending Proposals on Enforcement Measures – possible revisions of the NAFO CEM
11. Report and recommendations of the STACTIC Observer Program Review Working Group (WG-OPR)
12. Confidentiality measures in the NAFO CEM
13. Information Security Management System (ISMS)
14. Other Matters
  - a. NAFO Working Group on Improving Efficiency of NAFO Working Group Process
  - b. Catch and Fishing Effort Reporting in Article 28.8. (a)
  - c. Joint Advisory Group on Data Management (JAGDM) Update
  - d. Recommendations from the Ad hoc virtual NAFO Website Re-design Working Group
15. Election of Chair and vice-Chair
16. Time and Place of next meeting
17. Adoption of Report
18. Adjournment

**PART III.**  
**Report of the Standing Committee**  
**on Finance and Administration (STACFAD)**

39<sup>th</sup> Annual Meeting of NAFO, 18-22 September 2017  
Montréal, Québec, Canada

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

The first session of STACFAD was opened by the Chair, Deirdre Warner-Kramer (USA) on Monday, 18 September 2017. The Chair welcomed delegates and members of the NAFO Secretariat to the meeting.

Present were delegates 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 and the United States of America (Annex 1).

**2. Appointment of Rapporteur**

The NAFO Secretariat was appointed as Rapporteur.

**3. Adoption of Agenda**

The provisional agenda (Annex 2) was adopted as circulated.

**4. Auditors' Report for 2016**

Grant Thornton was appointed in 2016 to audit the financial statements of the Organization in accordance with the NAFO Financial Regulations.

NAFO adopted the use of International Financial Reporting Standards (IFRS) as the accounting framework for the Organization in 2012. Nevertheless, the Organization has had a number of departures from IFRS standards which has resulted in a qualified audit report. These deviations were clearly reported in the previous years' audit statements which were approved by the Commission. During the current year's audit, Grant Thornton advised that the summary of deviations from IFRS, would not allow them to issue a qualified opinion, as was received in the past from previous auditors.

Before finalizing the financial statements for the 2016 year end, Grant Thornton proposed that the Organization give consideration to its accounting options (STACFAD WP 17-07). A summary of the three options being proposed are:

**1. Become fully IFRS compliant**

Record all departures from generally accepted accounting principles (GAAP), including the pension obligation as well as other non-cash expenses. Additional costs would be associated with receiving an actuarial valuation on an annual basis for both the pension obligation and the termination benefits. A separate statement or reconciliation would also have to be performed to calculate the excess surplus to be given back to CPs as per the financial regulations.

**2. Correct sufficient departures so there is not a pervasive error in the financial statements**

As long as the cumulative impact on the remaining departures was not pervasive to the financial statements as a whole, a qualified opinion could likely be issued. Due to the size of the pension obligation, this amount would be required to be booked on the balance sheet.

### 3. Prepare the financial statements under a different basis of accounting

If the actuarial and termination benefit obligation is not relevant to the users of the financial statements and the Organization does not wish to present these on the face of the financial statements, consideration could be made to change the financial regulations.

NAFO has historically not recorded its capital assets, capital leases and the actuarial valuation of its pension obligation and termination benefits in the financial statements. It has however, provided supplementary information in the notes to the financial statement for its members. NAFO members have always been aware that this has been a departure from accounting standards and have been satisfied with this approach. Continuing with this approach allows the Organization to align the financial statements with the annual calculation of billings.

A review of other international fisheries organizations, based in Canada, has determined that:

- none of the three currently follow IFRS standards, instead they follow Not-for-Profit standards;
- their by-laws have been modified to allow for departures from GAAP; and
- their financial statements are prepared to comply with their financial regulations.

It is anticipated that switching from IFRS to Not-for-Profit accounting standards would not have any substantial or negative impact on the day-to-day financial affairs of the Organization. Based on unaudited internal financial statements, it was noted that the total expenditures incurred for the fiscal period ending 2016 amounted to \$1,867,951, which was 6.5% under the approved budget of \$1,997,000.

**STACFAD recommends that the Secretariat work with the auditors intersessionally to achieve the following:**

- **Use Not-for-Profit accounting standards from the current International Financial Reporting Standards (IFRS) accounting framework;**
- **Develop language, to be adopted by the Commission via an e-mail vote prior to 31 December 2017, to modify the NAFO Financial Regulations to state that the Organization will follow Not-for-Profit accounting standards and to describe the specific departures from the generally accepted accounting practices**
- **Complete the current year's audit on the basis of the modified financial regulations, once approved.**

## 5. Administrative and Activity Report by NAFO Secretariat

### a. Administrative and Activity Report

The Executive Secretary highlighted NAFO administrative matters and activities for the period September 2016 to August 2017 (COM Doc. 17-06).

### b. NAFO website

As the final stage of the NAFO website re-design project, and as agreed at the 2016 Annual Meeting of NAFO, the Secretariat continues to work towards a redesign of the secure sections of the NAFO website. It was agreed that the redesign should incorporate concerns raised regarding transparency in NAFO proceedings taking into account the different users of the NAFO website.

The Website Re-design *Ad hoc* virtual Working Group was established and continued to work intersessionally, in consultation with the Chairs of STACFAD and STACTIC, to develop standards and guidelines of access to documentation contained on secure portals including classifying which documentation requires log-in

credentials. An update on the progress of the group was presented (COM WP 17-29) as well as its recommendations (COM WP 17-30). The Secretariat is thanked for their work in facilitating these efforts.

**STACFAD recommends that:**

- **NAFO Contracting Parties strongly encourage additional participation in the *Ad hoc* virtual Working Group, in particular individuals from a broader range of Contracting Parties, and especially those with familiarity in either the technical and administrative aspects of NAFO.**
- **The *Ad hoc* virtual Working Group continue to work intersessionally, in consultation with the STACFAD and STACTIC Chairs, to further develop standards and guidelines of access to documentation contained in the NAFO forums for consideration at the 2018 Annual Meeting of NAFO.**
- **The *Ad hoc* virtual Working Group is empowered to make decisions on moving information that is clearly of a non-sensitive nature that can be migrated immediately from the restricted section of the NAFO website to the public pages, or from a more limited to a broader access within the restricted section, with the view to be as transparent as possible.**

## **6. Financial Statements for 2017**

The Secretariat presented the 2017 financial statements to the Committee. The operating budget for 2017 was approved at \$2,126,000 while expenditures for the year are projected to be at \$1,999,000, or \$127,000 under the approved budget. Savings for the year can be attributed to the following:

- 1) Annual meeting costs being lower than budgeted;
- 2) Fewer SC Inter-sessional meetings; and
- 3) Organizational Performance Review being deferred until 2018.

All remaining 2017 operating expenses are anticipated to be on or near budget for the year. The above noted cost savings of \$127,000 will be returned to the accumulated surplus and will be available to reduce Contracting Parties contributions in 2018.

## **Assessed Contributions**

At the beginning of 2017, the accumulated surplus had \$346,636, which was deemed to be in excess of the needs of the Organization and was allocated towards the 2017 operating budget. Therefore, in order to meet the 2017 operations budget of \$2,126,000, Contracting Parties were assessed contributions in the amount of \$1,779,364.

## **Balance Sheet**

The Organization's cash position at December 31, 2017 is estimated to be \$574,963. The cash balance should be sufficient to finance appropriations in early 2018 pending the receipt of annual payments by Contracting Parties in the spring of 2018.

It was noted that France (SPM) and Ukraine have full outstanding contributions for 2017. However, France (SPM) confirmed that their 2017 contribution was issued and should be received by the Secretariat during the week of the Annual Meeting. It was also noted that Ukraine recently informed the Secretariat that payment for their outstanding contributions would be issued in the near future.

## **7. Review of Accumulated Surplus Account and Contingency Fund**

According to the Financial Regulations, STACFAD and 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 to the good conduct of the business of the Organization.

The Secretariat noted the accumulated surplus account at December 31, 2017 is estimated to be \$656,000.

**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 2018, and of which \$85,000 would be a contingency fund available to be used for unforeseen and extraordinary expenses.**

## **8. Personnel Matters**

The NAFO Secretariat presented two staff members who were eligible for promotion and the Committee was in agreement with the proposed promotions.

## **9. Internship Program**

The Secretariat presented a report (STACFAD WP 17-01) on the activities of the internship program which occurred during the year including the tasks being performed by the intern, Jessica Randall (USA), hosted at the Secretariat in 2017.

The Committee recognized the benefits of the internship program to not only the Secretariat and the Organization but to the interns as well.

**STACFAD recommends that:**

- **The internship period be maintained for six (6) months during 2018.**
- **The NAFO Secretariat is encouraged to utilize the entire allocation for the internship program annually to fully achieve the benefits of the program.**

## **10. Implementation of the Amendments to the NAFO Convention**

### **a. Updates to the NAFO Rules of Procedure, Financial Regulations and Staff Rules**

One of the changes resulting from the amended NAFO Convention was the merger of the General Council and the Fisheries Commission into one body, the Commission. This entailed changes to the NAFO Rules of Procedure, Financial Regulations and Staff Rules, particularly to replace any references to the “*General Council*” and/or “*Fisheries Commission*” with “*the Commission*”.

Consequently, a STACFAD Working Group was formed in 2010 to revise the NAFO Rules of Procedure, Financial Regulations and Staff Rules in anticipation of the amended Convention entering into force. The Report of the STACFAD Working Group, 28-29 April 2010 (GC Doc. 10-02) was adopted at the 32nd Annual Meeting, 20-24 September 2010.

As there have been numerous amendments to the NAFO Rules of Procedure, Financial Regulations and Staff Rules since the adoption of the 2010 STACFAD Working Group Report, the NAFO Secretariat presented a Working Paper which was an amalgamation of the 2010 Report and adopted amendments made from 2010 onwards (COM WP 17-09 Revised to COM WP 17-11). The revised Rules of Procedure also include a new Rule 5.2 enabling STACTIC to communicate directly with the Scientific Council and other NAFO subsidiary bodies as was proposed by the NAFO Working Group on Improving Efficiency of NAFO Working Group Process (E-WG).



**STACFAD recommends that:**

- The NAFO Rules of Procedure (COM Working Paper 17-09 Revised); NAFO Financial Regulations (COM Working Paper 17-10) and NAFO Staff Rules (COM Working Paper 17-11) are adopted by the Commission.
- The NAFO Secretariat was requested, as per Rule 5 of the NAFO Financial Regulations, to report on the condition of the Scientific Research Fund, including the contributions received and their dispositions, beginning at the next Annual Meeting.

Norway indicated its intent to review the NAFO Rules of Procedure, particularly Rule 2 regarding Voting, to develop a proposal to improve their clarity and understandability for consideration at the 2018 Annual Meeting. The Committee would welcome such a proposal but requests that it be provided well in advance to ensure adequate time for review. This proposal, along with any recommendations regarding NAFO Rules of Procedure, Financial Regulations and Staff Rules that may arise from the Performance Review panel will be considered at the 2018 Annual Meeting. The Committee also noted that a holistic review of the Rules of Procedure may be warranted.

**b. Adjustment to 2017 Annual Contributions**

Under the amended NAFO Convention, which entered into force on 18 May 2017, the formula to calculate the respective annual contributions of Contracting Parties has been revised. Annual contributions for 2017 due from Contracting Parties that were issued in early March 2017 were based on the previous formula in force at that time. Because of the mid-year revision to the billing formula under the recent amendments, it is necessary recalculate annual contributions for 2017.

A summary of the adjustments to the 2017 contributions and amounts owing from or payable to Contracting Parties for 2017 was presented (STACFAD WP 17-02) and is provided in the table below. Contributions from 01 January to 17 May have been pro-rated based on the previous formula and contributions from 18 May to 31 December have been pro-rated based on the revised formula in the amended Convention.

Adjustment to 2017 Annual Contributions			
Contracting Party	Previously issued 2017 Contributions	Revised 2017 Contributions	Amount <b>Owing</b> <b>from</b> or Payable <b>to</b>
Canada	\$663,374	\$720,432	<b>-\$57,058</b>
Cuba	\$45,445	\$50,164	<b>-\$4,719</b>
DFG	\$312,330	\$250,610	\$61,720
EU	\$97,865	\$144,932	<b>-\$47,067</b>
Fr-SPM	\$51,147	\$55,390	<b>-\$4,243</b>
Iceland	\$44,484	\$48,758	<b>-\$4,274</b>
Japan	\$44,484	\$48,758	<b>-\$4,274</b>
Norway	\$48,861	\$55,566	<b>-\$6,705</b>
Korea	\$44,484	\$48,758	<b>-\$4,274</b>
Russia	\$59,004	\$72,782	<b>-\$13,778</b>
Ukraine	\$44,484	\$48,758	<b>-\$4,274</b>
USA	\$323,402	\$234,456	\$88,946
	<b>\$1,779,364</b>	<b>\$1,779,364</b>	<b>\$0</b>

**STACFAD recommends that:**

- **Any difference in 2017 annual contributions either owing from or payable to Contracting Parties, resulting from the revised calculation versus the 2017 billing previously issued, will be applied against 2018 annual contributions. Any Contracting Party with a balance owing to the Organization may instead request an invoice from the Secretariat to remit payment prior to the end of the 2017.**

**11. Report on the Annual Meeting of the International Fisheries Commissions Pension Society (IFCPS)**

The Annual Meeting of the International Fisheries Commissions Pension Society (IFCPS) was co-hosted by the Pacific Salmon Commission and the North Pacific Anadromous Fish Commission during 19-21 April 2017 in Vancouver, British Columbia, Canada. The Secretariat provided the Committee with an update on the highlights of the meeting. Background information on the pension plan, investment performance, financial status, as well as future administrative support was included with the information paper (STACFAD WP 17-03).

The latest actuarial valuation of the pension plan's assets and liabilities was performed on 1 January 2017. Based on the current economic data, several key assumptions in the valuation were revised, including the expected rate of return, mortality projection and retirement rates. These revised assumptions played a significant role in the pension fund deficit increasing from \$2,296,000 to \$3,206,00, since the last valuation was performed in 2014. Annual supplemental payments of \$320,600 will be required for the next 10 years, to address the pension deficiency. Consequently, additional funding of \$54,872 per year is required to cover this increase in liability from the previous valuation.

**12. Update on implementation of the NAFO Performance Review Panel (PRP) recommendations tasked to STACFAD**

One PRP recommendation tasked to STACFAD remains outstanding. PRP Recommendation 7.2.3 suggests amending certain provisions of the NAFO Staff Rules pertaining to the rights and obligations of NAFO Secretariat Staff, particularly dismissal or termination of appointment. A review of this agenda item has been deferred in prior years until the conclusion of the current wrongful dismissal legal case against NAFO.

Now that the legal case has been concluded, the NAFO Secretariat began a review of the current Staff Rules related to dismissal or termination, with the assistance of its lawyers. Once the review has been completed, a copy of the final report and any proposed changes will be presented to STACFAD in advance of the 2018 Annual Meeting.

**STACFAD recommends that:**

- **PRP Recommendation 7.2.3 be recognized as a stand-alone item, as this is the final PRP Recommendation to be completed from the first Performance Review of NAFO, and any resulting proposed changes to the Staff Rules be considered at the next Annual Meeting.**

**13. Budget Estimate for 2018**

The Committee reviewed the 2018 budget estimate as detailed in COM WP 17-03(Revised).

<i>Approved Budget 2017</i>	<i>Preliminary Budget Forecast 2018</i>	<i>Budget Estimate 2018</i>
<i>\$2,126,000</i>	<i>\$2,051,000</i>	<i>\$2,297,000</i>

The 2018 budget estimate of \$2,297,000 represents an increase of \$171,000 or 8.0% over the prior years approved budget.

The Committee noted that the latest actuarial valuation of the NAFO pension plan showed that the plan is in a deficit or unfunded position of \$3.2 million vs. the unfunded position from three years ago of \$2.3 million. The unfunded pension liability requires annual supplemental payments of \$320,600 for the next 10 years. This supplementary payment has been included in the Superannuation and Annuities budget line item.

As NAFO's second Performance Review was deferred until 2018, it was noted that \$93,000 originally earmarked for 2017, has once again been budgeted to cover expenses associated with the external review panel members' fees and travel, printing, etc.

It is anticipated that two additional inter-sessional scientific meetings, specifically the Precautionary Approach Framework (PAF) and the COD 3M Benchmark meetings, will be necessary to provide answers for requests for advice from the Commission. Therefore, an additional \$35,000 has been added to the inter-sessional scientific budget for 2018. As recommended by STACTIC to improve data security, an additional \$5,000 will be needed for external data storage.

**STACFAD recommends that:**

- **The budget for 2018 of \$2,297,000 (Annex 3) be adopted.**

#### **14. Budget Forecast for 2019 and 2020**

STACFAD reviewed the preliminary budget forecast for 2019 (\$2,225,000) and 2020 (\$2,263,000) (Annex 4) and approved the forecast in principle. It was noted that the budget for 2019 will be reviewed in detail at the next Annual Meeting.

#### **15. Adoption of 2017/2018 Staff Committee Appointees**

The Secretariat members nominated the following people to serve as members of the Staff Committee for September 2017–September 2018: Justine Jury (EU), Joanne Morgan (Canada) and Deirdre Warner-Kramer (USA).

**STACFAD recommends that:**

- **The Commission appoint the three Staff Committee nominees, Justine Jury (EU); Joanne Morgan (Canada) and Deirdre Warner-Kramer (USA), for September 2017–September 2018.**

#### **16. Office Relocation Update**

The current lease of the NAFO Secretariat headquarters has been extended and is scheduled to expire on April 30, 2018. The Secretariat has been informed by the Government of Canada that it will not likely be renewing its leases at 2 Morris Drive and therefore the NAFO Secretariat will have to relocate.

At last year's Annual Meeting, STACFAD noted the importance of ensuring the Secretariat is provided with appropriate space to meet the needs and interests of the Organization, including computer and data security, conference meeting space, security, etc.

Although a smaller footprint has been proposed for NAFO's new premises, due to its unique operational and special-purpose space requirements, an exemption from the Government of Canada's normal Workplace 2.0 Fit-Up standards was approved by Public Services and Procurement Canada (PSPC). This will provide for additional offices, a large conference room, medium-sized publications and storage rooms, and reception area in addition to the standard common amenities. As PSPC has now given its approval to NAFO's office space

requirements, work will begin on a suitable office design and layout for the new premises in downtown Halifax. The Committee encouraged the NAFO Secretariat and Canada to begin discussions to plan this work shortly following the Annual Meeting.

The Committee noted that the timing of the office relocation be considered to minimize its impact on workflow, particularly the second Performance Review of NAFO taking place in early 2018. It was further emphasized that disruption of web and data servers be kept to a minimum. Canada noted that no additional expenses are anticipated to be incurred by the Organization for the move.

## **17. Other Business**

No other business was raised by the Committee.

## **18. Election of vice-Chair**

According to the NAFO Rules of Procedure *"The Committee shall elect from among its members, to serve for two years, a Chair and a vice-Chair who shall be allowed to vote."*

The present vice-Chair, Élise Lavigne (Canada), was nominated and re-elected for a two-year term.

## **19. Time and Place of 2018-2020 Annual Meetings**

As previously agreed, the 2018 and 2019 Annual Meetings will be held 17-21 September and 23-27 September, respectively. 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 2020 Annual Meeting to be held (to be held in Halifax, Nova Scotia, Canada, unless an invitation to host is extended by a Contracting Party and accepted by the Organization) to be as follows:**

**21-25 September 2020**

## **20. Adjournment**

The final session of the STACFAD meeting adjourned on 21 September 2017.

The Committee thanked the Chair for her efficient and expedient work. Gratitude was expressed to Committee for its constructive cooperation this week, and to the NAFO Secretariat for its excellent support.

**Annex 1. List of Participants**

Élise Lavigne	<b>Canada</b>
Rasmus Bæk Pedersen	<b>Denmark (in respect of the Faroe Islands and Greenland)</b>
Karen Eva Abrahamsen	<b>European Union</b>
Christiane Laurent-Monpetit Benoît Tourtois	<b>France (in respect of St. Pierre et Miquelon)</b>
Masanori Wada	<b>Japan</b>
Hanne Østgård	<b>Norway</b>
Julia Badina	<b>Russian Federation</b>
Leah Fine Elizabethann Mencher Deirdre Warner-Kramer	<b>United States of America</b>
Fred Kingston Stan Goodick Lisa LeFort	<b>NAFO Secretariat</b>

## **Annex 2. Agenda**

1. Opening by the Chair, Deirdre Warner-Kramer (USA)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Auditors' Report for 2016
5. Administrative and Activity Report by NAFO Secretariat
  - a. Administrative and Activity Report
  - b. NAFO website
6. Financial Statements for 2017
7. Review of Accumulated Surplus and Contingency Fund
8. Personnel Matters
9. Internship Program
10. Implementation of the Amendments to the NAFO Convention
  - a. Updates to the NAFO Rules of Procedure, Financial Regulations and Staff Rules
  - b. Adjustment to 2017 Annual Contributions
11. Report of the Annual Meeting of the International Fisheries Commissions Pension Society (IFCPS)
12. Update on implementation of the NAFO Performance Review Panel (PRP) recommendations tasked to STACFAD
13. Budget Estimate for 2018
14. Budget Forecast for 2019 and 2020
15. Adoption of 2017/2018 Staff Committee Appointees
16. Office Relocation Update
17. Other Business
18. Election of vice-Chair
19. Time and Place of 2018-2020 Annual Meetings
20. Adjournment

**Annex 3. Budget Estimate for 2018****NORTHWEST ATLANTIC FISHERIES ORGANIZATION****Budget Estimate for 2018**

(Canadian Dollars)

	Approved Budget 2017	Projected Expenditures 2017	Preliminary Budget Forecast 2018	Budget Estimate 2018
1. Personal Services				
a) Salaries	\$1,026,000	\$1,028,000	\$1,069,000	\$1,080,000
b) Superannuation and Annuities	348,000	348,000	350,000	466,000
c) Medical and Insurance Plans	93,000	89,000	99,000	93,000
d) Employee Benefits	62,000	64,000	65,000	68,000
Subtotal Personal Services	1,529,000	1,529,000	1,583,000	1,707,000
2. Additional Help	2,000	2,000	2,000	2,000
3. Communications	23,000	23,000	23,000	24,000
4. Computer Services	42,000	42,000	42,000	47,000
5. Equipment	28,000	28,000	28,000	28,000
6. Fishery Monitoring	50,000	50,000	41,000	41,000
7. Hospitality Allowance	3,000	3,000	3,000	3,000
8. Internship	11,000	6,000	11,000	11,000
9. Materials and Supplies	28,000	28,000	28,000	28,000
10. NAFO Meetings				
a) Sessional	118,000	96,000	120,000	109,000
b) Inter-sessional Scientific	55,000	34,000	25,000	60,000
c) Inter-sessional Other	32,000	36,000	32,000	35,000
Subtotal NAFO Meetings	205,000	166,000	177,000	204,000
11. Other Meetings and Travel	35,000	35,000	35,000	32,000
12. Performance/External Reviews	93,000	-	-	93,000
13. Professional Services	51,000	61,000	52,000	51,000
14. Publications	14,000	14,000	14,000	14,000
15. Recruitment and Relocation	12,000	12,000	12,000	12,000
	<u>\$2,126,000</u>	<u>\$1,999,000</u>	<u>\$2,051,000</u>	<u>\$2,297,000</u>

Notes on Budget Estimate 2018  
(Canadian Dollars)

Item 1(a)	<b>Salaries</b> Salaries budget estimate for 2018.		\$1,080,000
Item 1(b)	<b>Superannuation and Annuities</b> Employer's pension plan which includes employer's contributions, administration costs, actuarial fees and the required annual payment towards previous pension plan deficits.		\$466,000
Item 1(c)	<b>Group Medical and Insurance Plans</b> Employer's portion of Canada Pension Plan, Employment Insurance, Group Life Insurance, Long Term Disability Insurance and Medical Coverage.		\$93,000
Item 1(d)	<b>Employee Benefits</b> Employee benefits as per the NAFO Staff Rules including overtime, repatriation grant, termination benefits, vacation pay, and travel to home country for internationally recruited members of the Secretariat.		\$68,000
Item 2	<b>Additional Support</b> Other assistance as required.		\$2,000
Item 3	<b>Communications</b> Phone, fax and internet services Postage and Courier	\$18,000 6,000	\$24,000
Item 4	<b>Computer Services</b> Computer hardware, offsite backup storage, software, supplies and support.		\$47,000
Item 5	<b>Equipment</b> Leases (print department printer, photocopier and postage meter) Purchases Maintenance	\$15,000 9,000 4,000	\$28,000
Item 6	<b>Fishery Monitoring</b> Vessel Monitoring System (VMS) annual maintenance fee including programming changes as required due to changes to CEM Oracle database annual maintenance	\$38,000 3,000	\$41,000



Item 10(a)	<b>NAFO Sessional Meetings</b> Annual Meeting, September 2018 SC Meeting, June 2018, Halifax, Canada SC Meeting, October 2018		\$109,000
Item 10(b)	<b>NAFO Inter-sessional Scientific Meetings</b> Provision for inter-sessional meetings and a general provision for unforeseen expenses necessarily incurred by SC required for the provision of answering requests for advice from the Commission. Special Meetings for PA Framework and 3M Cod Benchmark Review	\$25,000 \$35,000	\$60,000
Item 10(c)	<b>NAFO Inter-sessional Other</b> General provision for Commission inter-sessional meetings.		\$35,000
Item 11	<b>Other Meetings and Travel</b> International Meetings regularly attended by the NAFO Secretariat: <ol style="list-style-type: none"> <li>1. Aquatic Sciences and Fisheries Abstracts (ASFA)</li> <li>2. Committee on Fisheries (COFI)</li> <li>3. Co-ordinating Working Party on Fishery Statistics (CWP)</li> <li>4. Fisheries Resources Monitoring Systems (FIRMS)</li> <li>5. International Fisheries Commissions Pension Society (IFCPS)</li> <li>6. Regional Fishery Body Secretariats' Network (RSN)</li> <li>7. United Nations</li> </ol>		\$32,000
Item 12	<b>Performance/External Reviews</b> Costs associated with the performance review of the Organization.		\$93,000
Item 13	<b>Professional Services</b> Professional Services (audit, consulting, legal fees, and insurance) Professional Development and Training Public Relations	\$35,000 11,000 5,000	\$51,000
Item 14	<b>Publications</b> 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

**Annex 4. Preliminary Budget Forecast for 2019 and 2020**

## NORTHWEST ATLANTIC FISHERIES ORGANIZATION

## Preliminary Budget Forecast for 2019 and 2020

(Canadian Dollars)

	Preliminary Budget Forecast 2019	Preliminary Budget Forecast 2020
1 Personal Services		
a) Salaries	\$1,117,000	\$1,152,000
b) Superannuation and Annuities	464,000	461,000
c) Medical and Insurance Plans	98,000	102,000
d) Employee Benefits	68,000	68,000
Subtotal Personal Services	1,747,000	1,783,000
2 Additional Help	2,000	2,000
3 Communications	24,000	24,000
4 Computer Services	42,000	43,000
5 Equipment	28,000	28,000
6 Fishery Monitoring	42,000	42,000
7 Hospitality Allowance	3,000	3,000
8 Internship	11,000	11,000
9 Materials and Supplies	28,000	28,000
10 NAFO Meetings		
a) Sessional	129,000	130,000
b) Inter-sessional Scientific	25,000	25,000
c) Inter-sessional Other	35,000	35,000
Subtotal NAFO Meetings	189,000	190,000
11 Other Meetings and Travel	32,000	32,000
12 Professional Services	51,000	51,000
13 Publications	14,000	14,000
14 Recruitment and Relocation	12,000	12,000
	\$2,225,000	\$2,263,000

## Annex 5. Preliminary Calculation of Billing for 2018

### Preliminary calculation of billing for Contracting Parties against the proposed estimate of \$2,297,000 for the 2018 financial year (Canadian Dollars)

Budget Estimate	\$2,297,000
Deduct: Amount from Accumulated Surplus Account (pending approval from the Commission)	\$371,000
Funds required to meet 2018 Administrative Budget	\$1,926,000

#### Part A

Contracting Parties	Catches 2015	Catch %	NAFO Convention Article IX.2.a,b,c			
			10%	30%	60%	Subtotal
Canada	210,530	48.55%	\$105,487	\$48,150	\$561,044	\$714,681
Cuba	1,059	0.24%	-	\$48,150	\$2,773	\$50,923
Denmark (in respect of Faroe Islands and Greenland) (Note 2)	144,472	33.32%	\$72,389	\$48,150	\$385,046	\$505,585
European Union	32,073	7.40%	-	\$48,150	\$85,514	\$133,664
France (in respect of St. Pierre et Miquelon)	1,816	0.42%	\$910	\$48,150	\$4,854	\$53,914
Iceland	-	-	-	\$48,150	-	\$48,150
Japan	-	-	-	\$48,150	-	\$48,150
Norway	2,939	0.68%	-	\$48,150	\$7,858	\$56,008
Republic of Korea	-	-	-	\$48,150	-	\$48,150
Russian Federation	13,146	3.03%	-	\$48,150	\$35,015	\$83,165
Ukraine	-	-	-	\$48,150	-	\$48,150
United States of America	27,569	6.36%	\$13,814	\$48,150	\$73,496	\$135,460
<b>Total</b>	<b>433,604</b>	<b>100.00%</b>	<b>\$192,600</b>	<b>\$577,800</b>	<b>\$1,155,600</b>	<b>\$1,926,000</b>

#### Part B

Contracting Parties	Subtotal from Part A	NAFO Convention Article IX.2.d (Note 1)						Total contribution
		% Contribution	Catch % minus DFG	10%	30%	60%	Subtotal	
Canada	\$714,681	37.11%	72.81%	\$24,085	\$7,485	\$119,915	\$151,485	\$866,166
Cuba	\$50,923	2.64%	0.37%	-	\$7,485	\$603	\$8,088	\$59,011
Denmark (in respect of Faroe Islands and Greenland)	\$505,585	26.25%	-	-\$27,446	-\$82,335	-\$164,675	-\$274,456	\$231,129
European Union	\$133,664	6.94%	11.09%	-	\$7,485	\$18,268	\$25,753	\$159,417
France (in respect of St. Pierre et Miquelon)	\$53,914	2.80%	0.63%	\$208	\$7,485	\$1,034	\$8,727	\$62,641
Iceland	\$48,150	2.50%	-	-	\$7,485	\$0	\$7,485	\$55,635
Japan	\$48,150	2.50%	-	-	\$7,485	\$0	\$7,485	\$55,635
Norway	\$56,008	2.91%	1.02%	-	\$7,485	\$1,674	\$9,159	\$65,167
Republic of Korea	\$48,150	2.50%	-	-	\$7,485	\$0	\$7,485	\$55,635
Russian Federation	\$83,165	4.32%	4.55%	-	\$7,485	\$7,487	\$14,972	\$98,137
Ukraine	\$48,150	2.50%	-	-	\$7,485	\$0	\$7,485	\$55,635
United States of America	\$135,460	7.03%	9.53%	\$3,153	\$7,485	\$15,694	\$26,332	\$161,792
<b>Total</b>	<b>\$1,926,000</b>	<b>100.00%</b>	<b>100.00%</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$1,926,000</b>

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 3,767 metric tons  
Greenland 140,705 metric tons





Northwest Atlantic Fisheries Organization



**Report of the NAFO Joint Commission-Scientific Council  
Catch Estimation Strategy Advisory Group (CESAG) Meeting**

21 November 2017  
via Web-Ex

NAFO  
Dartmouth, Nova Scotia, Canada

2017

## **Report of the NAFO Joint Commission—Scientific Council Catch Estimation Strategy Advisory Group (CESAG)**

21 November 2017  
via Web-Ex

The Catch Estimation Strategy Advisory Group (CESAG) was established jointly by the Commission and the Scientific Council at the 39<sup>th</sup> Annual Meeting of NAFO in September 2017 by merging the Ad hoc Working Group on Catch Reporting (WG-CR) and the Catch Data Advisory Group (CDAG) (Annex 1 – NAFO COM-SC Doc 17-09).

At the 39<sup>th</sup> Annual Meeting, the Commission adopted the project proposal *Catch Estimates Methodology Study* (NAFO COM Doc 17-25). In the implementation of this project, an external contractor would undertake the study. The role and responsibility of CESAG in this project are, among others, to develop the evaluation criteria for the identification of a contractor and to identify the contractor.

The Secretariat organized the inaugural meeting by inviting previous participants of the WG- CR and CDAG. On 21 November 2017, the meeting was held via Web-Ex. The list of participants is presented in Annex 2.

There were two substantive items on the agenda:

1. election of co-Chairs in accordance with the Terms of Reference of CESAG, and
2. finalization of the draft *Call for Tender* document in relation to the *Catch Estimates Methodology Study*.

The meeting was opened by the Executive Secretary at 9:00 hrs. The Secretariat was appointed the Rapporteur.

Katherine Sosebee (USA) and Temur Tairov (Russian Federation) were elected as provisional co-Chairs of CESAG.

The draft *Call for Tender* was finalized. Edits to the draft were being incorporated by the Secretariat in real-time through the document-sharing feature of the Web-Ex.

It was agreed that the draft *Call for Tender* would be made available in SharePoint for further review until 27 November, after which time the *Call for Tender* will be uploaded to the NAFO Website and communicated to the Contracting Parties for dissemination. The *Call for Tender* is presented in Annex 3 (COM-SC CESAG-WP 17-01 Rev. 2).

As next steps, the Secretariat will compile the tender submissions received and forward to CESAG around 15 January 2018. It was agreed that a Web-Ex meeting will be held on 23 January 2018 with the aim of identifying the winning contractor who will undertake the study.

The co-Chair (Katherine Sosebee) also noted that there will be another CESAG meeting via Web-Ex in February 2018 to discuss the *Catch Estimation Strategy* which was developed by CDAG.

The meeting adjourned at 11:00 hrs.

## **Annex 1. Terms of Reference – Catch Estimation Strategy Advisory Group (CESAG) (NAFO COM-SC Doc 17-09)**

*Recognizing* the significant recent progress of both the Joint FC-SC Working Group on Catch Reporting (WG-CR) and the Catch Data Advisory Group (CDAG) on specific tasks identified in the respective Terms of Reference for each body;

*Noting* that in the course of completing these tasks, numerous recommendations have been made that provide direction for further work in the future;

*Mindful that* accurate catch reporting/estimation of catch are critically important in supporting the best available scientific advice, the sustainable management of all NAFO fish stocks, and the credibility of the Organization as a whole;

*Noting* that the Catch Data Advisory Group and the FC-SC Working Group on Catch Reporting have recommended that they be merged into a single technical body with a revised Terms of Reference to address ongoing issues related to catch validation;

It is recommended:

That the Ad hoc FC-SC Working Group on Catch Reporting and the Catch Data Advisory Group be merged into one body called the Catch Estimation Strategy Advisory Group (CESAG) with the following Terms of Reference:

### **Objectives:**

1. To provide oversight in the implementation of the catch estimation strategy and provide recommendations to the Commission on ongoing refinement.

### **Structure:**

The Group shall be comprised of technical experts from Contracting Parties with knowledge of catch data sources and accuracy thereof and/or operational practices within the fishery and the NAFO Secretariat.

The CESAG shall be co-chaired by representatives of the Commission and Scientific Council.

The Advisory Group shall report to the Commission and the Scientific Council.

The Advisory Group may engage, through the NAFO Secretariat, other NAFO bodies (e.g. STACTIC) on the implementation of the strategy.

### **Specific Duties:**

1. To support the application of the Catch Estimation Strategy by the NAFO Secretariat to all NAFO managed stocks; and
2. To consider and identify potential refinements of the Catch Estimate Strategy including the incorporation of haul-by-haul data within the strategy.

### **Meetings:**

Meetings of the Catch Estimation Strategy Advisory Group (CESAG) shall be held:

1. At least annually in advance of the May 1 deadline to support the development of catch estimates for the Scientific Council; or
2. At the request of the Commission or Scientific Council, in consultation with Contracting Parties and the NAFO Secretariat.

The Advisory Group shall communicate regularly through teleconferences and electronically (WebEx).

## **Annex 2. List of Participants**

### **CO-CHAIRS**

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Sosebee, Katherine (see co-Chairs).



**NAFO SECRETARIAT**

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Randall, Jessica. NAFO Intern.	



**Annex 3. Call for Tender - Catch Estimates Methodology Study**  
COM-SC CESAG-WP 17-01 (Rev. 3)

# **OPEN CALL FOR TENDERS**

## **CATCH ESTIMATES METHODOLOGY STUDY**

## **TENDERING SPECIFICATIONS**

## 1. Introduction

### 1.1. General information concerning the call for tender

The NAFO Convention on Cooperation in the Northwest Atlantic Fisheries, represented for the purposes of this call for tenders by the NAFO Secretariat, wishes to conclude a service contract on topics in relation to the NAFO mandate.

The eligible topic, which represents this call for tenders, is "Catch Estimates Methodology Study".

Joint tenders and subcontracting are authorized.

The services required are described in detail in section 2 of these specifications.

### 1.2 General information concerning the contract

The duration of tasks for this contract is:

- Nine (9) months from the date of signature of the contract.

Terms of payment:

- *Advance payment:* 30% after the signature of the contract by both parties.
- *1<sup>st</sup> Interim payment:* 30% following the approval by the NAFO Secretariat services of the interim report which shall be submitted four (4) months after the signature of the project.
- *Payment of the balance:* 40% to be issued within 60 days following the approval by the NAFO Secretariat of the final report.

## 2. Technical specification

### 2.1 Legal basis

The Convention on Cooperation in the Northwest Atlantic Fisheries, signed on 24 October 1978 in Ottawa, came into force on 1 January 1979 following the deposit with the Government of Canada the instruments of ratification, acceptance and approval by its then seven signatories: Canada, Cuba, the European Economic Community (EEC), German Democratic Republic (GDR), Iceland, Norway, and the Union of Soviet Socialist Republics (USSR). This Convention, establishing the Northwest Atlantic Fisheries Organization (NAFO<sup>1</sup>), replaced the 1949 International Convention for the Northwest Atlantic Fisheries (ICNAF). Currently NAFO has twelve Contracting Parties: Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), European Union, France (in respect of St. Pierre and Miquelon), Iceland, Japan, Norway, Republic of Korea, Russian Federation, Ukraine and the United States of America.

The objective of this Convention is to ensure the long-term conservation and sustainable use of the fishery resources in the Convention Area and, in so doing, to safeguard the marine ecosystems in which these resources are found.

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1 [www.nafo.int](http://www.nafo.int)

## 2.2 Definition of the study

### 2.2.1. Background to the study

A large amount of the data used by NAFO, especially by the Scientific Council in undertaking assessment, comprises catch, effort and biological data for commercially-exploited and assessed stocks.

The 2011 NAFO Performance Review<sup>2</sup> expressed concerns about the accuracy and quality of data submitted, particularly data used by the Scientific Council in its catch estimation procedures.

A Peer Review Expert Panel (PREP) was created in June 2012 to peer-review the STACFIS catch estimation methodology for some NAFO stocks. The PREP comprised three scientists/experts from Canada, European Union, and USA<sup>3</sup>. At the 35<sup>th</sup> NAFO Annual Meeting, the PREP presented its 2013 Final Report and NAFO recommendations at the General Council (GC Doc. 13-4 Revised)<sup>4</sup>.

The PREP **recommended** that "*NAFO (Scientific Council and Fisheries Commission working together) and flag States document and test (for accuracy) methods used by scientific observers and NAFO observers for estimating catch on a tow-by-tow basis. Discrepancies between tow-by-tow estimates represent the leading candidate for explaining the discrepancy between scientific estimates and STATLANT reports. In examining the accuracy of tow-by-tow estimates by NAFO observers, it is important to understand the relationship of these estimates to vessel logs and the accuracy of vessel logs*<sup>5</sup>.

Obtaining accurate estimates of commercial catch from fisheries in the NAFO area is critical to the assessment and management of most NAFO stocks. The quality and completeness of haul by haul catch data are expected to improve in future years and it is likely that the Catch Estimation Strategy will further rely on these data as a source of input for validation<sup>6</sup>.

The quality of scientific estimates depends primarily on the quality of the input data, where one of the areas of uncertainty is the estimation of catches made by the scientific observers<sup>7</sup>.

In examining the accuracy of catch estimates by scientific observers (who, as opposed to compliance observers, do not have a formal role in the NAFO conservation and management measures), it is important to understand the relationship of these estimates to vessel logs and the accuracy of vessel logs.

Observed catch discrepancies, as pointed out by the PREP, are due to differences in estimates of the tow catch found in different sources such as logbooks data, scientific observer's data, compliance observer's data and

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2 NAFO Performance Review, August 5, 2011.

3 NAFO FC-SC CR-WP 14-04.

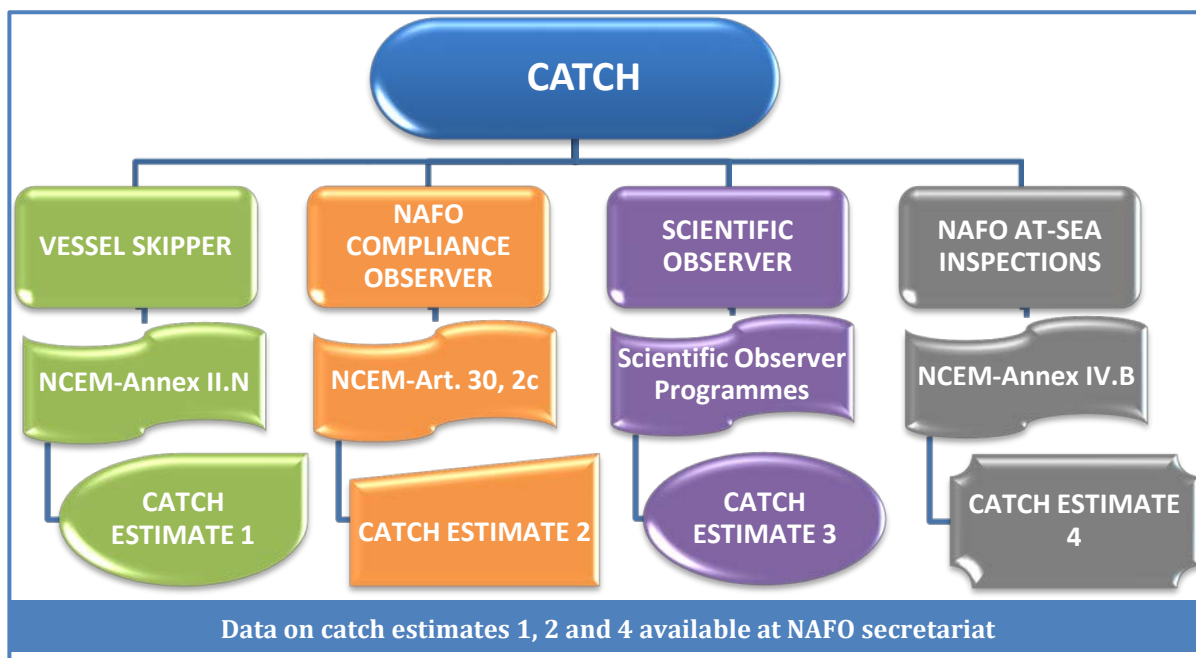
4 NAFO/FC-SC Doc. 14-01, Report of the Fisheries Commission and Scientific Council Ad hoc Working Group on Catch Reporting 3-4 February 2014.

5 NAFO/GC Doc. 13-4 (Rev.), Assessment of the methodology used by NAFO scientific council to estimate catches for NAFO stocks: 2013 progress report.

6 NAFO COM-SC Doc. 17-08

7 NAFO/GC Doc. 13-4 (Rev.), Assessment of the methodology used by NAFO scientific council to estimate catches for NAFO stocks: 2013 progress report.

inspection on board reports data on a tow-by-tow basis (See Figure 1). Therefore it is important to address the methodology behind the tow catch estimates leading to the catch discrepancies observed in some stocks.



**Figure 1.** Catch estimates discrepancies

At the 35<sup>th</sup> Annual Meeting, NAFO (NAFO/FC Doc. 13-24) it was established the ad hoc technical working group on Catch Reporting (WG-CR) to *inter alia*:

- address any outstanding recommendations of the Peer Review,
- evaluate potential approaches and data sources (e.g., daily catch data, tow by tow data, log books, etc.) to validate STATLANT 21 data and/or provide catch estimates.

At the 37<sup>th</sup> Annual Meeting, following the recommendation of the WG-CR, NAFO adopted (NAFO/FC-SC Doc. 15-06) that the Ad hoc Working Group on Catch Reporting continues, with the same goals and objectives for at least another year and the establishment of the Catch Data Advisory Group (CDAG) with the following objectives:

- to identify and provide guidance to the NAFO Secretariat on specific data inputs, gaps and parameters, in particular ensuring the representativeness of data for validating catch and/or developing catch estimates; and
- to provide oversight and endorsement of catch estimate methodology prepared by NAFO Secretariat.

An estimation strategy was developed by the CDAG and presented in FC-SC Doc. 16-02 reflecting the improvement achieved in the catch estimation at NAFO level.

### 2.2.2. Scope of the study

A fully documented description of the methodologies in place by all actors involved in the process of obtaining tow catch estimates in the four data-gathering processes identified, together with the development of common best practices to estimate catches.

### **2.2.3 Tasks to be performed**

- 1) Description and aggregate assessment of tow catch estimates methodologies and total catch estimates methodologies by actor and by contracting party while maintaining their confidentiality.
- 2) Development of guidance on realistic standard best practices to estimate tow catches.
- 3) Assessment on catch estimates resources needs: technical (equipment, computer technologies...), human (professional standards, training needs...) and methodological (standardization of protocols, independence of information sources, observer schemes synergies...).
- 4) Identification of margin of potential sources of error for tow catch estimates by species, if applicable.

### **2.2.4 Methodology**

The study should consider the PREP, WG-CR and CDAG work and building upon it, together with research literature supporting the assessment methodology and the identification of common standard protocols for catch estimates.

Furthermore, due to the exploratory nature of the study, information should be collected also through personal interviews.

### **2.2.5 Duration**

The project will be concluded within nine (9) months with effect from the date on which it is signed by NAFO Secretariat.

The timeline to complete the tasks to be performed should take into consideration meeting dates of the NAFO groups (Joint Commission-Scientific Council Catch Estimation Strategy Advisory Group (CESAG), Standing Committee on International Control (STACTIC) and Scientific Council).

### **2.2.6. Deliverables and meetings**

Reporting will be in English and submitted electronically (with paper copies of the final versions) and shall include a summary for non-specialists as well as an executive summary.

Any IT materials (Data bases, software and programming routines, etc.) produced or developed in the course of the study shall be provided in electronic format.

An interim report shall be submitted four (4) months after the signature of the project. A final report shall be submitted by the end of the nine (9) month period. Both reports must be reviewed by the CESAG to ensure that the terms of the contract have been met. A final presentation should be provided by the contractor to the CESAG.

## **3.1 Tender**

Tenders must be forwarded to the NAFO Secretariat by email ([info@nafo.int](mailto:info@nafo.int)) by close of business on **Friday, 05 January 2018.**

Tenderers must include all the information and documentation required to enable the NAFO Secretariat to appraise tenders in accordance with the criteria set out in section 4.

As regards the documentation related to the identification of the tenderer and the exclusion and selection criteria, tenderers are requested to provide original documents.

Submission of a tender in response to a call for tenders issued by the NAFO Secretariat implies:

- accepting all the terms and conditions stipulated in the call for tenders and in the special terms and conditions;
- waiving the tenderer's own terms of business.

All documents presented by the tenderers will become the property of the NAFO Secretariat and are to be deemed confidential.

All tenders received will be acknowledged by the NAFO Secretariat.

### **3.2 Prices**

The NAFO Secretariat enters into contracts and makes payments in Canadian dollars.

Prices must be quoted in Canadian dollars, exclusive of all taxes. The amounts must be quoted to two decimal places.

Costs incurred in preparing and submitting tenders are borne by the tenderers.

All costs linked directly or indirectly with the performance of the contract shall be incorporated into the financial tender. No additional reimbursement of costs linked to the performance of the contract like travel and subsistence expenses will be provided.

Tenderers must present their detailed financial offers to complete the study.

Prices shall be fixed and not subject to revision.

In signing and submitting an offer, the tenderer shall certify that:

- the prices indicated in the tender have been laid down in full independence, without consultation or communication on any of the points concerning the price with another tenderer or competitor;
- unless the law stipulates otherwise, the prices indicated in the tender have not been and will not be voluntarily communicated by the tenderer to another tenderer or competitor, directly or indirectly, before the offers are opened;
- the tenderer has not attempted and will not attempt to induce other persons to present a tender or to prevent them from so doing with a view to restricting competition.

### **3.3 Contacts**

The contact point indicated in the covering letter of this call for tenders is the only one allowed. Tenderers are requested to put any questions in writing and to send them to the e-mail address indicated. Queries by telephone will not be considered.

Questions concerning the administrative procedures will be treated individually. If the reply to a question is of general interest, it will be made available on NAFO website at the following address:

[www.nafo.int](http://www.nafo.int)

The site will be updated regularly and it is tenderers' responsibility to check for updates and modifications during the tendering period.

#### **4. Evaluation and award of the contract**

The evaluation will be based on the information provided by the tenderer in the tender submitted in reply to this call for tenders.

In addition, the NAFO Secretariat reserves the right to use any other information from public or specialist sources. All the information will be assessed in the light of the criteria set out in these specifications.

The evaluation will proceed in stages, as described below. Only the tenders meeting the requirements of each stage will pass on to the next stage of the evaluation. The final stage involves the award of the contract.

The stages of the evaluation procedure will be as follows:

- 1) Identification of the tenderer: eligibility.
- 2) Exclusion criteria: the purpose of these criteria is to determine whether the tenderer is authorized to participate in the procurement procedure.
- 3) Selection criteria: the purpose of these criteria is to determine whether the tenderer has the necessary financial, economic, technical and professional capacity to carry out the contract.
- 4) Award criteria: the purpose of these criteria is to choose between the tenders which have been submitted by the tenderers not subject to exclusion and which meet the selection criteria.

##### **4.1 Identification of the tenderers**

Tenderers must submit official documents regarding the identification of the tenderer

Moreover, an official document (statutes, power of attorney, notary statement, etc.) must be submitted proving that the person who signs on behalf of the company is duly authorized to do so.

##### **4.2 Exclusion criteria**

The exclusion criteria will be assessed in relation to each member of the group and/or subcontracting individually. If a member of the group and/or subcontracting is subject to exclusion, the tenderer shall be excluded.

By providing the declaration on their honour in relation to the exclusion criteria as required under sections 4.2.1 and 4.2.2 below, tenderers acknowledge that they have been acquainted with the administrative and financial penalties which may be applied if any of the declarations or information provided proves to be false.

###### **4.2.1. Exclusion from participation in the procurement procedure**

Tenderers must provide a declaration on their honour, duly signed and dated, stating that they are not in any of the situations described hereafter.

Tenderers will be disqualified from taking part in the procurement procedure if they:

- a) are bankrupt or being wound up, are having their affairs being administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or are in any analogous situation arising from a similar procedure provided for in national legislation or regulations;



- b) have been convicted of an offence concerning their professional conduct by a judgment which has the force of *res judicata*;
- c) have been guilty of grave professional misconduct proven by any means which the contracting authority can justify;
- d) have not fulfilled all their obligations relating to the payment of social security contributions and the payment of taxes in accordance with the legal provisions of the country in which they are established, with those of the country of the contracting authority and those of the country where the contract is to be carried out;
- e) have been the subject of a judgment which has the force of *res judicata* for fraud, corruption, involvement in a criminal organization or any other illegal activity;
- f) are currently subject to an administrative penalty for being guilty of misrepresentation in supplying the information required by the contracting authority as a condition of participation in a procurement procedure or failing to supply an information, or being declared to be in serious breach of their obligations under contracts covered by any of the NAFO contracting parties budget.

Tenderers are informed that the tenderer to whom the contract is to be awarded will be requested to furnish, within a time limit defined by the NAFO Secretariat and preceding the signature of the contract, evidence confirming his declaration with regard to the situations of exclusion described in point (a), (b), (d) and (e).

The contracting authority shall accept, as satisfactory evidence that the tenderer to whom the contract is to be awarded is not in one of the situations described in point (a), (b) or (e), a recent extract from the judicial record or, failing that, an equivalent document recently issued by a judicial or administrative authority in the country of origin or provenance showing that those requirements are satisfied

The NAFO Secretariat shall accept, as satisfactory evidence that the tenderer is not in the situation described in point (d), a recent certificate issued by the competent authority of the State concerned.

For any of the situations (a), (b), (d) or (e) above, where any document or certificate referred to above is not issued in the country concerned, it may be replaced by a sworn or, failing that, a solemn statement made by the interested party before a judicial or administrative authority, a notary or a qualified professional body in his country of origin or provenance.

The contracting authority may waive the obligation of the tenderer to whom the contract is to be awarded to submit the documentary evidence if such evidence has already been submitted to it for the purposes of another procurement procedure and provided that the issuing date of the documents does not exceed one year and that they are still valid.

In such a case, the tenderer to whom the contract is to be awarded shall declare on his honour that the documentary evidence has already been provided in a previous procurement procedure and confirm that no changes in his situation have occurred.

#### **4.2.2. Exclusion from award of the contract**

A contract shall not be awarded to tenderers who, during the procurement procedure for this contract:

- are subject to a conflict of interest;
- are guilty of misrepresentation in supplying the information required by the contracting authority as a condition of participation in the procurement procedure or fail to supply this information;

- find themselves in one of the situations of exclusion from participation in the procurement procedure.

Tenderers must declare on their honour that:

- a) on the date of submission of the tender, the company or organization they represent and the staff proposed for this tender are not subject to a conflict of interests in the context of this call for tenders and that they undertake to inform the NAFO Secretariat without delay of any change to this situation after the date of submission of the tender;
- b) they will carry out the study and/or provide services to the highest professional standards, in particular in terms of objectiveness and impartiality and exclusively in the best interests of the contracting authority with no consideration linked to any possibility of a future contract;
- c) they guarantee that there is no conflict of interests with other commitments or contracts recently concluded or to be concluded by them either individually or by any consortium to which they belong or via any subsidiary or related company.
- d) they have not made and will not make any offer of any type whatsoever from which an advantage can be derived under the contract;
- e) they have not granted and will not grant, have not sought and will not seek, have not attempted and will not attempt to obtain, and have not accepted and will not accept, any advantage, financial or in kind, to or from any party whatsoever, constituting an illegal practice or involving corruption, either directly or indirectly, as an incentive or reward relating to the award of the contract;
- f) the information provided to the NAFO Secretariat within the context of this call for tenders is accurate, sincere and complete;
- g) in case of award of the contract, they shall provide the evidence that they are not in any of the situations described in section 4.2.1 under (a), (b), (d), (e).

### 4.3 Selection criteria

#### 4.3.1 Economic and financial capacity

Tenderers must have sufficient economic and financial capacity to be able to perform the contract in compliance with the contractual provisions. If, in the light of the information supplied, the contracting authority has serious doubts about a tenderer's financial capacity, or if this is clearly insufficient for performance of the contract, the tender may be rejected without the tenderer being entitled to claim any financial compensation.

**Each tenderer** must provide the **following supporting documents** for verification of its economic and financial capacity:

- Copy of the balance sheets for the last three (3) years for which accounts have been closed, showing the annual pre-tax profit. If, for a valid reason, tenderers are unable to provide them, they must enclose a statement as to annual pre-tax profits for the last three (3) years.
- Statement as to overall annual turnover realized during the last year. Minimum level demanded: tenderers (as a whole) must provide evidence of an average overall annual turnover exceeding at least 100 000 Canadian dollars.
- If, for some **exceptional reason** which the contracting authority considers justified, the tenderer is unable to provide the references requested, it may prove its economic and financial capacity by any other means which the contracting authority considers appropriate.

- Tenderers may, where appropriate, rely on the capacities of other entities, regardless of the legal nature of the links which they have with them. They must in this case prove to the contracting authority that they will have at their disposal the resources necessary for performance of the contract, for example by producing an undertaking on the part of those entities to place those resources at their disposal.

Under the same conditions, a group of service providers may rely on the capacities of the members of the group or of other entities.

#### **4.3.2. Technical and professional capacity**

Tenderers must furnish the following supporting documents for verification of their technical and professional capacity:

- 1) Statement of the average annual manpower and the number of managerial staff in the last three years. Minimum level demanded: tenderers must provide evidence of employing at least three managerial staff with academic education.
- 2) The educational and professional qualifications and language skills of the tenderer's managerial staff and, in particular, those of the person or persons responsible for providing the services (Curriculum vitae). Specifically, the minimum number of CVs is:
  - 1 for category I (management staff with >10 years experience);
  - 2 for category II (senior staff with academic qualifications and  $\geq 5$  years experience);
  - 2 for category III (junior staff with academic qualifications and < 5 years experience)

The tenderer shall have proven experience in NAFO fisheries or similar fisheries.

#### **4.4 Award criteria**

The contract will be awarded to the tenderer offering the best value for money having regard to quality and price. To determine which tender offers the best value for money, the following evaluation method will be used:

##### **4.4.1. Technical evaluation**

The technical tender should neither include any of the documents referred to under the exclusion or selection criteria nor should it refer to matters already covered by the exclusion and selection criteria.

In particular, CVs of the staff available for the performance of the services will be assessed as part of the selection criteria (technical capacity) and should not be provided again as part of the technical tender as they are not to be re-examined in the award phase.

A maximum of 110 points will be awarded for the quality of the tender.

The criteria for the assessment of the quality are:

##### **(1) Understanding of the context and objectives (maximum 20 points; minimum required: 10 points)**

To this end, the tenderers should present a 5-6 pages summary description of their understanding of the research and requested services. They will also describe their understanding of the work to be performed and describe the general approach proposed to undertake the different tasks.

**(2) Quality of the proposed methodology and quality of the data sets (maximum points 60; minimum required: 30 points)**

To this end, the tenderers should provide their approach to the "work description and deliverables" and a practical, detailed description of the services proposed for the performance of the contract to address the tasks to be performed under Section 2.2.3. **(maximum 15 points, minimum required 7.5 points for each of the four (4) tasks).**

**(3) Project management, work organization and time schedule (maximum 30 points; minimum required: 15 points)**

To this end, the tenderers should provide:

A description of their approach to project management, contract follow-up (including contacts/ meetings with the NAFO Secretariat as well as the presentation/discussion with the NAFO Working Group) and organization of work (maximum 12 points; minimum required 6 points). As an example, engagements with observers, inspectors, vessel Masters, etc., shall be representative of the participants of the NAFO fisheries.

A work scheme, including a detailed implementation plan on each of the tasks and subtasks with estimated timing per subtask. This should also include the allocation of staff and expected days per task and a full overview of scheduled trips connected to the contract (maximum 18 points; minimum required 9 points).

**4.4.2 Financial evaluation**

The financial value of the tenders that pass the quality examination will be determined by calculating the price index as follows:

$$(\text{Lowest price tender} / \text{Price of the tender in question}) \times 100$$

**4.4.3 Award of the contract**

The contract shall be awarded to the tender offering the best quality/price ratio, with a 60/40 weighting between technical quality and financial value.

This will be achieved by multiplying:

- the result of the technical evaluation (number of points) by 0.6
- the result of the financial evaluation (price index) by 0.4

The two results will be added together and the contract will be awarded to the tender obtaining the highest score at the end of this process.



## Report of the Joint Advisory Group on Data Management (JAGDM) Meeting

20 – 21 March 2018  
London, United Kingdom

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## **Report of the Joint Advisory Group on Data Management (JAGDM) Meeting**

20 – 21 March 2018  
London, United Kingdom

### **1. Opening of the meeting**

The Chair, Lloyd Slaney (Canada) opened the meeting and welcomed the participants to this meeting with special focus on the outstanding NEAFC issues postponed from several JAGDM meetings.

The following Contracting Parties were present: Canada from NAFO, and from NAFO and NEAFC; Denmark in respect of Faroes and Greenland, the European Union, Iceland and Norway.

The NAFO and NEAFC Secretariats were present.

The list of participants is annexed to this report as JAGDM 2018-01-02.

### **2. Appointment of the rapporteur.**

The NEAFC Secretariat was appointed as rapporteur.

### **3. Discussion and adoption of the Agenda**

The Agenda was adopted with no additions.

### **4. Election of Chair and vice-Chair**

JAGDM duly elected Leifur Magnússon (Iceland) as Chair of JAGDM and Natasha Barbour (Canada) as Vice-Chair. Tenure of both positions would start following the close of the present meeting.

### **5. Data Exchange Statistics**

#### **a) NAFO**

The NAFO Secretariat presented document JAGDM 2018-01-11 Rev1 on messages and reports received by the NAFO Secretariat. The participants discussed the information provided in the document, in particular, concerns around the high numbers of report cancellations from some Contracting Parties and the lack of cancel messages from others. The potential for the incorrect messages to be cancelled due errors in the data elements was also discussed. It appeared there may be both technical and FMC compliance issues to be resolved to improve the situation.

#### **It was agreed:**

- That Canada would follow-up with the NAFO Secretariat to investigate the issues raised by the report.

**b) NEAFC**

The NEAFC Secretariat presented documents JAGDM 2018-01-13 number of messages and reports received by the NEAFC Secretariat, and 2018-01-14 on breakdown of return messages generated by the NEAFC Secretariat after receiving messages and reports from the Contracting Parties. Part of the discussion focused on how the NEAFC Scheme dealt with duplicate messages in the system, as this is part of the NEAFC Scheme, but there is no equivalent part of NAFO CEM. This difference in the way of handling identification of duplicates may have an impact on the level of cancellations. It was noted the proposed NEAFC Electronic Reporting System (ERS) would handle duplication differently by increasing the level of validation before messages are sent which will further reduce duplication. Document JAGDM 2018-01-14 summarised annual activity as well as highlighting how input validation results are coded in return messages, errors and follow-up messages for catch and activity, registry and position messages. There was some discussion of the number of future time warnings generated by position messages

**It was agreed:**

- **That the NEAFC Secretariat would follow up with the service provider to clarify the details of the future time validation done to detect error in POS messages.**

**6. NEAFC issues****a) Technical implications of the implementation of recommendations**

*(Recommendations adopted in 2018 with technical implications are listed below. An update will be given in a single information document.)*

**i) Adoption of UN/CEFACT International Standard (Rec 16 2018)****ii) Adding 'Reason for Entry' to Port State Control forms (Rec 15 2018)****iii) Changes to Access to Meeting Documents (Rec 17 2018)**

JAGDM note the updates from the NEAFC secretariat on the technical implications of recommendations adopted by NEAFC for 2018 (JAGDM 2018-01-08 Rev1). The presentation by the Secretariat included a preview of how the Electronic Reporting System browser might appear to the user. JAGDM noted the importance of developing the browser with input from the fisheries inspectors who would use it.

**b) Issues Raised by PECMAC****i) Work on a proposed the Business Continuity Plan for NEAFC ERS based on current EU proposal**

JAGDM discussed business continuity, with an initial discussion based on a January 2018 request from the NEAFC ERS Working Group (AHWG ERS) to assess the draft Business Continuity Plan proposed by EU in the context of catch and activity reporting from electronic logbooks within NEAFC (Document JAGDM 2018-01-03). JAGDM noted that the business continuity needed to be considered in a wider context, including the existing ISMS business continuity and fall-back procedures (and ultimate consideration by the Commission). The NEAFC Risk Assessment Template (Document JAGDM 2018-01-07) was also relevant in this context.

Following further discussion, JAGDM finalised a response to NEAFC AHWG ERS (Documents JAGDM 2018-01-19 and 2018-01-20) which included recommendations on: a) responsibilities in relation to Business Continuity and the architecture of the NEAFC FLUX system b) the relation of the business continuity plan within the ISMS and; c) the application of the draft risk assessment template to the FLUX proposal. It was noted that a step by step FLUX implementation starting with one or two parties and NEAFC Secretariat afforded the opportunity to review the approach to use of a FLUX Endpoint node as against a central node approach.

**It was agreed:**

- **That the NEAFC Secretariat should finalise the diagram in the agreed documents and then forward to the chair of the NEAFC AHWG ERS.**

**c) NEAFC Information Security Management System (ISMS)**

**i) Upgrade to ISO 27001:2013 version (ISMS article 4 last paragraph)**

The NEAFC secretariat updated JAGDM on the draft mapping of existing NEAFC ISMS to the 2013 version of ISO 27001 (JAGDM 2018-01-06) that had been done to ensure any shortcomings were addressed.

**ii) Risk management (ISMS article 3) status of the work**

The NEAFC secretariat presented the draft risk assessment template for NEAFC (JAGDM 2018-01-07 Rev1). A first draft of a risk assessment currently being carried out by the NEAFC internet service provider, Positive Internet, was also presented (JAGDM 2018-01-17 and 2018-01-18). JAGDM noted that work on the complete set of technical risk audit information would be sent to NEAFC Security System Administrators (SSAs). Implications for other Permanent Committees and Working groups would be considered as part of the ongoing work to upgrade the NEAFC ISMS to be based on the 2013 ISO standard.

**iii) Annual Review of the NEAFC Inventory (ISMS article 7.1)**

JAGDM noted the NEAFC inventory, as presented in document JAGDM 2018-01-16. This inventory would be included in the update of the ISMS.

**iv) Reflecting EU General Data Protection Regulation (GDPR) in NEAFC ISMS**

NEAFC secretariat presented document JAGDM 2018-01-05, which updated JAGDM on the European Union General Data Protection Regulation. While it was not clear yet what implications, if any, the regulation would have for data held by International Organisations. Nevertheless it was considered prudent to set out NEAFC status on at least the general principles covered by the regulation.

The NEAFC Secretariat were planning to alert the Contracting Parties on the details of the regulation.

**7. NAFO issues**

**a) Technical Implications of the implementation of recommendations**

No update

**b) Recommendations for adopting an ISMS for NAFO**

No update

**c) Issues raised by STACTIC**

The NAFO secretariat presented document JAGDM 2018-01-15 which sought advice from JAGDM on proposed changes to the format of the observer reports (OBR) under the NAFO Conservation and Enforcement Measures (CEM). The changes proposed were discussed in length by JAGDM participants and advice and items for consideration were noted by the NEAFC Secretariat.



**It was agreed:**

- That JAGDM would return the advice detailed in document JAGDM 2018-01-21 to the Chair of STACTIC.

**d) Updated from STACTIC****i) Latest MCS website enhancements**

JAGDM noted a presentation by the NAFO Secretariat on its website enhancements with regard to catch reports (JAGDM 2018-01-12).

**ii) Review of NAFO CEM Annexes**

JAGDM reviewed and proposed amendments to the NAFO CEM Annex IIE reports (as proposed by Norway; JAGDM 2018-01-09) to provide further clarification through the removal of footnotes, without changing obligations. Greenland also noted the inconsistency of Speed and Course being marked as mandatory in all Annex IIE messages, even though coordinates (on which Speed and Course Depend) are optional in EXI messages.

**It was agreed:**

- That the draft amended NAFO CEM Annex IIE 2018-01-09 Rev1] should be submitted to STACTIC for consideration of the amendments. Canada would also be raising at STACTIC the consideration of speed and course being marked mandatory in Annex II E EXI message, but in fact is close connected to the coordinates listed as optional under the current scheme.

**e) Status of other NAFO projects**

No updates

**8. Management of the North Atlantic Format**

No update under this item.

**9. Management of the websites****a) JAGDM**

The issue of the login / logout timing when using the JAGDM website was noted.

**It was agreed:**

- That the NEAFC Secretariat will look into the login/logout timing issue on the JAGDM website.

**b) NAF****i) Updating the NAF website with codes in use by Contracting Parties**

No update under this item.

## 10. JAGDM Reflection Paper

JAGDM considered a reflection paper presented by both NAFO and NEAFC Secretariats on the progress of JAGDM since its creation (JAGDM 2018-01-10). Issues discussed by JAGDM included how to get better attendance at the meetings, flexibility of meeting arrangements, benefits in terms of experience sharing and harmonisation and a focus on the outputs needed by NAFO and NEAFC.

A paper copy of JAGDM Terms of References (TOR), JAGDM Rules of Procedure and the JAGDM Guidelines for the Secretariats (guidelines) was distributed to the participants.

JAGDM agreed that a new TOR for JAGDM were not required, but the Secretariats should try to merge existing guidelines into the TOR document. In doing so the Secretariats should highlight the flexible arrangements possible for the meetings of JAGDM, allowing one or other organisation to accelerate progress on an issue. This could be done by inserting meetings of primary interest to one organisation into the JAGDM meeting programme. For such meetings, attendance by a member of the 'other' organisation's Secretariat (at least by video conference) should be aimed at. More generally the use of video conference facilities at two physical locations either side of the Atlantic, for instance, could be used for bigger meetings. The usefulness of JAGDM and its practical outcomes should be better advertised within the two organisations' relevant meetings. Where a JAGDM meeting had been focused on the needs of one of the organisations, a post-JAGDM briefing between Secretariats and Chairs from both organisations was considered very useful.

### **JAGDM agreed:**

- **That new TORS for JAGDM were not required, but the Secretariats should try to merge existing guidelines into the TOR document and reflect the points of discussion at the meeting (above).**

## 11. Any other business

JAGDM noted for information document JAGDM 2018-01-04, which set out JAGDM outputs presented at the last Annual Meeting of NEAFC (2017). It was commented that this presentation from the NEAFC Secretariat was very useful to highlight the work of JAGDM and that it would be beneficial if the NAFO Secretariat also had such a document.

## 12. Report to the Annual Meetings

The Vice-chair, in absence of the Chair, will report the JAGDM activities to STACTIC.

### **JAGDM agreed:**

- **That NAFO and NEAFC Secretariat would each make a list of the main issues to sum up the progress of JAGDM as reported by the Chair or Vice chair to the NEAFC annual meeting, and for NAFO, reported to STACTIC so that the chair of STACTIC can report this to the annual meeting of NAFO.**

## 13. Date and place of the next meeting

The location, format and agenda of the next JAGDM meeting(s) would be decided in light of the decisions made earlier in the meeting and issues arising under NAFO and NEAFC.

**14. Closure of the meeting**

Participants thanked the outgoing Chair Lloyd Slaney and outgoing vice-Chair Ellen Fasmer for all their hard work over the past years in managing and chairing the work of JAGDM.

The Chair congratulated the new Chair and vice-Chair. He thanked the participants and the Secretariats for the excellent work and wished all a safe return home.

## **Annex 1. List of Participant**

(JAGDM 2018-01-02)

### **CHAIR**

Slaney, Lloyd - Fisheries & Oceans Canada

### **NAFO SECRETARIAT**

Kendall, Matt

Laycock, DJ (Virtual attendance)

Aker, Jana (Virtual attendance)

### **NEAFC SECRETARIAT**

Campbell, Darius

Lewsley, Rachel

### **CANADA**

Barbour, Natasha - Fisheries & Oceans Canada

### **DENMARK (IN RESPECT OF THE FAROE ISLANDS AND GREENLAND)**

Lund Rossing, Mads

### **EUROPEAN UNION**

Collotte, Pascal – EC

### **ICELAND**

Magnússon, Leifur

### **NORWAY**

Fasmer, Ellen (Vice Chair)

Northwest Atlantic Fisheries Organization



**Report of the NAFO Joint Commission-Scientific Council  
Catch Estimation Strategy Advisory Group (CESAG) Meeting**

26 April 2018  
via WebEx

NAFO  
Dartmouth, Nova Scotia, Canada  
2018

## Report of the NAFO Joint Commission-Scientific Council Catch Estimation Strategy Advisory Group (CESAG) Meeting

26 April 2018  
via WebEx

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## **Report of the NAFO Joint Commission-Scientific Council Catch Estimation Strategy Advisory Group (CESAG) Meeting**

26 April 2018  
via WebEx

### **1. Opening by the co-Chairs, Katherine Sosebee (USA) and Temur Tairov (Russian Federation).**

The *NAFO Joint Commission-Scientific Council Catch Estimation Strategy Advisory Group (CESAG)* met via WebEx on 26 April 2018. The meeting was opened at 09:00 hours (Atlantic Daylight Time) by co-Chairs, Katherine Sosebee (USA) and Temur Tairov (Russian Federation). Representatives from Canada, the European Union (EU), the Russian Federation and the United States of America (USA) participated (Annex 1).

### **2. Appointment of Rapporteurs and Adoption of Agenda**

Tom Blasdale and Ricardo Federizon (NAFO Secretariat) were appointed co-rapporteurs.

Under “Other Matters”, an addition was made, namely, Update on MRAG Americas: *NAFO Catch Estimates Methodology Study*.

The meeting agenda is presented in Annex 2.

The Chairs noted that this meeting is a continuation of an agenda item at the last WebEx meeting of March 2018, pertaining to an evaluation of the 2017 catch estimates. The report of the March 2018 meeting is appended in Annex 3. Evaluation of the updated catch estimates would be addressed in agenda items 3 and 4.

### **3. Review and finalization of 2017 Catch Estimates**

The Secretariat updated 2017 catch estimates of the managed stocks (for this report, “managed stocks” means fish stocks that are subject to catch limitations and are listed in Annex I.A of the NAFO Conservation and Enforcement Measures (NCEM)). They are presented in COM-SC CESAG WP 18-01 (Revised). The update incorporates additional fishing reports received by the Secretariat after the March 2018 meeting.

As in the March 2018 meeting, no significant issue was raised.

As requested, the Secretariat will include the catch estimates of alfonosinos (FAO 3-letter code ALF).

The updated catch estimates of the managed stocks and of alfonosinos will be contained in COM-SC CESAG WP 18-01 (Revised 2). As agreed, they will be forwarded to Scientific Council (SC) by May 1 (see agenda item 5).

### **4. Catch Data Comparison**

The Secretariat presented COM-SC CESAG WP 18-04 which compares the catch data sources for all NAFO managed stocks. The data sources include Daily Catch Reports (CATs), Port inspection Reports (PSC3), Observer Reports, and Logbook reports (haul by haul reports). The working paper (WP) contains the catch estimates, for each managed stock, from the data sources mentioned above. Except for the port inspection report which contains only nominal catches, quantities of retained and rejected catches are presented. The WP also provides a summary of submission rates for the various reports received by the Secretariat, by flag State, for trips that started and ended in 2017.

The Advisory Group noted the data gaps that are highlighted in the WP, particularly the low submission rates of the 2017 haul by haul reports. For example, out of the 109 trips in 2017, only 69 trips have haul by haul reports. There were only 50 trips on which the Secretariat has received all four sources of data to date.

Concerns were expressed regarding the low submission rates of the 2017 haul by haul reports. Furthermore, to have a more up-to-date analysis of the catch data, the 60-day (after the fishing trip) submission deadline

should be shortened to 30 days. The Secretariat indicated that it has the capacity to process haul by haul reports as soon as they are received. A recommendation to address the issue of low compliance to the reporting obligations was drafted (see agenda item 5).

Regarding the port inspection reports, it was noted that the NCEM requires only at least 15% inspection coverage. If the landing includes Greenland halibut, a port inspection is required, i.e. 100% coverage. Canada indicated that, for catch estimation purpose, it can make all Canadian port inspection reports available to the Secretariat and CESAG when requested.

Regarding the March 2018 request that the percentage coverage by Division be split by flag States, the Secretariat indicated that it is a work in progress. When accomplished, it will be presented in the working paper COM-SC CESAG WP 18-02 (Revised) be uploaded in SharePoint. Participants will be informed as soon as it becomes available.

## 5. Recommendations

The NAFO Joint Commission-Scientific Council Catch Estimation Strategy Advisory Group (CESAG) **recommends** that:

- **The Secretariat, on behalf of CESAG, forward to Scientific Council, for consideration in its fish stock assessment work, the updated 2017 catch estimates as contained in CESAG WP 18-01 (Revised 2);**
- **Noting the specific duty of CESAG to consider and identify potential refinements of the Catch Estimate Strategy including the incorporation of haul-by-haul data within the strategy and noting the compliance issues with regards to the submission of the haul by haul reports, CESAG requests the Commission to consider some formal follow-up procedure to Contracting Parties with the aim of improving the compliance to the haul by haul submission requirement.**

## 6. Other Business

MRAG Americas *Catch Estimates Methodology Study*: At the last WebEx meeting, MRAG Americas was identified as the successful tenderer to perform the study. The Secretariat provides administrative input and serves as liaison between MRAG Americas and NAFO's subsidiary bodies.

The Secretariat informed the Advisory Group that MRAG Americas has commenced the undertaking of the project. The Secretariat and MRAG had an inception meeting earlier in April 2018. In accordance with the approved workplan, MRAG has started to implement the data gathering phase. They will shortly conduct interviews with NAFO scientists, at-sea-inspectors, observers, and fishery managers.

## 7. Adoption of Report

The meeting report was adopted by the meeting participants through correspondence.

## 8. Adjournment

The meeting was adjourned at 10:30 hours (Atlantic Daylight Time).



**Annex 1. List of Participants**

	26 April 2018	13 March 2018
<b>CO-CHAIRS</b>		
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<b>RUSSIAN FEDERATION</b> Tairov, Temur (see above)	x	x
<b>UNITED STATES OF AMERICA</b> Sosebee, Katherine (see above)	x	x
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Glindtvad, Sebastian. NAFO Intern	x	

## **Annex 2. Agenda**

1. Opening by the co-Chairs
2. Appointment of Rapporteurs and Adoption of the Agenda
3. Review and finalization of the 2017 Catch Estimates
4. Catch Data Comparison
5. Recommendations
6. Other Business
7. Adoption of Report
8. Adjournment

### **Annex 3. Interim Meeting Report of the NAFO Joint Commission-Scientific Council Catch Estimation Strategy Advisory Group (CESAG), 12 March 2018 via WebEx**

(COM-SC WP 18-03)

#### **1. Opening by the co-Chairs**

The NAFO Joint Commission-Scientific Council Catch Estimation Strategy Advisory Group (CESAG) met via WebEx on 12 March 2018. The meeting was opened at 08:00 hours (Atlantic Daylight Time) by co-Chairs Katherine Sosebee (USA) and Temur Tairov (Russian Federation). Representatives from Canada, the European Union (EU), the Russian Federation and the United States of America (USA) were in attendance (Annex 1).

#### **2. Appointment of Rapporteur and Adoption of the Agenda**

The Scientific Council Coordinator (Tom Blasdale) was appointed as rapporteur.

The agenda was adopted as circulated (Annex 2).

#### **3. Identification of a contractor to perform the Catch Estimates Methodology Study**

At the 39th Annual Meeting, the Commission adopted the project proposal Catch Estimates Methodology Study (NAFO COM Doc. 17-25). A Call for Tender was finalized following the November 2017 meeting of CESAG and advertised and circulated to potential contractors by the Secretariat in January 2018.

In response to this advertisement, a single proposal was received (from MRAG Americas). This was circulated to CESAG members by email in preparation for the present meeting.

It was agreed that the proposal appeared to satisfy all of the evaluation criteria developed by CESAG during its November 2017 meeting. The only concern was a potential conflict of interest resulting from one member of the project team (Michael Sissenwine) being a NAFO delegate. The tenderers have acknowledged this as a potential concern but stated that Dr. Sissenwine would not be a leading member of the project team. None of the meeting participants raised any objections on the ground of conflict.

The EU raised the concern that the role of the SC in this study had not been made sufficiently clear in the proposal: the proposal states that interim results will be presented to the SC June meeting but nothing further. In addition, the EU recalled that involvement of scientific observers is important. CESAG agreed a greater degree of engagement with SC will be required, possibly including a further presentation at the September meeting. It was agreed that the proposal will be accepted subject to the insertion of the following wording:

During their meeting with the Scientific Council (SC) in June 2018, the contractor will agree with SC the role of the SC and its members in the development of the project.

#### **4. Evaluation of the preliminary 2017 catch estimates derived following the revised Catch Estimation Strategy (COM-SC Doc. 17-08)**

The NAFO Secretariat (Jana Aker) presented preliminary results of applying the methods outlined in the revised Catch Estimation Strategy (COM-SC Doc. 17-08) to all NAFO managed stocks. This work was presented in three working papers. In the first (COM-SC CESAG-WP 18-01), preliminary catch estimates following the Catch Estimation Strategy were presented broken down by flag State and NAFO Division. Catch estimates derived from port inspection data and Daily catch reports, and the daily catch reports were presented for comparison. The second working paper (COM-SC CESAG-WP 18-02) showed the percentage of catch data from port inspections for which it was possible to assign catches according to division, and the third (COM-SC CESAG-WP 18-03) presented weight of catches inspected in ports as a percentage of CAT weight.

CESAG members raised a few minor points of clarification but no significant concerns were raised.

The EU asked whether it would be possible to compare the values derived through the Catch Estimation Strategy with the haul by hauls data, given that SC in 2016 requested that catch estimates should be from haul by hauls. The Secretariat responded that the 2017 haul by haul data is unlikely to be complete at the present time.

Canada requested that for the next meeting the percentage coverage by division should be split by flag State and the Secretariat undertook to do this.

The next steps in completing this work will be comparison with haul by haul and inclusion of any new data received up to 1 April 2018.

## **5. Recommendations**

This agenda item was deferred to the next Advisory Group meeting.

## **6. Other Business**

No other matters were raised under this agenda item.

## **7. Adjournment**

A further meeting of CSAG will be held in late April to evaluate the final results of this work. The Secretariat will run a doodle poll for to identify appropriate dates in late April.

The meeting closed at 08:45 hours (Atlantic Daylight Time).



Northwest Atlantic Fisheries Organization



**Report of the NAFO Commission Ad hoc Working Group to Reflect on the Rules  
Governing Bycatches, Discards and Selectivity (WG-BDS)  
in the NAFO Regulatory Area Meeting**

Dartmouth, Nova Scotia, Canada  
02-03 May 2018

NAFO  
Dartmouth, Nova Scotia, Canada  
2018

**Report of the NAFO Commission Ad hoc Working Group to Reflect on the Rules  
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## **Report of the NAFO Commission Ad hoc Working Group to Reflect on the Rules Governing Bycatches, Discards and Selectivity (WG-BDS) in the NAFO Regulatory Area Meeting**

Dartmouth, Nova Scotia, Canada  
02-03 May 2018

### **1. Opening by the Chair, Temur Tairov (Russian Federation)**

The Chair, Temur Tairov (Russian Federation), opened the meeting at 10:00 hours on Wednesday, 02 May 2018 at the NAFO Headquarters in Dartmouth, Nova Scotia, Canada. Representatives from Canada, the European Union, and United States of America were present and representatives from Iceland participated via WebEx (Annex 1).

### **2. Appointment of Rapporteur and Adoption of Agenda**

The NAFO Secretariat (Ricardo Federizon) was appointed rapporteur.

The provisional agenda circulated earlier (NAFO/18-066) was based on the following points that shall be considered in examining the feasibility of introducing policies to minimize or eliminate discards in NAFO (COM Doc. 17-23).

- Reasons or objectives for eliminating discards;
- Performance indicators to be considered in evaluating the implications of eliminating discards (e.g., conservation and sustainability, ecosystem function, economic benefits, food security, reliability of scientific advice, cost of managing fisheries, public perception of fisheries and fishery management);
- Analysis of how well a policy to eliminate discards will perform relative to the objectives, and compared to alternative approaches for addressing the objectives; and
- Current or potential impacts of discards on quota management.

### **3. Discussions**

On the outset, participants expressed concern that the Working Group would not be able to have in-depth discussion of the substantive items in the provisional agenda as the information on discards has not yet been fully compiled or analysed to inform the extent and scope of the discard issue in the NAFO Regulatory Area (NRA).

Some participants recalled that the *Action Plan in the Management and Minimization of Bycatch and Discards* (COM Doc. 17-26) adopted in 2017 was meant to offer a better picture of the discard problem in the NRA, and the Working Group should use this opportunity to identify potential challenges in its implementation. It was noted there was also the potential to consider targeted solutions to fishery specific problems once they have been identified and there is confidence in the reliability of discard data. As a result, participants noted that discussions would be largely philosophical in nature, recalling that the *Action Plan* already identified key objectives and timelines.

The meeting proceeded with the Secretariat's presentation "*Management and Minimization of Bycatch and Discards in NAFO*" (Annex 2). The presentation covered the identification of provisions in the NAFO Conservation and Enforcement Measures (NCEM) that pertains, directly and indirectly, to bycatch and discards; catch estimates (retained + rejected) of moratoria species derived from 2017 daily catch reports (CATs);

frequency analysis of occurrence of hauls exceeding bycatch thresholds using 2017 haul by haul data; and, mapping of directed fisheries and their associated bycatch.

While the presentation was found to be informative, especially on the bycatch situation, it highlighted two issues:

1. low submission rates of the 2017 haul by haul data; and
2. sparse and low-level discard data.

The Working Group discussions engendering from the presentation centered on how these issues can be addressed while maintaining sight on the adopted *Action Plan*. Concerning the former, it has been noted that the haul by haul data could provide bycatch and discards information by fishery with more precise location than other data sources (e.g. daily catch reports) available in the Secretariat could not. Concerning the latter, it was noted that the sparsity and low discards level could be due to non-compliance and/or non-occurrence of discards in the NRA, the extent of both are undetermined. The limited indications of discards suggested that it was an isolated problem but a more complete analysis was needed. It was also noted that Task 1.3 of the *Action Plan* pertains to data completeness and identification of data gaps. The Working Group and the Secretariat identified NAFO bodies to perform the task by September 2019.

Other points of discussions emerged during the meeting that were not necessarily consensus views and/or did not result in suggested recommendations:

- Clarification on the definition or description of bycatch. No “blanket” definition, as it can be modified depending on the directed fishery; there is no qualitative/narrative descriptor; definition considered previously by the Working Group and STACTIC; NCEM clearly establish what constitutes bycatch and explicitly states that it should be minimized;
- Information on survivability of discards required;
- Catch data analysis as prerequisite to consideration of management options;
- Flexibility is needed before a total discard ban; need to consider fishery specific solutions; important to consider the mixed nature of some NAFO fisheries;
- Need to incorporate VME species list in Annex I.C of the NCEM;
- Sharing of information between NAFO, NEAFC and ICCAT regarding straddling stocks and geographical overlap of fishing vessels with other RFMOs in the NRA.

In support of Task 1.3 of the *Action Plan*, the Working Group agreed that:

*The Secretariat prepare a work plan for the bycatch and discard analyses of the available data, including haul by haul data (beginning from 2016). The work plan shall be reviewed by the Working Group via correspondence, which shall provide guidance to the Secretariat in conducting the analyses. The plan should be completed no later than the 2018 Annual Meeting.*

*The analyses shall include, but not be limited to, bycatch and discard quantities of all hauls, instances of excess of thresholds and their associated quantities, more finely-grained mapping on a geographic and temporal scale to identify bycatch and discard “hotspots”.*

*The Secretariat should identify trends, patterns, anomalies, as well as data gaps; provide regular updates to the WG-BDS in the form of progress reports; and seek clarification or direction from the WG-BDS as warranted (possibly through WebEx).*

#### 4. Recommendations

It was **agreed** that:

1. *The Commission and Scientific Council, and their subsidiary bodies, as well as the Secretariat, move forward with full implementation of the Action Plan in the Management and Minimization of Bycatch and Discards (COM Doc. 17-26).*
2. *The Commission consider a means of formal follow-up with Contracting Parties to address non-compliance with the requirement to submit haul by haul data, including previous years (2016 and 2017).*
3. *Contracting Parties be encouraged to explore with their respective industry representatives the reasons for discards and bycatch and report back to the Working Group at its next meeting. To the extent possible, this information should seek to identify specific times, areas, fisheries and/or other factors.*
4. *The Commission include in its request for advice to Scientific Council at the 2018 meeting the task identified under Section 2.2 of the Action Plan in the Management and Minimization of Bycatch and Discards (COM Doc. 17-26).*
5. *STACTIC review existing NAFO observer and haul-by-haul reporting requirements to consider enhancements that would provide specific information related to the rationale for discards.*
6. *The Secretariat, in conjunction with STACTIC and WG-EAFFM, develop tools to cross-reference the relevant FAO 3-alpha code with the VME indicator species, set out in Annex I.E of the NCEM to facilitate their inclusion in observer and haul by haul catch reports.*

#### 5. Other Business

There was no other business discussed under this agenda item.

#### 6. Adoption of Report

The meeting report was adopted by correspondence.

#### 7. Adjournment

The meeting was adjourned at 11:30 hours on 03 May 2018.

## **Annex 1. List of Participants**

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Glindtvad, Sebastian. NAFO Intern

**Annex 2. PowerPoint Presentation by the Secretariat –  
Available Information on Bycatch and Discards in the NRA**

# **Management and Minimization of Bycatch and Discards in NAFO Regulatory Area**

**(presented by the Secretariat)**

**[WG-BDS Working Paper 18-01]**



NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

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## **Action Plan in the Management and Minimization of Bycatch and Discards**

- **Adopted in September 2017 (NAFO/COM Doc 17-26)**
- **Overarching Objectives**
  - Minimization of bycatch, discards and improvement of selectivity
  - Accurate reporting of target, non-target and incidental catch
  - Management measures are adaptive to changing fishery conditions
  - Management measures reflect precautionary and ecosystem approaches
  - Identification of priority areas for bycatch management (priority: when this is risk of causing serious harm to bycatch species)
  - Linkages with NAFO Bodies: STACTIC, WG-EAFFM, WG-ESA, WG-CR
- **Components**
  - Data management (Secretariat, CP's, BDS)
  - Ongoing analysis and monitoring (Secretariat, SC)
  - Identification of priorities (SC, BDS, Secretariat)
  - Development of management options (BDS, STACTIC, SC)

NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

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### Examining the feasibility of introducing policies to minimize or eliminate discards in NAFO

- Adopted in September 2017 (NAFO/COM Doc 17-23)
- WG-BDS shall consider the following:
  - Reasons or objectives for eliminating discards [agenda item 3]
  - Performance indicators in evaluating the implications of eliminating discards [agenda item 4]
  - Analysis of how well a policy to eliminate discards will perform relative to the objectives [agenda item 5]
  - Potential impacts of discards on quota management [agenda item 6]
- In parallel, STACTIC shall consider the following:
  - Identification of the current discard obligations in the NCEM
  - Compilation of existing relevant domestic legislations of CP
  - Examination of possible measures to minimize or eliminate discards
  - Review the approaches to control of the landing obligations
- STACTIC and WG-BDS shall coordinate their plans, including realistic timetables and present them to the Commission during the AM 2018.
- The Secretariat will inform STACTIC, at its May 2018 Intersessional, the results of this meeting.

NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

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### Some relevant NCEM Articles

#### Directed Fishery:

Art.5.2 (a): the species which comprises the largest percentage by weight of the total catch in the haul shall be considered as being taken in a **directed fishery** for the stock concerned.

*After the species with the largest percentage is identified in a single haul, is the rest of the catch in the haul is considered bycatch?*

#### Bycatch:

Art. 6.2 –A species listed in the Quota Table\* shall be classified as bycatch where any of the situations exist:

- (a) No quota has been allocated to that CP;
- (b) Moratorium for a particular stock is in force;
- (c) “Others” quota has been fully utilized.

NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

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### Some relevant NCEM Articles

#### Bycatch Thresholds:

Art. 6.3 –Each CP shall ensure that its vessels... shall limit the retention of on board species classified as bycatch to the maxima specified ...:

*Generally, 1250 kg or 5%, whichever is greater. For 3NO Cod, the threshold is 1000 kg or 5%, whichever is greater.*

#### Threshold calculations:

Art. 6.4 –The limits and percentages in paragraph 3 of this Article are calculated by Division as the percentage, by weight, for each stock of the total catch of stocks listed in Annex I.A **retained on board** for that Division at the time of inspection, on the basis of the fishing logbook figures.

NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

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### Some relevant NCEM Articles

#### “Discards”:

Art. 5.5 (i) – ensure that, after a closure of its fishery in accordance with this paragraph, **no more fish** of the stock concerned **is retained on board** the vessels entitled to fly its flag unless otherwise authorized by the CEM.

Art. 14.1 - **No vessel shall retain on board any fish** smaller than the minimum size established in accordance with Annex I.D, which it shall **immediately return to the sea**.

Art. 28.6 (c) – [Daily catch reports, by species and Division. **Requirement also to report Discards.**]

Annex I.D = Minimum Fish Size

Species	Gilled and gutted fish whether or not skinned; fresh or chilled, frozen, or salted.			
	Whole	Head Off	Head and Tail Off	Head Off and Split
Atlantic Cod	41 cm	27 cm	22 cm	27/25 cm**
Greenland halibut	30 cm	N/A	N/A	N/A
American plaice	25 cm	19 cm	15 cm	N/A
Yellowtail flounder	25 cm	19 cm	15 cm	N/A

NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

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**Bycatch and discards in the NRA: preliminary analysis of the 2017 data****2017 Data:**

- From 2017 VMS position reports, we identified 112 trips with 3823 days present in the NRA.
- From 2017 daily catch reports (CATs), 56890 t of fish retained.
- From 2017 daily catch reports (CATs), 1387 t discarded.
- Of the 112 trips, only 72 have H x H data (Compliance issue)
- Of the 72 trips, HxH reports from 2 trips are incomplete/useless.
- Only 70 trips are considered in the analysis. 2944 days.
- 70 trips: HxH catch = 37847.8 (37738.0 + 109.8). 6436 hauls.
- For quick comparison - CAT catches = 45354.7 (44420.2 + 934.5) t.
- HxH data (6436 hauls) were used for threshold analysis.

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**2017 Retained and Discarded Catches (t):****Table 1. Retained catches of 2017 fishing trips (source: CATs)**

	3L	3M	3N	3O	6G	Grand Total
COD	98.3	14187.1	328.6	212.3	0.0	14826.3
GHL	6594.3	1562.0	1092.9	8.3	0.0	9257.6
HKW	0.0	1.9	56.0	108.6	0.0	166.5
PLA	82.7	158.5	600.0	231.8	0.0	1073.0
RED	3720.4	7079.3	4117.4	6991.1	0.0	21904.0
SKA	76.9	43.3	3612.4	420.6	0.0	4153.2
SQI	0.0	2.8	0.0	11.5	0.0	14.4
WIT	38.1	181.7	87.5	179.3	0.0	486.6
YEL	0.0	0.0	3816.7	43.9	0.0	3860.6
NonReg	193.0	187.6	253.4	453.9	56.2	1148.2
<b>Grand Total</b>	<b>10803.7</b>	<b>23404.2</b>	<b>13964.9</b>	<b>8661.3</b>	<b>56.2</b>	<b>56890.4</b>

NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

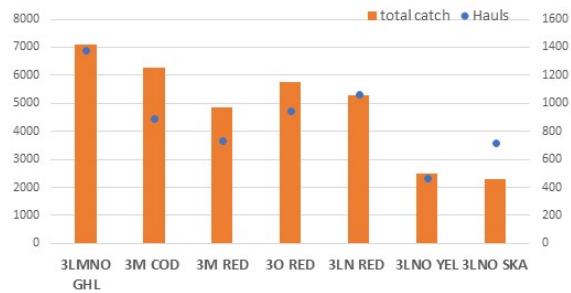
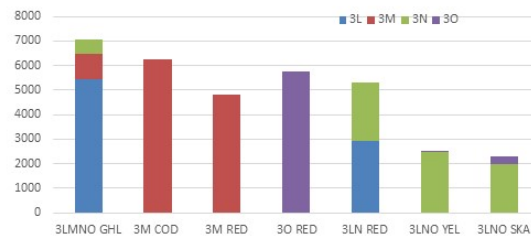
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**2017 Retained and Discarded Catches (t):****Table 2. Rejected catches of 2017 fishing trips (source: CATs)**

	3L	3M	3N	3O	Grand Total
COD	4.9	7.1	30.0	0.0	41.9
GHL	0.0	0.0	1.1	0.0	1.2
HKW	0.0	0.0	14.9	0.6	15.5
PLA	5.5	1.3	58.6	3.7	69.1
RED	1.0	10.8	1.2	2.9	15.8
SKA	2.1	2.2	61.7	0.9	66.8
SQI	0.0	0.1	0.0	2.1	2.2
WIT	8.1	1.3	6.6	9.0	25.0
YEL	0.0	0.0	24.5	0.0	24.5
GSK	183.0	36.3	125.7	19.7	364.7
MZZ	280.4	120.2	320.0	40.0	760.6
<b>Grand Total</b>	<b>484.9</b>	<b>179.3</b>	<b>644.3</b>	<b>78.9</b>	<b>1387.4</b>

NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

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**Number of Hauls and their total Catches****Haul Catches by Division**

NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

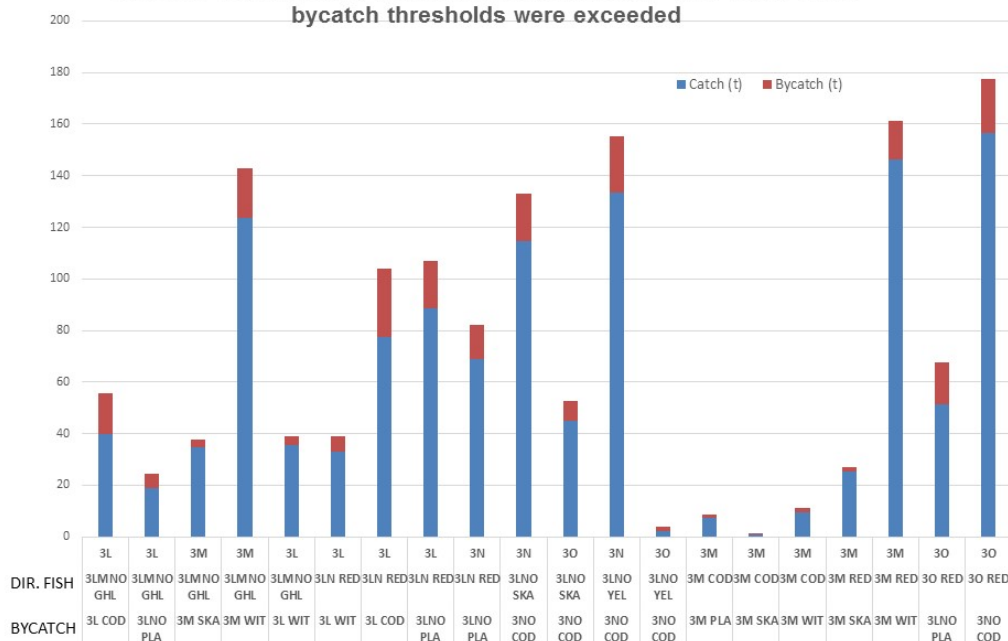
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**Analysis of frequency of hauls exceeding thresholds. Data: 2017 H x H**

- 70 trips. 2944 days in the NRA (according to VMS records)
- Total: 6436 hauls, 37848 t of fish caught.
- 7 Stocks considered as directed fishery: 3LMNO GHL, 3M COD, 3M RED, 3O RED, 3LN RED, 3LNO YEL, and 3LNO SKA.
- 6 Stocks considered as bycatch: 3NO COD, 3M PLA, 3LNO PLA, 3L COD, 3L WIT, 3M WIT, 3M SKA
- 6236 hauls with directed fishery of one of the DF stocks. These hauls account for 34054 t of fish caught.
- Of 6236 hauls, 317 have exceeded threshold.

NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

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**Directed Fisheries and their Bycatch by Division - only hauls when bycatch thresholds were exceeded**

NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

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**Analysis of frequency of hauls exceeding thresholds. Data: 2017 H x H**  
 - Of 6236, 317 hauls exceeded threshold.

### **Directed Fishery**

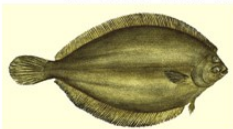
3LMNO GHL



**1385 hauls, 52  
hauls exceeded  
threshold**

### **Bycatch stocks**

3L and 3M WIT



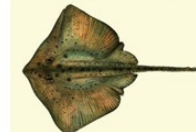
3L COD



3LNO PLA



3M SKA



NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

13

**Analysis of frequency of hauls exceeding thresholds. Data: 2017 H x H**  
 - Of 6236, 317 hauls exceeded threshold.

### **Directed Fishery**

3M COD



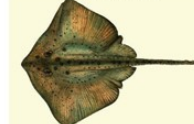
**899 hauls, 16  
hauls exceeded  
threshold**

### **Bycatch stocks**

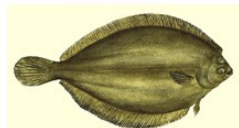
3M PLA



3M SKA



3M WIT



NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

14

**Analysis of frequency of hauls exceeding thresholds. Data: 2017 H x H**  
 - Of 6236, 317 hauls exceeded threshold.

### **Directed Fishery**

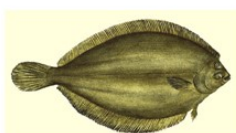
3M RED



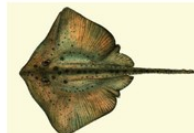
**735, 38 hauls  
exceeded  
threshold**

### **Bycatch stocks**

3M WIT



3M SKA



NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

15

**Analysis of frequency of hauls exceeding thresholds. Data: 2017 H x H**  
 - Of 6236, 317 hauls exceeded threshold.

### **Directed Fishery**

3O RED



**954 hauls, 27  
hauls exceeded  
threshold**

### **Bycatch stocks**

3NO COD



3LNO PLA



NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

16

**Analysis of frequency of hauls exceeding thresholds. Data: 2017 H x H**  
 - Of 6236, 317 hauls exceeded threshold.

### Directed Fishery

3LN RED



**1072 hauls, 37  
hauls exceeded  
threshold**

### Bycatch stocks

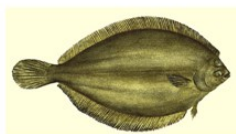
3L and 3NO COD



3LNO PLA



3L WIT



NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

17

**Analysis of frequency of hauls exceeding thresholds. Data: 2017 H x H**  
 - Of 6236, 317 hauls exceeded threshold.

### Directed Fishery

3LNO YEL



**469 hauls, 44  
hauls exceeded  
threshold**

### Bycatch stocks

3NO COD



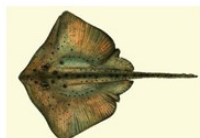
NAFO WG-BDS, 2-3 May 2018, Dartmouth,  
NS, Canada

18

**Analysis of frequency of hauls exceeding thresholds. Data: 2017 H x H**  
 - Of 6236, 317 hauls exceeded threshold.

### Directed Fishery

3LNO SKA



**724 hauls, 103  
hauls exceeded  
threshold**

### Bycatch stocks

3NO COD



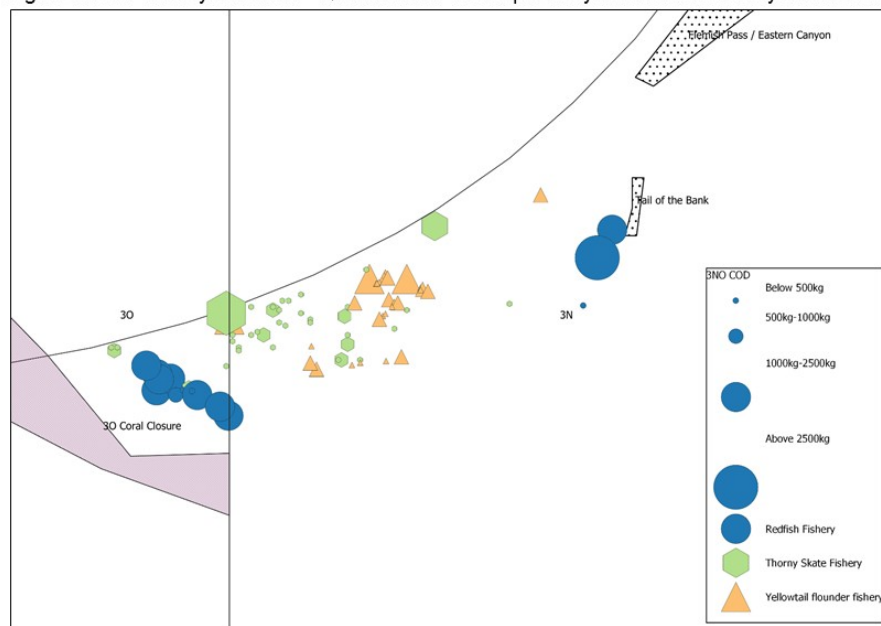
3LNO PLA



NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

19

Figure 1. 3NO Cod Bycatch in 2<sup>nd</sup> Quarter 2017 - a sample analysis. Source: Haul by Haul Data.



NAFO WG-BDS, 2-3 May 2018, Dartmouth, NS, Canada

20





Northwest Atlantic Fisheries Organization



**Report of the NAFO Standing Committee on International Control (STACTIC)  
Intersessional Meeting**

08-10 May 2018  
Dartmouth, NS, Canada

NAFO  
Dartmouth, Nova Scotia, Canada  
2018

## Report of the NAFO Standing Committee on International Control (STACTIC) Intersessional Meeting

08-10 May 2018  
Dartmouth, NS, Canada

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## **Report of the NAFO Standing Committee on International Control (STACTIC) Intersessional Meeting**

08-10 May 2018  
Dartmouth, NS, Canada

### **1. Opening by the Chair, Judy Dwyer (Canada)**

The Chair, Judy Dwyer (Canada), opened the meeting at 10:00 hours on Tuesday, 08 May 2018 at the NAFO Secretariat Headquarters in Dartmouth, Nova Scotia, Canada. The Chair welcomed representatives from the following Contracting Parties (CPs) – Canada, Denmark (in respect of the Faroe Islands and Greenland), the European Union, France (in Respect of St. Pierre et Miquelon), Iceland, Japan, Norway, the Russian Federation, and the United States of America (Annex 1).

### **2. Appointment of Rapporteur**

The NAFO Secretariat (Jana Aker) was appointed as rapporteur.

### **3. Adoption of Agenda**

The following amendments were made to the agenda under agenda item 17 – Other Business:

- a. MRAG Americas – Catch Estimation Study
- b. Discussion on NAFO CEM Article 37.4
- c. Discussion on garbage and labour conditions onboard vessels

The agenda was adopted as presented in Annex 2.

### **4. Compilation of fisheries reports for compliance review (2017), including review of Apparent Infringements**

The NAFO Secretariat presented STACTIC WP 18-02 on 2017 catch, effort and compliance and highlighted the compliance tables found in STACTIC WP 18-01. Several Contracting Parties raised concerns about the submission rates of the logbook (haul by haul) data (Article 28.8.b of the NAFO CEM) noting that the lack of submissions has been flagged by other working groups within NAFO. Contracting Parties highlighted that in the Secretariat's presentation (STACTIC WP 18-02), it would be better to name the Contracting Parties / vessels that have not met the submission requirements in order for STACTIC to have the ability to assess what the specific issues are for those parties who are not meeting the submission requirements. Contracting Parties who have yet to submit the logbook (haul by haul) data noted that they would work on getting the submissions to the NAFO Secretariat.

The European Union highlighted that the compliance presentation from the NAFO Secretariat in STACTIC WP 18-02 resulted in confusion about what the specific compliance issues are within NAFO for the previous year because of the lack of transparency within the presentation itself. In recent years, STACTIC has become more open in its conversations, especially at the Intersessional Meetings, and the compliance presentation from the Secretariat should reflect that openness by highlighting specific vessels / Contracting Parties that were not in compliance with the NAFO CEM. The European Union noted that the report at the STACTIC Intersessional Meeting is meant to be the internal review of compliance and that the purpose of the presentation at the intersessional meeting is to generate discussion within STACTIC on operational problems with the NAFO CEM and potential solutions. It was noted that the inclusion of trends would benefit STACTIC in its task of identifying key compliance issues in NAFO fisheries. Contracting Parties agreed that it would be beneficial if the presentation included the following:

1. A trend analysis for:
  - the level of fishing effort from year to year.

- the uptake of stocks from year to year.
  - the bycatches and discards from year to year.
2. Clarification on the various tables (e.g. making it clear that quotas in Table 2 of STACTIC WP 18-02 include transfers).
  3. Replace the terms “*regulated*” and “*non-regulated*” species with “*species subject to catch limitation (species listed in the Quota table)*” and “*species not subject to catch limitation (species not listed in the Quota table)*”.
  4. Identify Contracting Parties that have failed to comply with obligations in the NAFO CEM as well as which provisions were not complied with (including specific NAFO CEM references)
  5. A review of the port State inspection coverage under Chapter VII (i.e. 15% requirement being met).
  6. A review of the port State inspection coverage under Article 10
  7. Submission rates of types of catch reports (e.g. haul by haul) by Contracting Party
  8. The date that fines were issued (NAFO Secretariat can request this information when it is not submitted).
  9. Draft compliance reports with vessel and/or Contracting Party details be distributed to STACTIC members by 15 April each year.

The NAFO Secretariat requested that any comments for corrections on the Compliance Tables in STACTIC WP 18-01 be submitted by 31 May 2018. The NAFO Secretariat reminded that the Compliance Tables will be circulated to Contracting Parties in June 2018 in accordance with Rule 5.1 of the NAFO Rules of Procedure: Commission.

The NAFO Secretariat presented STACTIC WP 18-03, which contained the information received from Contracting Parties in accordance with Article 40 of the NAFO CEM and STACTIC WP 18-04, which included a summary of the Apparent Infringements that were issued by inspectors during at-sea inspections. It was noted that the current templates cause confusion as some infringements are repeated in the document and the European Union agreed to draft improved reporting templates for the next STACTIC Intersessional Meeting.

It was **agreed** that:

- **The NAFO Secretariat would circulate the draft compliance tables, with vessel names included, to STACTIC participants by 15 April each year to facilitate review by Contracting Parties in advance of the STACTIC Intersessional Meeting.**
- **The NAFO Secretariat would include the above-mentioned enhancements to the Compliance Review for the next STACTIC Intersessional Meeting.**
- **The European Union would draft new templates for the information presented in STACTIC WP 18-03 and STACTIC WP 18-04 for the next STACTIC Intersessional Meeting.**
- **Contracting Parties would submit any comments or corrections on the Compliance Tables (STACTIC WP 18-01) to the NAFO Secretariat by 31 May 2018.**

## **5. Measures concerning repeat non-compliance of serious infringements in the NAFO Regulatory Area**

The Chair opened this agenda item noting that at the last Annual Meeting of STACTIC, Contracting Parties had agreed to submit information to Canada on their domestic legislation for addressing repeated serious infringements of the NAFO CEM. Canada provided an update on the status of submitted domestic legislation by Contracting Parties and noted that some Contracting Parties have not yet submitted the information. Canada outlined that in reviewing the information that is available, there are some commonalities between Contracting Parties, particularly as it relates to vessels. Canada is considering options for a proposal on a way forward.

Contracting Parties agreed to submit the information to Canada, and Canada agreed that they would continue the review with the aim of having a proposal for the Annual Meeting, noting they may seek clarification from Contracting Parties on some of the domestic legislation information.

The NAFO Secretariat presented STACTIC WP 18-05 which highlighted that CCAMLR had a Contracting Party IUU vessel list. The European Union clarified that CCAMLR is not the only RFMO that has adopted an IUU listing procedure for Contracting Party vessels. Canada will consider how other RFMOs have addressed the problem in their development of a proposal.

It was **agreed** that:

- **Contracting Parties will submit and/or clarify domestic legislation/authorities/policies to Canada to facilitate their drafting of a proposal for addressing repeat non-compliance with the NAFO CEM.**
- **Canada will continue to review the submissions from Contracting Parties and upon receiving input from all Contracting Parties, will work on a proposal for addressing repeat non-compliance with the NAFO CEM with the aim to present it at the next Annual Meeting.**

## **6. New and pending proposals on enforcement measures: Possible revisions of the NAFO CEM**

The United States of America presented STACTIC WP 18-15 outlining a proposal for changes to the NAFO CEM regarding move-along provisions. The United States highlighted the challenges of applying the move-along provisions for their smaller longline vessels, noting the provision was written mainly in the context of trawlers, which can result in inconsistent or inequitable application to other types of gear used, including longlines. Some Contracting Parties did not agree that multiple strings of lines should be considered as a single set of gear. Canada noted that, from their perspective, it is standard practice to use start and end positions on a single string to define a set and believe it is consistent with the requirement to record for the smallest geographical area for which a quota has been allocated. However, although Canada believes the move-along provisions have been applied consistent with the measures, they agreed to work with other Contracting Parties to clarify how they are applicable to longliners because the terms haul / set / tow are not defined in the NAFO CEM. Denmark (in Respect of the Faroe Islands and Greenland) noted that move-along provisions can be difficult for longliners in Division 3M because the geographic area within 3M is quite small and the sets are quite long. The United States thanked Contracting Parties for their feedback on this proposal, noting that they feel it is still important to address the differences between trawl and non-trawl vessels in applying the move-along provisions to ensure minimization of bycatch and equity between the different gear types operating in the NRA. For these reasons, the United States asked to defer any decision on their proposal at this meeting so that they could confer with Contracting Parties about developing alternatives to address their concerns for possible consideration at the next Annual Meeting.

The European Union highlighted that their proposals under this agenda item are a result of discussions held and ideas for improvements to the measures suggested at the Inspectors Workshop that was held in October 2017 and invited other Contracting Parties to participate in future workshops. The European Union presented STACTIC WP 18-20 highlighting a clarification in the estimation of bycatches onboard a vessel in Article 6.9 of the NAFO CEM. Contracting Parties raised some concerns on the clarification of “*total catch*” in this article, and what it would be interpreted as in other Articles and felt that the best way forward would be to add a definition of total catch to Article 1 of the NAFO CEM. The European Union withdrew the proposal and Canada agreed to draft the definition for the next Annual Meeting.

The European Union presented STACTIC WP 18-21, a proposal to require vessels entering the NAFO Regulatory Area with catch onboard to have a stowage plan for that catch that meets the requirements in the NAFO CEM. Contracting Parties agreed with the proposal, and Canada requested to add that the information be available to inspectors. It was agreed to forward STACTIC WP 18-21 (Revised) to the Commission for adoption.

Report of STACTIC,  
08-10 May 2018

The European Union presented STACTIC WP 18-22, which proposed amendments to the NAFO CEM to facilitate the collection of DNA samples from fish by inspectors at sea and in port. During the presentation, the European Union noted that there have been issues with misrecording of species, and DNA analysis is a valuable method for verifying species / stocks. The European Union also sought support to harmonize procedures related to sample collection and DNA analysis, in order to reinforce the admissibility of the results of DNA analysis as evidence in court, in particular when non-flag State inspectors are involved. Based on procedures applied within Contracting Parties, STACTIC should promote a project on DNA collection and analysis with the view to establish best practices on:

- a. sampling sizes, sufficient to extrapolate the results to the entire catch;
- b. procedure to take samples;
- c. standards for the analysis of DNA samples in national laboratories;
- d. transmission of results to enable continuity of evidence to be secured to support prosecution (traceability of the samples back to their origin);
- e. use of results from non-flag State Contracting Parties as stand-alone evidence for follow-up by the flag State Contracting Party.

Contracting Parties requested further clarity in the text in the proposal, with the final proposal being presented in STACTIC WP 18-22 Rev.2 and subsequently adopted.

Contracting Parties agreed that Canada and the European Union would work together on the project for consideration at the next Inspectors Workshop scheduled for October 2018 and report back to STACTIC.

Canada presented STACTIC WP 18-26 outlining a proposal for the requirement for product labels to be facing upwards, when product is stowed, to be added to the NAFO CEM to facilitate inspections and noted that there have been issues with vessels placing the product labels downward, and highlighted the challenges for inspectors who conduct inspections in freezer holds when faced with product stored in this manner. The European Union noted that the vessel in question that has been having this issue is doing so because the equipment onboard the vessel does not allow for the labels to be on the tops of the boxes. The European Union requested that they be provided with time to discuss the situation with the vessel operators to see if the issue can be resolved before resorting to creating a revision of the NAFO CEM to address the issue. Contracting Parties agreed to this way forward, and Canada agreed to withdraw the proposal with the possibility of bringing it back at the next Annual Meeting pending the results of the European Union discussions.

Canada presented STACTIC WP 18-27, which outlined proposed amendments to Article 28.5 relating to the stowage of catch and noted that they have experienced challenges in relation to stowage plans during inspections and that this proposal would help resolve some of those issues. Contracting Parties noted that the wording was a bit confusing in terms of the requirement for a "*top and side view*" and requested that Canada come back at the next Annual Meeting with a visual representation of their expectations for Contracting Parties to review and make a decision on the proposed revisions.

It was **agreed** that:

- **Action on STACTIC WP 18-15 was deferred so that the United States could consult with other Contracting Parties to see if their proposal could be modified in a way to address concerns regarding how move-along provisions apply to longline gear.**
- **Canada would draft a definition of total catch, for inclusion in Article 1 of the NAFO CEM, for presentation at the next Annual Meeting.**
- **The proposal outlined in STACTIC WP 18-21 (Revised) be forwarded to the Commission for adoption.**

- The proposal outlined in STACTIC WP 18-22 (Rev. 2) be forwarded to the Commission for adoption.
- Canada and the European Union would work together on the project for consideration at the next Inspectors Workshop scheduled for October 2018 and report back to STACTIC.
- Canada would come to the next Annual Meeting with a revision to the proposal outlined in STACTIC WP 18-27, including visual representations on what the proposal is outlining.

## 7. NAFO Monitoring, Control and Surveillance (MCS) Website

The NAFO Secretariat displayed the catch data query tool on the MCS Website that was implemented following a recommendation at the 2017 Annual Meeting. The NAFO Secretariat also presented a demonstration of the Quota Monitoring tool that could be incorporated into the MCS Website. Contracting Parties thanked the NAFO Secretariat for their work and agreed that the Quota Monitoring tool would be a useful addition to the MCS Website.

It was **agreed** that:

- The Quota Monitoring tool as demonstrated by the NAFO Secretariat be added to the NAFO MCS Website.

## 8. Information Security Management System (ISMS)

### a. NAFO Secretariat backup tape storage

The NAFO Secretariat presented STACTIC WP 18-06 highlighting the new data backup process at the NAFO Secretariat.

### b. Data Classification

The NAFO Secretariat presented STACTIC WP 18-07 highlighting a request from the *Ad hoc Virtual NAFO Website Re-design Working Group: Phase II – Data Classification* for STACTIC to review the classification of its working papers in terms of whether they should remain on the secured NAFO Members Pages or if they should be on the public NAFO website. The United States of America highlighted that they were in support of the idea of moving working papers to the public website in the interest of transparency, but several Contracting Parties raised concerns about the sensitive information presented in some of the working papers within STACTIC being made public.

It was **agreed** that:

- STACTIC working papers should remain on the secured NAFO Members Pages website.
- The United States will bring a working paper on the transparency of working papers to STACTIC at the next Annual Meeting.

## 9. Half-year review of the implementation of new NAFO CEM measures

The NAFO Secretariat presented STACTIC WP 18-08 and noted that there have been no issues so far in 2018 with the measures that were adopted at the 2017 Annual Meeting.

Norway presented STACTIC WP 18-25 in response to a recommendation from STACTIC at the 2017 STACTIC Intersessional meeting relating to the PSC1/2 approval process where a vessel with catch onboard is entering port solely for “*use of port services*” and requesting information from NEAFC. Norway noted that NEAFC adopted changes to the scheme at the 2017 Annual Meeting that require flag State confirmation and port State authorization for the “*use of port services*” and that the PSC1/2s that are solely for use of port services are not counted towards the inspection thresholds. Norway recommended that STACTIC should consider making

similar amendments to the NAFO CEM and volunteered to draft a proposal for the Annual Meeting. Contracting Parties thanked Norway for this report and accepted the offer for them to draft a proposal.

The European Union flagged that there is confusion about what information is being requested from inspectors in the sea inspection report template of Annex IV.B Section 6 under "*Vessel quota by stock area*". It was agreed that this matter will be added to the agenda for the next Inspectors Workshop scheduled for October 2018 to seek clarification.

It was **agreed** that:

- **Norway would draft a proposal similar to what NEAFC had adopted at their 2017 Annual meeting (as described in STACTIC WP 18-25) for presentation to STACTIC at the next Annual Meeting.**
- **Annex IV.B of the NAFO CEM be added to the agenda for the fall 2018 Inspectors Workshop.**

## 10. Review and evaluation of Practices and Procedures

The NAFO Secretariat presented STACTIC WP 18-09 and noted there have been no updates to the website since the Annual Meeting. Iceland and Denmark (in Respect of the Faroe Islands and Greenland) had agreed to provide presentations under this agenda item, but they were deferred until the next Annual Meeting. Iceland also noted that they would work with the Secretariat to get anonymized data in order to demonstrate their business intelligence software for monitoring, control, and surveillance.

It was **agreed** that:

- **Iceland would present a demonstration of their business intelligence software for monitoring, control, and surveillance at the next Annual Meeting.**
- **Denmark (in respect of the Faroe Islands and Greenland) would provide a presentation of their quota monitoring system at the next Annual Meeting.**

## 11. Review of current IUU list

The Secretariat presented the NAFO IUU List Update in STACTIC WP 18-10 and noted that there have been no changes to the IUU list since the last update at the 2017 NAFO Annual Meeting. The NAFO Secretariat also noted that they have added a link to the North Pacific Fisheries Commission (NPFC) IUU list on the Other RFMOs IUU list page on the NAFO Website.

Norway noted that, according to Lloyds List of Intelligence, the vessel Maine is now called Labiko. This information has been put forward to NEAFC for consideration for updating their IUU list at the 2018 Annual Meeting to include the name change. NAFO will take appropriate action concerning the name of this vessel, if necessary, after the 2018 NEAFC Annual Meeting. The European Union noted that several vessels are no longer in operation but continue to be presented on the IUU list. Clarification was requested from the Executive Secretary on how NAFO notifies the vessels' flag State and whether there was a follow-up process to the initial notice. The NAFO Secretariat agreed to examine the process and advise at the 2018 Annual Meeting on whether improvements are required. Contracting Parties were encouraged to provide evidence, if it exists, justifying the removal of a vessel from the IUU list in a proposal to STACTIC.

## 12. Review of data reporting requirements in the NAFO CEM

The NAFO Secretariat presented STACTIC WP 18-11 on a review of the monthly provisional catch reporting requirement in the NAFO CEM Article 28.8.a noting some Contracting Parties report landed amounts while other reports are based on the daily CAT amounts. The provision has been in place since at least 1980, before daily catch reporting was a requirement in NAFO. Because landing figures and daily CAT amounts are not necessarily equivalent, the European Union requested clarification on the concept of provisional monthly catches to determine which kind of figures are required. Should the provisional monthly catch refer to CAT



amounts, Contracting Parties agreed that the measure may no longer be of value and requested that the NAFO Secretariat check with the Scientific Council to ensure that they are not using the data before making any changes in the NAFO CEM.

The NAFO Secretariat presented STACTIC WP 18-12 highlighting the recommendations for STACTIC from the Catch Data Advisory Group (CDAG). The Secretariat explained that on the first recommendation, the group was asking STACTIC to review the 60-day requirement for submitting haul by haul data in accordance with Article 28.8.b, with the goal of reducing the timeframe down from 60 days. Contracting Parties noted that before there could be a reduction in the timeline of the submission requirement, there needs to be an analysis on why the 60-day requirement is not being met by some Contracting Parties. Contracting Parties agreed that a review of haul by haul reporting should be added to the agenda for the next Annual Meeting with a view to examine and address potential causes of untimely reporting or non-reporting of this data, appropriate timeframe for reporting this data, the feasibility of including catch information by haul in the daily CAT, the availability of this data to NAFO Inspectors, recommendation 5 from the latest WG-BDS meeting report, and any other issues related to haul by haul reporting.

On the second recommendation, the Secretariat explained that the Catch Estimation Methodology (outlined in Annex 1 of COM Doc. 17-08) relies on port inspection data, and that having that data presented by division in the reports would be beneficial in applying the method. The European Union noted that the CAT messages already request the catch of the previous day to be reported by division.

The NAFO Secretariat presented STACTIC WP 18-13 highlighting an outdated weekly reporting requirement in the NAFO CEM following a recommendation from the 2017 Annual Meeting. The NAFO Secretariat noted the requirement is in relation to the Observer Scheme, and the Chair noted that the Observer Program Review Working Group could address this issue.

It was **agreed** that:

- **A review of the reporting of haul by haul data be added to the agenda for the next Annual Meeting with a view to examine and address potential causes of untimely reporting or non-reporting of this data, appropriate timeframe for reporting this data, the feasibility of including catch information by haul in the daily CAT, the availability of this data to NAFO inspectors, recommendation 5 from the WG-BDS meeting report, and any other issues related to haul by haul reporting.**
- **The NAFO Secretariat would ask the Scientific Council what it expects from the provisional monthly catch reporting data under NAFO CEM Article 28.8.a (landing figures or CAT amounts) and report back to STACTIC at the next Annual Meeting.**

### 13. Bycatches and discards

The Chair introduced COM Doc. 17-23 which tasked STACTIC and the *Ad Hoc Working Group on Bycatches, Discards and Selectivity (WG-BDS)* to examine the feasibility of introducing policies to minimize or eliminate discards in NAFO. In COM Doc. 17-23, STACTIC was specifically requested to review domestic legislation in relation to this task, and Contracting Parties were requested to submit this information prior to this meeting. The NAFO Secretariat presented STACTIC WP 18-14 and noted that submissions were received from Canada, the European Union, Faroe Islands, Greenland, Iceland, Japan and Norway, and the Chair encouraged other Contracting Parties to submit this information. In addition to this, STACTIC was requested to identify current discard obligations in the NAFO CEM, and the European Union presented STACTIC WP 18-23 in response to this request.

Contracting Parties discussed their domestic discarding and landing provisions and their potential applicability in NAFO, but Contracting Parties noted that the current task outlined in COM Doc. 17-23 was to present a plan for how the points outlined in the document are going to be addressed. The Chair tasked a smaller working group to meet within the margins of STACTIC to develop that plan and they presented it in STACTIC WP 18-28 (Revised). The timelines presented in the working paper will be reviewed and finalized at the next Annual

Meeting. STACTIC will coordinate its plan with the WG-BDS. During the discussion of this plan, it was noted that STACTIC will propose edits to the Bycatch and Discards Action Plan (COM Doc. 17-26) in advance of the next Annual meeting to reflect these recommendations and will present it to the Commission for their review.

It was **agreed** that:

- **STACTIC would coordinate its plan with the WG-BDS.**
- **The plan presented in STACTIC WP 18-28 (Revised) be updated to include timelines at the next Annual Meeting and forwarded to the Commission for adoption.**
- **STACTIC will propose edits to the Bycatch and Discards Action Plan (COM Doc. 17-26) in advance of the next Annual meeting to reflect these recommendations and will present it to the Commission for their review.**

#### **14. Editorial Drafting Group (EDG) of the NAFO CEM**

The NAFO Secretariat presented STACTIC WP 18-16 that highlighted a small editorial change to Article 38.5 that may be required to be reviewed by the EDG. Contracting Parties agreed that the Secretariat could make the editorial change rather than forward the issue to the EDG.

The working paper also highlighted that some definitions in the NAFO Convention differed from those in the NAFO CEM, and the Secretariat sought guidance on this issue. Contracting Parties noted that the definitions in the NAFO CEM are meant for use within the NAFO CEM, and that as long as the definitions in the NAFO CEM are not any less restrictive to those in the NAFO Convention, it should not be an issue that the definitions differ.

It was **agreed** that:

- **Contracting Parties would reflect on the differences in the definitions between the NAFO CEM and the NAFO Convention and report back at the next Annual Meeting if any concerns are noted.**

#### **15. Report and recommendations of the STACTIC Observer Program Review Working Group (WG-OPR)**

The Chair of the WG-OPR (Judy Dwyer, Canada) reported that the working group continues to work on the revision of Article 30 and currently have seven draft annexes associated with the revision of the Article. The Chair highlighted STACTIC WP 18-24, which was a paper submitted by the European Union to provide a summary on the status of the Working Group and highlight the two main outstanding issues within the group, which are coverage levels and whether the annexes should be legally binding. The Chair tasked a smaller group within the working group to develop potential criteria that could be used to apply a derogation from a 100% observer coverage requirement. The smaller group will discuss possible criteria for derogation and consider other factors such as whether coverage should be applied on a vessel or fleet basis. The working group will exchange email and continue to meet via WebEx to address these outstanding issues.

The Chair presented the latest version of Article 30 in WG-OPR Draft Article 30 -Version 8Revised2 and noted that there is consensus from the members of the Working Group on the text in the current draft, but that some Contracting Parties not participating in the Working Group may want to provide comments. It was agreed that Contracting Parties would provide any comments on the latest draft of Article 30 to the NAFO Secretariat by 25 May 2018.

It was **agreed** that:

- **The WG-OPR would convene a series of WebEx meetings before the next Annual Meeting to discuss the coverage levels and the annexes for the revision of Article 30.**
- **Contracting Parties would provide any comments to the latest draft of Article 30 (WG-OPR Draft Article 30 -Version 8Revised2) to the NAFO Secretariat by 25 May 2018.**

- **The WG-OPR would continue to work toward the goal of having a full revision of the NAFO Observer Program to present to STACTIC at the next Annual Meeting.**

## **16. Report and advice of the Joint Advisory Group on Data Management (JAGDM)**

The vice Chair of JAGDM (Natasha Barbour, Canada) presented STACTIC WP 18-17 outlining the meeting highlights from the last meeting of JAGDM that took place in March 2018. The highlights included discussions on data exchange statistics, the review of the proposed changes for the OBR report in the NAFO CEM, a review of the NAFO MCS website and a review of the NAFO CEM annexes. The group also discussed the JAGDM reflections paper following some operational concerns with the joint group. The Chair of the WG-OPR noted that the advice from JAGDM on the OBR message would be discussed at a future WG-OPR WebEx meeting.

The vice-Chair of JAGDM also presented STACTIC WP 18-18, which outlined a proposal from JAGDM to clarify the VMS data format requirements as outlined in Annex II.E of the NAFO CEM. Contracting Parties thanked JAGDM for the proposal and agreed to forward it to the Commission for adoption. The mandatory requirement for speed and course of an EXI VMS message, even though the latitude and longitude are optional, was also raised by the JAGDM vice Chair for discussion.

It was **agreed** that:

- **The proposal from JAGDM outlined in STACTIC WP 18-18 be forwarded to the Commission for adoption.**

## **17. Other Business**

### **a. MRAG Americas – Catch Estimation Study**

The Chair introduced Graeme Parkes and Jill Swasey from MRAG Americas who have been contracted to complete the NAFO Catch Estimates Study that was adopted at the 2017 Annual Meeting (COM Doc. 17-25). MRAG gave a presentation on the background and an outline of the study and asked STACTIC participants to meet with them, if time allows, throughout the week to conduct interviews and gather relevant information and contacts.

### **b. Discussion on NAFO CEM Article 37.4**

Iceland flagged a recent citation of a serious apparent infringement that occurred in the NAFO Regulatory Area and questioned why Contracting Parties were not informed of the AI following Article 37.4. Iceland noted that this vessel approached a port in the NEAFC area, and although port inspectors were informed through informal means, could easily have been unaware of the AI prior to inspection. The Secretariat noted that the CEM currently obliges them to distribute information on apparent infringements only to Contracting Parties operating within the Scheme under Chapter VI of the NAFO CEM. Contracting Parties agreed on the importance of sharing information on apparent infringements issued at sea with port inspection authorities, and Canada agreed to draft a proposal to address this at the next Annual Meeting.

The European Union offered to develop a proposal to enable Contracting Parties without inspection presence access to further information on the NAFO MCS Website for presentation at the next Annual Meeting.

It was **agreed** that:

- **Canada would draft a proposal to revise Article 37.4 in the NAFO CEM to facilitate the sharing of information on apparent infringements issued at sea with other Contracting Parties for the next Annual Meeting.**
- **The European Union offered to develop a proposal to enable Contracting Parties without inspection presence access to further information on the NAFO MCS Website for presentation at the next Annual Meeting.**

### **c. Discussion on garbage and labour conditions onboard vessels**

The European Union sought to initiate a discussion on how garbage is handled onboard vessels in the NAFO Regulatory Area, and whether it is possible for a measure to be included in the NAFO CEM to address the issue. Contracting Parties noted that there are requirements under MARPOL, specifically Annex V, and that some have domestic legislation that is applied to either incinerate garbage onboard or land all garbage in port. The NAFO Secretariat noted that under the revised Convention, there is a commitment to safeguard the marine environment and take due account of the need to reduce pollution and waste, so it could be within the scope of the Convention to add something in the NAFO CEM on garbage disposal requirements. The Chair asked Contracting Parties to reflect on the issue of garbage disposal at sea and the extent to which their domestic laws can address the issue. The NAFO Secretariat agreed to check whether other RFMOs consider the application of MARPOL requirements for further discussion at the next Annual Meeting. All materials, including information pertaining to domestic practices, should be forwarded to the Secretariat so that it can be posted to the STACTIC SharePoint site.

The European Union also requested a discussion on what Contracting Parties are currently doing from a fishery context to address situations where the working conditions onboard vessels are not suitable. Contracting Parties explained that some address these situations through the provisions in their national legislation, some their national labour boards, and some through the coast guards, etc. The Chair encouraged Contracting Parties to reflect on this issue and continue discussions at the Annual Meeting.

It was **agreed** that:

- **Contracting Parties would reflect on the issue of garbage disposal at sea and the extent to which their domestic laws can address the issue.**
- **The NAFO Secretariat would check whether other RFMOs consider the application of MARPOL requirements for further discussion at the next Annual Meeting.**
- **All materials, including information pertaining to domestic practices, would be forwarded to the Secretariat so that it can be posted to the STACTIC SharePoint site.**
- **Contracting Parties would reflect on the issue of labour conditions and continue discussions at the Annual Meeting.**

### **18. Time and Place of next meeting**

The next STACTIC meeting will be held in Tallinn, Estonia from 17-21 September 2018.

### **19. Adoption of Report**

The report was adopted on 10 May 2018, prior to the adjournment of the meeting.

### **20. Adjournment**

The meeting was adjourned at 14:25 hours on 10 May 2018. The Chair thanked the NAFO Secretariat for hosting the meeting and for their support during the meeting. She also thanked the meeting participants for their cooperation and input. The participants likewise expressed their thanks and appreciation to the Chair for her leadership.

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## **Annex 2. Agenda**

1. Opening by the Chair, Judy Dwyer (Canada)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Compilation of fisheries reports for compliance review (2017), including review of Apparent Infringements
5. Measures concerning repeat non-compliance of serious infringements in the NAFO Regulatory Area
6. New and pending proposals on enforcement measures: Possible revisions of the NAFO CEM
7. NAFO Monitoring, Control and Surveillance (MCS) Website
8. Information Security Management System (ISMS)
  - a. NAFO Secretariat backup tape storage
  - b. Data Classification
9. Half-year review of the implementation of new NAFO CEM measures
10. Review and evaluation of Practices and Procedures
11. Review of current IUU list
12. Review of data reporting requirements in the NAFO CEM
13. Bycatches and discards
14. Editorial Drafting Group (EDG) of the NAFO CEM
15. Report and recommendations of the STACTIC Observer Program Review Working Group (WG-OPR)
16. Report and advice of the Joint Advisory Group on Data Management (JAGDM)
17. Other Business
  - a. MRAG Americas – Catch estimation Study
  - b. Discussion on NAFO CEM Article 37.4
  - c. Discussion on garbage and labour conditions onboard vessels
18. Time and place of next meeting
19. Adoption of Report
20. Adjournment



Northwest Atlantic Fisheries Organization



**Report of the NAFO Joint Commission-Scientific Council Working Group on  
Risk-Based Management Strategies (WG-RBMS) Meeting**

13-15 August 2018  
London, United Kingdom

NAFO  
Dartmouth, Nova Scotia, Canada  
2018

Report of the COM/SC WG-RBMS,  
13-15 August 2018

## **Report of the NAFO Joint Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS) Meeting**

13-15 August 2018  
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## **Report of the NAFO Joint Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS) Meeting**

13-15 August 2018  
London, United Kingdom

### **1. Opening by the co-Chair, Jacqueline Perry (Canada)**

The meeting was opened at 09:30 hours on 13 August 2018 at the North-East Atlantic Fisheries Commission (NEAFC) Secretariat in London, United Kingdom. The co-Chair, Jacqueline Perry (Canada), welcomed representatives from Canada, Denmark (in respect of Faroe Islands and Greenland), the European Union, Japan, and the United States of America (Annex 1). The Chair also acknowledged the presence of Darius Campbell, the Secretary of NEAFC. The Scientific Council (SC) Chair, Brian Healey (Canada), acted as a co-Chair of this meeting.

### **2. Appointment of co-Chair**

It was noted that the SC co-Chair position, previously held by Carsten Hvingel (Norway) was vacant. The appointment of a new SC co-Chair was deferred to the Annual Meeting in September 2018.

### **3. Appointment of Rapporteur**

The NAFO Secretariat (NAFO Senior Fisheries Management and Scientific Council Coordinators) were appointed co-Rapporteurs for this meeting.

### **4. Adoption of Agenda**

Sub-agenda item 6.c "*Revised calendar for the development of 3M Cod Management Strategy Evaluation (MSE)*" was inserted (Annex 2).

### **5. Development of Exceptional Circumstances Protocol for 2+3KLMNO Greenland halibut management strategy**

The WG-RBMS noted that in 2017, the Commission adopted a new Management Procedure (MP) for the Greenland halibut stock (GHL) in Subarea 2 + Divisions 3KLMNO, which shall be in force from 2018 to 2023 inclusive. This MP includes a harvest control rule (HCR) applied annually to adjust the Total Allowable Catch (TAC) based on biomass indices provided each year by five different surveys.

Exceptional Circumstances provisions are intended to respond to an event or observation that is outside of the range of possibilities considered within the Management Strategy Evaluation (MSE). An Exceptional Circumstances Protocol should consist of two elements: 1) a technical description of what constitutes Exceptional Circumstances, and 2) actions to be taken should Exceptional Circumstances exist.

The Commission has tasked the NAFO Joint Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS) with finalizing the Exceptional Circumstances Protocol for adoption at the NAFO Annual Meeting in September 2018. To support the development of an Exceptional Circumstances Protocol, the Scientific Council developed criteria in June 2018 for the identification of Exceptional Circumstances, as requested by the Commission and taking into account the issues noted by the WG-RBMS (COM-SC Doc. 17-11).

Further, the WG-RBMS noted that the SC has provided specific guidance on some of the issues raised by the WG-RBMS (see SCS Doc. 18-19), while other issues will require expert judgement on a case-by-case basis to determine whether Exceptional Circumstances are occurring. Indicators that would be annually monitored by the SC were considered separately from assessment-based indicators, which would be based on less frequent update assessments.

SC advice identified four roles for the SC when Exceptional Circumstances have been declared to apply:

1. To comment on the severity of the Exceptional Circumstance identified
2. To advise on options with respect to the Management Procedure (MP) and TAC
3. If required and, if possible, to provide updated TAC advice (i.e. not using the MP)
4. If necessary, to advise on an earlier review of the MP

WG-RBMS endorsed the guidance provided by the SC. On the basis of this advice, WG-RBMS developed an Exceptional Circumstances Protocol (Annex 3).

WG-RBMS discussed its role when Exceptional Circumstances are considered to apply. It is expected that WG-RBMS would convene between the annual SC June meeting and the Annual Meeting to consider the SC advice and the options. WG-RBMS would not be expected to propose alternative TACs but would review options provided by SC, if available, and develop recommendations in relation to the review or revision of the management procedure.

## **6. Work plan for 3M Cod Management Strategy Evaluation**

SC held a benchmark assessment meeting for 3M Cod in Lisbon, Portugal in April 2018. The report of this meeting has not yet been finalized but the outcomes of the meeting were presented to the SC June meeting and (with some modifications to the prior distribution proposed at the end of the benchmark) formed the basis of SC's response to item 5 in the Commission's request for advice in 2018. The final model agreed in the benchmark, including the modification to the prior distribution proposed at the end of the benchmark, was agreed by the SC in June and used for the 2018 assessment of 3M cod.

The data used in the SC June 2018 Cod 3M assessment (over the time frame 1988-2017) will be used to conduct the MSE. Further, the assessment model approved in the 2018 June SC meeting will be used as the base case reference operating model (OM) in the MSE. SC proposed guidelines for the development of other OM, the period over which the simulations will be carried out and the development of MSE performance statistics.

### **a. Development of Harvest Control Rule for Cod in Div. 3M**

It was agreed that index-based rules were preferred, but the WG would consider model-based HCRs if required.

Within the management strategy evaluation, the performance of a variety of candidate Management Procedures should be considered. The eventual selection amongst candidates will be based on the most robust results in terms of a set of agreed performance statistics.

Restrictions to maximum changes in the TAC in terms of percentages and absolute numbers should be considered either as part of the HCR or as part of a suite of performance statistics (there is an initial preference for the former because it provides a degree of certainty for the industry). These restrictions may differ depending on the direction of the change and/or status of the stock.

### **b. Development of Management Objectives, Performance Statistics and associated Risk Thresholds for Cod in Div. 3M**

Performance Statistics and Criteria agreed as required/desirable during the development of the Greenland halibut MSE in 2017 (FC-SC Doc. 17-03, Table 2) were taken as a starting point for the development of equivalent objectives for the 3M Cod MSE. The WG-RBMS agreed that the Greenland halibut MSE elements were not being endorsed as a template. However, it was accepted they could inform the 3M Cod process recognizing there may be specific considerations for the management of each species and therefore may be considered individually.

The required performance statistic, performance criterion and relevant management objectives were provisionally adapted. They are included in Table 1 below. There was no agreement on the content highlighted in grey and it was recognized that further discussion on these aspects is required before they serve as the basis of any evaluation. These details have been left in the table for illustrative purpose only.

**Table 1.** Performance Statistics and Criteria development for 3M Cod MSE.

This table was adapted from one developed during the Greenland halibut MSE. Content highlighted in grey has not been agreed to apply to 3M Cod but has been left in for illustrative purposes.

REQUIRED PERFORMANCE STATISTICS/CRITERIA		
Performance statistic	Performance criterion	Relevant management objective
$P(B_{20YY} < B_{MSY})$	$P \leq 0.5$	Restore to within a prescribed period of time or maintain at $B_{MSY}$
To be determined	Count	Low risk of exceeding $F_{lim}$ (currently $F_{MSY}$ )
To be determined	$P \leq 0.1$ Count	Very low risk of going below an established threshold [e.g. $B_{lim}$ or $B_{lim}$ proxy].
DESIRABLE SECONDARY PERFORMANCE STATISTICS/CRITERIA		
Performance statistic	Performance criterion	Relevant management objective
$P(B_{2022} < B_{2018})$	$P \leq \alpha$ Where; $\alpha = 0.10$ if $B_{2018} < 0.3B_{MSY}$ ; $0.25$ if $0.3B_{MSY} < B_{2018}$	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
$C_{2019}$ $C_{2020}$ $\sum_{y=2018}^{2022} C_y / 5$ $\sum_{y=2018}^{2027} C_y / 10$ $\sum_{y=2018}^{2037} C_y / 20$		Maximize yield in the short, medium and long term
For each year, y $P\left(\frac{ C_y - C_{y-1} }{C_{y-1}} > 0.15\right)$ $AAV_{2018-2022} = \frac{1}{5} \sum_{y=2018}^{2022} \frac{ C_y - C_{y-1} }{C_{y-1}}$ and $AAV_{2018-2037} = \frac{1}{20} \sum_{y=2018}^{2037} \frac{ C_y - C_{y-1} }{C_{y-1}}$	$P \leq 0.15$	Keep inter annual TAC variation below “an established threshold”

It was agreed that short medium and long-term objectives will be evaluated over 5, 10 and 20-year periods but that this may vary to some extent depending on the specific statistic.

**c. Revised Calendar for the development of the 3M Cod Management Strategy Evaluation (MSE)**

Drawing from the lessons and experience in the development of the Greenland halibut MSE that was recently adopted by the Commission in 2017, the Working Group started to develop the workplan for 3M Cod MSE. The Working Group discussed the calendar developed during the Working Group meeting in February 2017 in London, United Kingdom (FC-SC Doc. 17-02).

- *Elements considered to be currently available/achieved are:* Finalization of past data to be used
- Partial list of Management Objectives (MO)
- Partial list of Performance Statistics (PS) and associated risk thresholds
- Base Case Operating Model (OM)
- Guidance from SC on considerations for Operating Models
- Progress on Development of Operating Models
- Initiation of development of projection specifications
- Guidance from WG-RBMS on development of HCRs

Outstanding work includes:

- Finalize MO
- Finalize PS and associated risk thresholds
- Finalize initial set of OMs
- Approve final set of OMs, including the acceptability of their conditioning
- Specify tuning to be used to compare across HCRs (if agreed)
- Develop and update Trials Specifications (OM details, basis for projections, data used) in SCR document
- Make arrangements for code and trial results to be archived
- Finalize data used in HCR calculation and associated projection specifications
- Agree plausibility weightings for OMs
- Test a range of candidate HCRs
- Review performance of HCRs on all OMs
- Add new HCRs if desired; compile results

With the goal of having the 3M Cod MSE ready for presentation to the Commission in September 2019, the calendar for the development of 3M Cod MSE was revised (Annex 4). It will be presented to the Commission for endorsement as it requires an unexpected intersessional meeting.

**7. Progress on the Review of the NAFO Precautionary Approach (PA) Framework**

The Chair of the PA Framework Working Group, Kathy Sosebee (USA) reported that there has been no progress in the work of the NAFO PA Framework since January 2017. There was a plan to have a workshop on the PA framework but that did not happen.

The Working Group discussed the reasons contributing to the lack of progress, in particular the SC experts on the PA involved in the work that have moved on or retired and the prioritization of the Greenland halibut MSE and Cod 3M benchmark assessment.

Also, it was noted that among Contracting Parties, there has been no agreement whether to consider  $F_{msy}$  as the target or limit reference point. In some cases, this is written into national legislation making it very difficult to reach a common position. The PA will be raised during the joint SC/Commission session in September in order to discuss a plan for the way forward. The SC vice-Chair, Carmen Fernandez (EU) is working toward preparing a summary of the ICES PA review which may inform future NAFO work on this matter.

## **8. Other Business**

At its June 2018 Meeting, SC brought to the attention of the Secretariat an error in formula six (6) in the Annex I.F "*Greenland halibut Management Strategy*" of the NAFO Conservation and Enforcement Measures (NCEM). COM-SC RBMS-WP 18-01 shows the correction in Annex I.F to reflect the original intention of the Greenland halibut Management Strategy adopted by the Commission in 2017 (Annex 5). It is recommended that the Commission approve the changes.

## **9. Recommendations to forward to the Commission and Scientific Council**

The WG-RBMS recommends that:

- The Commission adopt the Exceptional Circumstances Protocol for 2+3KLMNO Greenland halibut management strategy as reflected in Annex 3. The Protocol would be inserted as Annex I.G in the NAFO Conservation and Enforcement Measures.
- The Commission and Scientific Council consider and endorse the revised calendar for the development of the 3M Cod MSE as reflected in Annex 4 of this report (COM-SC Doc. 18-02).
- The Commission and the Scientific Council continue their work on the NAFO PA Framework.
- The Commission approve the corrections in Annex I.F of the NCEM as reflected in Annex 5 of this report (COM-SC Doc. 18-02).

## **10. Adoption of Report**

The report was adopted via correspondence.

## **11. Adjournment**

The meeting was adjourned at 12:30 hours on 15 August 2018.

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## **Annex 2. Agenda**

1. Opening by the co-Chair, Jacqueline Perry (Canada)
2. Appointment of co-Chair
3. Appointment of Rapporteur
4. Adoption of Agenda
5. Development of Exceptional Circumstances Protocol for 2+3KLMNO Greenland halibut management strategy
6. Work plan for 3M Cod Management Strategy Evaluation
  - a. Development of Harvest Control Rule for Cod in Div. 3M
  - b. Development of Management Objectives, Performance Statistics and associated Risk Thresholds for Cod in Div. 3M
  - c. Revised Calendar for the development of the 3M Cod MSE
7. Progress on the Review of the NAFO PA Framework
8. Other Business
9. Recommendations to forward to the Commission and Scientific Council
10. Adoption of Report
11. Adjournment

### **Annex 3. Draft Exceptional Circumstances Protocol for the Greenland halibut Management Procedure**

The following criteria constitute Exceptional Circumstances:

1. Missing survey data:
  - More than one value missing, in a five-year period, from a survey with relatively high weighting in the HCR (Canadian Fall 2J3K, Canadian Fall 3LNO, and EU 3M surveys);
  - More than two values missing, in a five-year period, from a survey with relatively low weighting in the HCR (Canadian Spring 3LNO and EU-Spain 3NO surveys);
2. The composite survey index used in the HCR, in a given year, is above or below the 90 percent probability envelopes projected by the base case operating models from SSM and SCAA under the MS; and
3. TACs established that are not generated from the MP

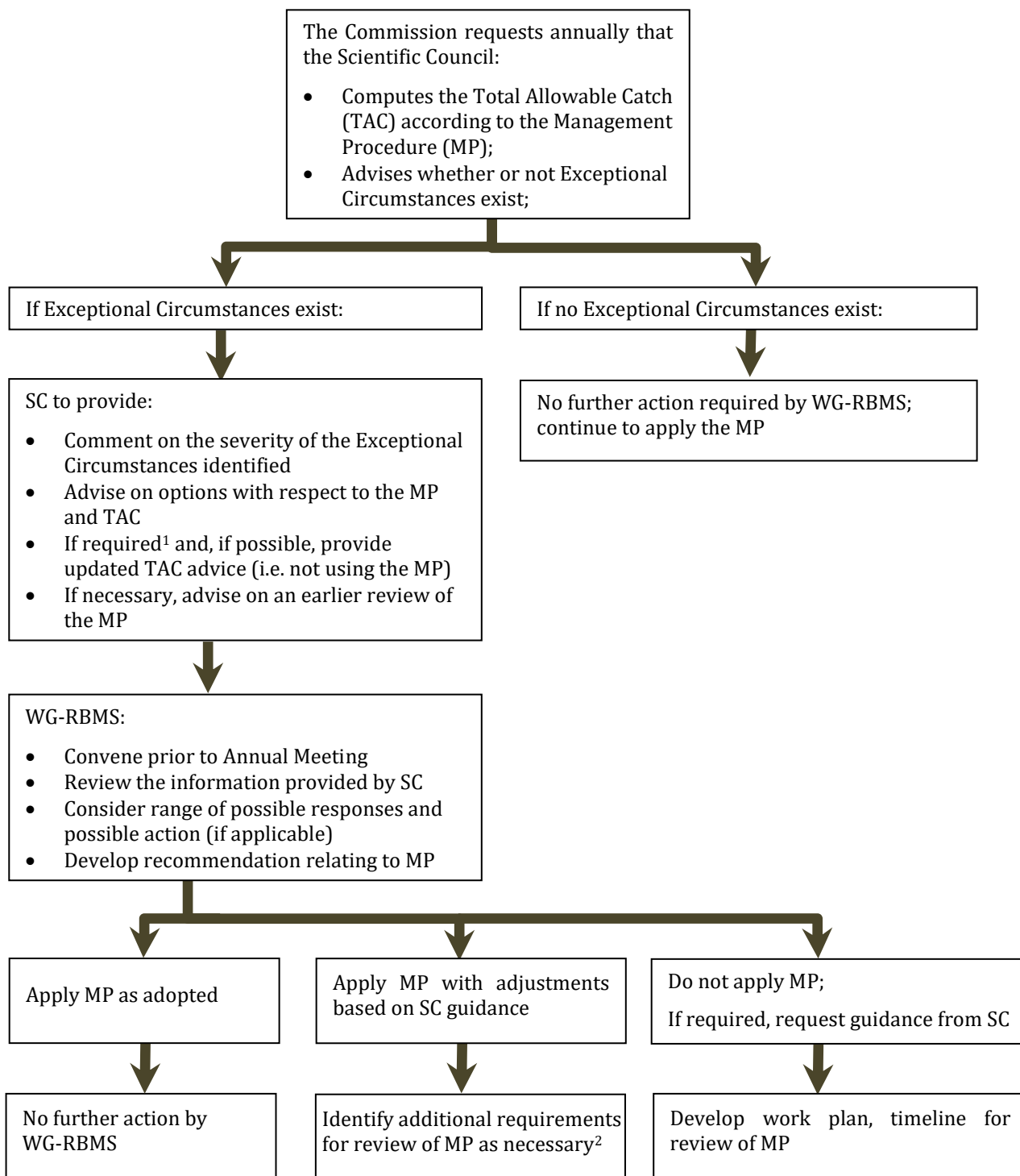
The following elements will require application of expert judgment to determine whether Exceptional Circumstances are occurring:

1. the five survey indices relative to the 80, 90, and 95 percent probability envelopes projected by the base case operating models (SSM and SCAA) for each survey;
2. survey data at age four (age before recruitment to the fishery) compared to its series mean to monitor the status of recruitment; and
3. discrepancies between catches and the TAC calculated using the MP.<sup>1</sup>

Figure 1 illustrates the actions to be taken in Exceptional circumstances.

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<sup>1</sup> Noting that 10% exceedance of TAC was tested during MSE.



<sup>1</sup> For example, where the SC determines that, in the light of identified exceptional circumstances, the application of the TAC generated by the MP may not be appropriate.

<sup>2</sup> This review may include updated assessment, sensitivity analysis, etc.

**Figure 1.** Decision tree illustrating actions to be taken in the event of Exceptional Circumstances.

#### Annex 4. Revised calendar for the development of 3M Cod MSE

The table below shows actions required to complete the MSE process, the parties responsible for their completion, and indicative dates that would enable the process to be completed by September 2019.

Validation of code by independent analysts was initially suggested as a separate step towards the end of the process. It is considered to be unlikely that this could be done in the time available although this will remain under consideration. An alternative option would be that external validation could be achieved through some sort of continuous external review throughout the process.

Dates	Action	Responsibility
Fall 2018	Development of OMs	Analysts
	Testing of HCRs	Analysts
	Development of Projection Specifications	Analysts
	Proposals for full set of MO/PS/Risks	Analysts
	Develop Trials Specification document (to be updated as the process continues)	Analysts
	Arrange repository for code and results	Secretariat
January 2019	Review OMs and approve initial set of OMs, including the acceptability of their conditioning, and/or suggest further refinements	SC
	Approve Projection Specifications	SC
	Comments on initial set of HCR (if required)	SC
Feb-March 2019	Test initial/refined HCRs using initial/refined set of OMs	Analysts
March 2019	Review initial MSE results	WG-RBMS
	Update and possibly finalize PS and associated risk levels	WG-RBMS
	Indicate where improvements in performance are most required to guide analysts in revising HCRs	WG-RBMS
	Implement HCR improvements	Analysts
April – May 2019	Propose plausibility weightings for OMs (if required)	Analysts
	Review refined OMs and approve final set of OMs, including the acceptability of their conditioning	SC
June 2019 SC Meeting	Review results from refined HCRs and cull those HCRs not needing further consideration	SC
	Agree plausibility weightings of OMs (though subject to endorsement by RBMS)	SC
	Finalize PS and associated risk levels –	WG-RBMS
Summer 2019. (potentially an additional day on the end of the SC June meeting or separate July meeting, possibly by Webex)	Endorse plausibility weightings of OMs	WG-RBMS
August-early September 2019	Run tests of a final set of HCRs on finalized OMs and prepare consolidated results –	Analysts
preceding NAFO AM 2019	Review results of MSE for revised HCRs & recommendation to Commission –	WG-RBMS

## Annex 5. Changes in Greenland halibut Harvest Control Rule in Annex I.F of the NCEM

### Revision of NCEM Annex I.F

#### Greenland halibut Management ~~Strategy~~ Procedure

Proposed changes to Annex I.F to reflect the original intention in the Greenland halibut management strategy adopted by the Commission in 2017.

### Annex I.F

#### Greenland halibut Management ~~Strategy~~ Procedure

The harvest control rule (HCR) will adjust the total allowable catch (TAC) from year (y) to year (y+1), according to:

a combination of a “target based” and a “slope based” rule detailed below.

#### Target based (t)

The basic harvest control rule (HCR) is:

$$TAC_{y+1} = TAC_y (1 + \gamma(J_y - 1)) \quad (1)$$

where

$TAC_y$  is the TAC recommended for year y,

$\gamma$  is the “response strength” tuning parameter,

$J_y$  is a composite measure of the immediate past level in the mean ~~weight per tow from surveys ( $J_y$ ) abundance indices~~ that are available to use for calculations for year y; ~~for this base case CMP~~ five series ~~have been~~ are used, with  $i = 1, 2, 3, 4$  and 5 corresponding respectively to Canada Fall 2J3K, EU 3M 0-1400m, Canada Spring 3LNO, EU 3NO and Canada Fall 3LNO:

$$J_y = \frac{\sum_{i=1}^5 \frac{1}{(\sigma^i)^2} \frac{J_{current \text{ ~~curr~~ } y}^i}{J_{target}^i}}{\sum_{i=1}^5 \frac{1}{(\sigma^i)^2}} \quad (2)$$

with

$(\sigma^i)^2$  being the estimated variance for index  $i$  (estimated in the SCAA model fitting procedure, see Table 1)

$$J_{current \text{ ~~curr~~ } y}^i = \frac{1}{q} \sum_{y'=y-q}^{y-1} I_{y'}^i \quad (3)$$

$$J_{target}^i = \alpha \frac{1}{5} \sum_{y'=2011}^{2015} I_{y'}^i \quad (\text{where } \alpha \text{ is a control/tuning parameter for the } \text{CMPMP}) \quad (4)$$

Note the assumption that when a TAC is set in year y for year y+1, indices will not at that time yet be available for the current year y.

#### Slope based (s)

The basic harvest control rule (HCR) is:

$$TAC_{y+1} = TAC_y [1 + \lambda_{up/down} (s_y - X)] \quad (5)$$

where

$\lambda_{up/down}$  and  $X$  are tuning parameters,

$s_y$  is a measure of the immediate past trend in the survey-based abundance indices, computed by linearly regressing  $\ln I_{y'}^i$  vs year  $y'$  for  $y' = y - 5$  to  $y' = y - 1$ , for each of the five surveys considered, with

$$s_y = \frac{\sum_{i=1}^5 \frac{1}{(\sigma^i)^2} s_y^i}{\sum_{i=1}^5 \frac{1}{(\sigma^i)^2}} \quad (6)$$

with the standard error of the residuals of the observed compared to model-predicted logarithm of survey index  $i$  ( $\sigma^i$ ) estimated in the SCAA base case operating model.

*Combination Target and Slope based (s+t)*

For the target and slope-based combination:

- 1)  $TAC_{y+1}^{target}$  is computed from equation (1),
- 2)  $TAC_{y+1}^{slope}$  is computed from equation (5), and
- 3)  $TAC_{y+1} = (TAC_{y+1}^{target} + TAC_{y+1}^{slope})/2$

Finally, constraints on the maximum allowable annual change in TAC are applied, viz.:

$$\text{if } TAC_{y+1} > TAC_y(1 + \Delta_{up}) \text{ then } TAC_{y+1} = TAC_y(1 + \Delta_{up}) \quad (7)$$

and

$$\text{if } TAC_{y+1} < TAC_y(1 - \Delta_{down}) \text{ then } TAC_{y+1} = TAC_y(1 - \Delta_{down}) \quad (8)$$

The control parameters for the recommended adopted MP MP: CMP16.5-s+t are shown in Table 2 with a starting TAC of 16 500 t in 2018. Missing survey values are treated as missing in the calculation of the rule as in the MSE.

**Table 1.** The weights given to each survey in obtaining composite indices of abundance are proportional to the inverse squared values of the survey error standard deviations  $\sigma^i$  listed below.

Survey	$\sigma^i$
Canada Fall 2J3K	0.22
EU 3M 0-1400m	0.21
Canada Spring 3LNO	0.49
EU 3NO	0.38
Canada Fall 3LNO	0.26

**Table 2.** Control parameter values for the MPs recommended. The parameters  $\alpha$  and  $X$  were adjusted to achieve a median biomass equal to  $B_{msy}$  for the exploitable component of the resource biomass in 2037.

$TAC_{2018}$	16 500 tonnes
$\gamma$	0.15
$q$	3
$\alpha$	0.972
$\lambda_{up}$	1.00
$\lambda_{down}$	2.00
$X$	-0.0056
$\Delta_{up}$	0.10
$\Delta_{down}$	0.10





Northwest Atlantic Fisheries Organization



**Report of the NAFO Joint Commission-Scientific Council Working Group on  
Ecosystem Approach Framework to Fisheries Management (WG-EAFFM) Meeting**

16-17 August 2018  
London, United Kingdom

NAFO  
Dartmouth, Nova Scotia, Canada  
2018

## **Report of the NAFO Joint Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management (WG-EAFFM) Meeting**

16-17 August 2018  
London, United Kingdom

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## **Report of the NAFO Joint Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management (WG-EAFFM) Meeting**

16-17 August 2018  
London, United Kingdom

### **1. Opening by the co-Chairs, Andrew Kenny (EU) and Elizabethann Mencher (USA)**

The meeting was opened by the co-Chair, Elizabethann Mencher (USA), at 09:30 hours on 16 August 2018 at the North-East Atlantic Fisheries Commission (NEAFC) Secretariat in London, United Kingdom. She thanked NEAFC Secretariat for the excellent facilities, welcomed the participants, and acknowledged the presence of observers (Annex 1). Brian Healey (Scientific Council Chair) acted as co-Chair of this meeting on behalf of Andrew Kenny (EU) who could not attend the meeting.

### **2. Appointment of Rapporteur**

The NAFO Secretariat (NAFO Senior Fisheries Management and Scientific Council Coordinators) were appointed co-Rapporteurs for this meeting.

### **3. Adoption of Agenda**

The agenda previously circulated was adopted with insertion of three subitems under “*Other Business*”:

- SponGES Presentation,
- Presentation on FAO and WCMC Areas Beyond National Jurisdiction (ABNJ) Deep Seas Project,
- Update on 2018 Performance Review.

### **4. Review of Commission response to recommendations of the 2017 WG-EAFFM meeting**

It was noted that during the 2017 Annual Meeting, the delineation of the New England Seamount closure was revised based on the recommendation of this Working Group (WG). The new delineation is now reflected in the NAFO Conservation and Enforcement Measures (NCEM).

### **5. Report from the Secretariat on ongoing global processes**

#### **a. Sustainable Ocean Initiative (SOI) Global Dialogue with Regional Seas Organizations and Regional Fishery Bodies**

NAFO Executive Secretary (Fred Kingston) informed the Working Group of his participation to the recent meeting of the SOI Global Dialogue with Regional Seas Organizations and Regional Fisheries Bodies. The complete meeting report is at <https://www.cbd.int/doc/c/eeeb/91a2/8082b4619ed1d8f02673652b/soi-om-2018-01-02-en.pdf>

The following are some of the meeting highlights (COM-SC EAFFM-WP 18-03 and 18-05):

- The 2<sup>nd</sup> Meeting of the Sustainable Ocean Initiative Global Dialogue with Regional Seas Organizations and Regional Fisheries Bodies on Accelerating Progress toward the Aichi Biodiversity Targets and Sustainable Development Goals was convened by the Secretariat of the Convention on Biological Diversity in Seoul from 10 to 13 April 2018. Financial support was provided by several government agencies. The meeting was organized in collaboration with the United Nations Environment Programme (UN-EP), the Food and Agriculture Organization (FAO) of the United Nations, and many other international and regional partners.
- Participants comprised representatives of Regional Seas Organizations (RSOs), Regional Fisheries Bodies (RFBs), including Regional Fisheries Management Organizations (RFMOs), and relevant United Nations/international organizations/initiatives as well as experts from national governments and agencies, and non-governmental organizations.

- This meeting focused on the main objectives of the Sustainable Ocean Initiative (SOI) Global Dialogue, as set by its first meeting – enhancing cross sectoral collaboration among regional seas organizations and regional fisheries bodies, with a view to further strengthening their complementary roles in supporting national implementation of the Strategic Plan for Biodiversity 2011-2020 towards achieving the Aichi Biodiversity Targets and the relevant Sustainable Development Goals (SDGs).

#### **b. Biological Diversity Beyond Areas of National Jurisdiction (BBNJ)**

NAFO Executive Secretary (Fred Kingston) informed the Working Group of the ongoing processes on BBNJ (COM-SC EAFFM-WP 18-04).

To recall, in its resolution 69/292 of 19 June 2015, the General Assembly decided to develop an international legally binding instrument (ILBI) under the United Nations Convention on the Law of the Sea (UNCLOS) on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction. To that end, it decided to establish, prior to holding an intergovernmental conference, a Preparatory Committee, open to all States Members of the United Nations, members of the specialized agencies and parties to the Convention, with others invited as observers in accordance with past practice of the United Nations, to make substantive recommendations to the General Assembly on the elements of a draft text of an international legally binding instrument under the Convention.

In 2018, the Executive Secretary attended in part both the third and the fourth (and last) sessions of this Preparatory Committee. The Executive Secretary also participated as a panelist in a side event to the fourth session of the Preparatory Committee that was organized by the FAO entitled “*Exploring a new instrument through the lens of Regional Fisheries Bodies (including Regional Fisheries Management Organizations)*”. At this side event, the Executive Secretary focused on the development of NAFO’s ecosystem approach framework to fisheries management.

### **6. Presentation and discussion on Scientific Council response to Commission request for advice in 2018:**

The Commission Request pertaining to EAFFM-related topics were formulated in September 2017 during its Annual Meeting (NAFO COM Doc. 17-22). The SC Response to the Request was formulated at its June 2018 Meeting (SCS Doc. 18-19). The SC response to the EAFFM-related topics is largely based on the work of Working Group on Ecosystem Science and Assessment (WG-ESA) which met in November 2017 (SCS Doc. 17-21). Details of the SC response are contained in the two SCS documents.

#### **a. 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 (request #6 in COM. Doc. 17-22).**

Pierre Pepin, co-Chair of WG-ESA, presented the SC response pertaining to this request (see SCS Doc. 18-19, pp. 39-40). The Working Group was informed that SC considered an overview of all analysis conducted on this subject since the request was first raised during its 2015 meeting.

In 2016, SC (SCS Doc. 16-21) conducted an analysis of the spatial overlap of significant catches of VME indicator species in survey trawls from: (i) NAFO closed areas, (ii) areas inside the VME polygons, but outside closed areas, (iii) areas outside of closures and outside VME polygons. It was found that the vast majority of significant catches of VME indicator species - and the highest rate of such catches - occur in the areas covered by current closures.

In both 2016 and 2017, SC reviewed the consequences of excluding survey tows within the current closures to evaluate impacts on biomass indices for stocks assessed by SC. The results show minimal impact on estimates of survey biomass and trends for all the assessed species with the exception of roughhead grenadier and Greenland halibut. For these species the difference in biomass indices (with and without hauls in closed areas) is more noticeable, but the trends were similar to the original index.

Furthermore, an analysis of the length and age-disaggregated survey indices for these species was conducted for the Canadian survey data, and the results were indistinguishable. It was concluded that the impact of excluding the closed areas from future Canadian surveys would enhance protection of VME while not compromising the ability to determine stock status of NAFO-managed resources.

SC reiterates its recommendation in 2017 that scientific bottom trawl surveys in existing closed areas be avoided if possible and additional work be conducted as soon as possible to further evaluate the implications of excluding RV surveys in closed areas on stock assessment metrics.

SC noted that trawl survey data have been used both for the provision of fish stock abundance indices and for identification of Vulnerable Marine Ecosystems (VME). In order to continue monitoring of VME and fish stocks in closed areas, it will be necessary for Contracting Parties (CPs) to consider plans for the deployment of non-destructive surveying methods (e.g. camera surveys).

The Working Group discussed alternative surveying methods and noted that a period of comparative surveying will be required to ensure calibration between the new and old methods. Some CPs also noted that the scientific trawl studies were helpful in identifying areas with VME indicator species.

A recommendation of the Working Group in relation to this agenda item is given in Section 9 of this report.

**b. Guidance on the implementation of an ecosystem approach and application of the Ecosystem Approach to Fisheries (EAF) Road Map, through examples of how advice compares to single species stock assessment, including additional factors to be considered and integrating trophic level interactions and climate change predictions (request #9 in COM Doc. 17-22).**

Pierre Pepin, co-Chair of WG-ESA, presented the SC response pertaining to this request (see SCS Doc. 18-19, pp. 41-51).

On the implementation of an ecosystem approach and application of the EAF Road Map, SC produced example ecosystem-level advice for 3LNO Grand Bank Ecosystem Production Unit (EPU). The ecosystem-level advice provides synoptic overview of both ecological features and management measures at the level of each EPU, i.e. Flemish Cap, Grand Banks and Newfoundland Shelf. The concept of Total Catch Ceiling (TCC), first introduced to WG-EAFFM in 2015 (see FC-SC Doc. 15-03), was presented and discussed.

The Ecosystem Summary Sheets (ESS) reports on each of the major EPU. Summaries consist of two element groups: 1) measures of state (oceanographic, production, ecological features) and species interactions within each EPU; and, 2) relationship of the state variables relative to management framework and objectives. The ESSs are provided with the general principles of the new Convention of long-term sustainability of fisheries resources, best scientific advice, precautionary approach, etc., in mind. ESS should be carried at medium-term intervals (3-5 years). Annex 3 provides an example of an ecosystem-level advice and the accompanying ESS and narrative on ecological features and management measures. It was emphasized by SC that it is not an actual advice but an illustration of how the SC advice would look like.

Some comments and discussion points that arose from the presentation are presented below and they are not necessarily the consensus among the scientists and managers:

- Given the complications of ecosystems, the ESSs are helpful as it gives a balance of simplification and important information.
- The ESS is appropriate to provide overview. No missing or redundant elements were identified. Many participants noted that available manpower and expertise was a factor, and there was no consensus on completing the ESS for other EPUs.
- The challenge of translating the advice into practical management measures was noted. For example, if the TCC (as an indicator or limit) is reached or productivity is declining, there would be an impact on the TAC of each of the managed stocks (as listed in Annex I.A in the NCEM) that could require a management action. In addition, it was noted there were other specific challenges related to multispecies management including possible implications for existing allocations, considerations of highly migratory species, implications for species managed by other RFMOs and others.
- Participants discussed that there could be a range of uses for the TCC and associated ESSs, including as tool to warn managers of long-term declines in stock and ecosystem health.

- Caution must be exercised in the use of terms, e.g. ceilings, limits, and overfishing etc. For example, “overfishing” in the context of single stock assessment is understood to have a specific meaning in relation to exceeding Maximum Sustainable Yield.
- The Working Group will have to meet via Web-Ex before the scheduled WG-ESA meeting in November, to resolve the issue of terminologies. The co-Chair of WG-ESA invited managers to attend the November WG-ESA meeting to assist in the validation of models used in the formulation of ESS.
- Some CPs indicated that the concept of TCC must be revisited.
- The Working Group noted the need to think carefully about next steps and specifically how this information could potentially be used. The Commission must reflect on what direction it needs to take and provide specific and concrete advice to inform the work of the SC. It was suggested that this could be discussed at the upcoming Commission-SC session at the Annual Meeting in September.

The presiding co-Chair, Elizabethann Mencher (USA), summed up the discussions: There needs to be consensus on terminology, and the process of the provision of advice needs to be fine-tuned before the Commission can decide how to handle the ecosystem-level advice. In moving forward, the Working Group made some recommendations in relation to this agenda item and they are presented in Section 9 of this report.

## 7. Discussion of ongoing matters:

### a. Progress towards the 2021 re-assessment of the impacts of NAFO bottom fisheries (request #10 in COM. Doc. 17-22).

Pierre Pepin, co-Chair of WG-ESA presented the SC response pertaining to this request which comprises four components (see SCS Doc. 18-19, pp. 52-54):

#### i. *Assessment of the overlap of NAFO fisheries with VME.*

SC made further progress in assessing the overlap of NAFO fisheries with VME through an analysis of haul-by-haul log-book data in combination with VMS data. Such analysis significantly improves the spatial definition of specific fishing areas within the NAFO footprint. SC recommends: the dimensions of the door spread of fishing gear is required for the estimation of swept area calculations, and this should be added to Annex II.M, 1B standardized observer report template for trawl gear information.

#### ii. *Objective weighing criteria for the assessment of Significant adverse impact (SAI).*

Objective ranking processes and weighting criteria for the overall assessment of SAI can only be completed once work towards advancing the assessment of all six of the FAO criteria for the next reassessment has concluded.

#### iii. *Maintaining efforts to assess the six FAO criteria (Article 18 of the FAO International Guidelines for the Management of Deep Sea Fisheries in the High Seas).*

SC made progress in developing models and methodological approaches which assess the functional significance of VMEs and the estimation of recovery rates of different VME indicator species. In addressing criteria IV, SC continues to develop and refine methodological approaches that can provide an estimate of the rates of VME recovery and resilience. SC has initiated a biological traits analysis to help determine the functional significance of VMEs that will help to address FAO criteria V.

#### iv. *Continuation of work on non-sponge and non-coral VMEs (for example bryozoans and sea squirts).*

SC updated analysis (including new data) on non-coral and non-sponge VME indicator species and further work is planned on defining non-coral and non-sponge VMEs ahead of the re-assessment of VME fishery closures in 2020.

The Working Group endorsed that the SC and WG-ESA advance the work on the FAO six criteria and further noted that NAFO's significant advancements in this work would be of use to other Regional Fisheries Management Organizations (RFMOs). A recommendation of the Working Group in relation to this agenda item is given in Section 9 of this report.

Regarding the fishing gear recommendation by SC to collect and report additional information trawl door spread to assist in the implementation of the six FAO criteria, the SC Chair will consult with the Secretariat and the STACTIC Chair to determine what information on door spread is currently being collected, and if that information is being digitized, and is available to the SC. This information will be collated in advance of the 2018 Annual Meeting, informing the way forward with respect to the SC recommendation regarding the 2021 reassessment process of NAFO bottom fisheries.

#### **b. Review of area closures, including area #14 (NAFO CEM Article 17.3.b)**

According to Article 17.3.b of the NCEM, Area 14, an area with significant concentrations of sea pens, is closed to bottom fishing activities until 31 December 2018.

To help inform the Commission in deciding on management measures after 2018, SC conducted an updated analysis with additional sea pen biomass records (2014-2017). SC concludes that there is very little change in the overall distribution of sea pen VME found on the eastern area of the Flemish Cap (see SCS Doc. 18-10, pp. 86-87).

There was no clear consensus within the Working Group regarding the status of Area 14 closure beyond December 31, 2018. Some members of the Working Group suggested extending the closure through 2020 to align with the other NAFO closed areas and reflecting the precautionary approach. Several Contracting Parties (CPs) noted the need for additional information from the SC on the status on the resilience of sea pens, as part of the Article 18 criteria of the FAO Guidelines for the Management of Deep Sea Fisheries in the High Seas. There was a number of divergent views offered by CPs including continuing the closure, suspending the closure until the 2020 review, and discontinuing it. Several CPs noted the need to consult further internally on this issue. It was agreed that Area 14 would be included in the 2020 closure review.

The Working Group was unable to come to consensus on the status of the Area 14 closure, and as such, it will require a decision from the Commission at its September 2018 meeting. A recommendation of the Working Group in relation to this agenda item is given in Section 9 of this report.

### **8. Other Business**

#### **a. Adoption of FAO 3-alpha codes for VME indicator species**

The NAFO Commission Ad Hoc Working Group to Reflect on the Rules Governing Bycatches, Discards and Selectivity in the NAFO Regulatory Area (WG-BDS) met in May 2018 and recommended that the Secretariat, in conjunction with STACTIC and WG-EAFFM, develop tools to cross-reference the relevant FAO 3-alpha code with the VME indicator species, set out in Annex I.E of the NCEM to facilitate their inclusion in observer and haul by haul catch reports.

The Working Group reviewed the VME species lists in Annex I.E of the NCEM and in the *Coral, Sponge, and Other Vulnerable Marine Ecosystem Indicator Identification Guide, NAFO Area* (ID Guide). It was noticed that 3-letter FAO alpha codes of the species, which would facilitate the catch reporting of the VME indicator species, are not indicated in NCEM or in the ID Guide.

Recommendations of the Working Group in relation to this agenda item is given in Section 9 of this report.

#### **b. SponGES Presentation**

A presentation was given by Dr. Ellen Kenchington on the EU Horizon 2020 Framework project SponGES. The project is funded under the Blue Growth call “*Improving the preservation and sustainable exploitation of Atlantic marine ecosystems*” and has brought together more than 20 institutions in a partnership to undertake research on deep-sea sponges and sponge grounds. SponGES is linked to the Galway Statement, a research alliance between the EU, USA and Canada, and the project coordinators are Prof. Hans Tore Rapp (Norway), Prof. Shirley Pomponi (USA) and Dr. Ellen Kenchington (Canada), reflecting this agreement.

SponGES covers a wide range of research topics aimed at gaining new knowledge on the basic biology and ecology of these organisms, improving innovation and predictive capacity, developing tools for conservation and exploitation, and translating the science to managers and policy makers through annual meetings such as this Working Group. The presentation focused on the new research being done which will inform management

decisions in NAFO. Major research efforts that are expected to be available through peer reviewed publications prior to the 2020 review of the closed areas are: biodiversity, connectivity (informed by new knowledge on the reproduction and genetics of key species and the oceanographic settings of the sponge grounds), fish associations, habitat modelling, and the ecosystem functioning of sponge grounds. The latter includes in situ and laboratory experiments on the utilization of nutrients (Si, N, P) and dissolved and particulate organic carbon by sponges, their respiration and filtration rates. These results will be used to estimate the significant adverse impact of fishing in the NRA. Further, work is being undertaken to look at the impacts of longline and trawl fishing on the removal of sponges according to their shape and size (morphotype), and of the recovery of areas known to have been trawled at a certain time. Experiments exposing the sponges to sediments as well as to temperatures and pH associated with climate change will help to assess the impact of these stressors on the sponge grounds.

The presentation also highlighted SponGES research in the fields of blue growth, particularly in the areas of marine-derived chemicals with pharmaceutical applications and in bone tissue engineering and regenerative medicine. Recent capacity building workshops for sponge identification were outlined and the supporting pamphlets produced by FAO (and their download links) which provide an overview of the project were presented to the group. A number of questions were raised concerning the research and the Working Group expressed their appreciation for the presentation and were pleased to see how the work was integrating well with the work of WG-ESA and well-timed to assist with management decisions.

### **c. Presentation on FAO and WCMC Areas Beyond National Jurisdiction (ABNJ) Deep Seas Project**

William Emerson, Project Coordinator of the FAO Common Oceans Deep Seas Project, informed the Working Group about the ABNJ project.

FAO and the United Nations Programme Environment World Conservation Monitoring Centre (WCMC) provided an overview of the ABNJ Deep Seas Project (<http://www.fao.org/in-action/commonoceans/projects/deep-seas-biodiversity/en/>) and activities related to the Project. The Deep Seas Project is a 5-year GEF funded project. The project's aim is to *"enhance sustainability in the use of deep-sea living resources and biodiversity conservation in the ABNJ through the systematic application of an ecosystem approach"*.

This project focuses on four areas:

1. Improving implementation of policy and legal frameworks for sustainable fisheries and biodiversity conservation of deep seas in the ABNJ (FAO)
2. Reducing adverse impacts on VMEs and enhanced conservation and management components of EBSAs (FAO)
3. Improving planning and adaptive management for deep sea fisheries in ABNJ (FAO)
4. Developing and testing of a methodology for area-based planning (WCMC)

FAO and WCMC also introduced the side events they will host at the BBNJ meeting in New York. These include:

- Deep seas sponges and other biodiversity in the ABNJ: advances in research and information and implications for management (FAO)
- 10 years of the FAO Deep Seas Fishers Guidelines (FAO)
- Area based planning tools (WCMC)

### **d. Update on 2018 Performance Review**

NAFO Executive Secretary (Fred Kingston) informed the Working Group that the 2018 Performance Review has concluded. The Review Panel will present its report to the Commission at the September 2018 NAFO Annual Meeting in Tallinn, Estonia.



## 9. Recommendations to forward to the Commission and Scientific Council

The WG-EAFFM recommends that:

- In relation to the evaluation of impact of scientific trawl surveys on VMEs in closed areas, Contracting Parties consider possible options for non-destructive regular monitoring within closed areas, bearing in mind cost implications and the utility of data collected for provision of advice.
- In relation to implementation of the Ecosystem Approach Roadmap, WG-EAFFM continue to make progress on the Ecosystem Approach Roadmap, acknowledging the general concepts of Ecosystem Production Potential (EPP) as a useful step towards implementation of EAFFM.

The Scientific Council continue to refine its work under the ecosystem approach road map, including testing the reliability of the ecosystem production potential model and other related models, and to report on these results to the WG-EAFFM to further develop how it may apply to management decisions.

WG-EAFFM work to reconsider the terminology used in the Ecosystem Summary Sheets in order to avoid potential confusion with standard terminology in fisheries management, as well as considering their potential ability to inform management decisions.

- In relation to the area #14, the Scientific Council include it in its review of closed areas in 2020, irrespective of the decision on continuing or not this closure after 2018, which remains to be considered by the Commission.
- In relation to the assessment of significant adverse impacts (SAI), SC maintain efforts to assess all of the six FAO criteria, including the three FAO functional SAI criteria (Article 18 of the FAO international Guidelines for the management of deep-sea fisheries in the High Seas) which could not be evaluated in the current assessment.
- In relation to FAO three letter codes for VME indicator species, the existing taxa list in Annex I.E. Part VI of the NCEM be updated with the FAO ASFIS codes as listed in Annex 4 of this report.

The Scientific Council review the proposed revisions to Annex I.E. Part VI as reflected in COM-SC EAFFM-WP 18-01, and to compare the consistency of the list of taxa in that Annex to the VME species guide with a view to recommend updates, as necessary.

The Secretariat to work with the FAO to develop new ASFIS codes, as necessary, for those taxa listed in Annex 1.E Part VI.

## 10. Adoption of Report

The report was adopted via correspondence.

## 11. Adjournment

The meeting was adjourned at 12:00 hours on 17 August 2018.

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Report of the COM-SC WG-EAFFM,  
16-17 August 2018

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## **Annex 2. Agenda**

1. Opening by the co-Chairs, Andrew Kenny (EU) and Elizabethann Mencher (USA)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Review of Commission response to recommendations of the 2017 WG-EAFFM meeting
5. Report from the Secretariat on ongoing global processes
  - a. Sustainable Ocean Initiative (SOI) Global Dialogue with Regional Seas Organizations and Regional Fishery Bodies
  - b. Biological Diversity Beyond Areas of National Jurisdiction (BBNJ)
6. Presentation and discussion on Scientific Council response to Commission request for advice in 2018:
  - a. 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 (request #6 in COM. Doc. 17-22).
  - b. Guidance on the implementation of an ecosystem approach and application of the Ecosystem Approach to Fisheries (EAF) Road Map, through examples of how advice compares to single species stock assessment, including additional factors to be considered and integrating trophic level interactions and climate change predictions (request #9 in COM Doc. 17-22).
7. Discussion of ongoing matters:
  - a. Progress towards the 2021 re-assessment of the impacts of NAFO bottom fisheries (request #10 in COM. Doc. 17-22).
  - b. Review of area closures, including area #14 (NAFO CEM Article 17.3.b)
8. Other Business
  - a. Adoption of FAO three letter codes for VME indicator species
  - b. SponGES Presentation
  - c. Presentation on FAO and WCMC Areas Beyond National Jurisdiction (ABNJ) Deep Seas Project
  - d. Update on 2018 Performance Review
9. Recommendations to forward to the Commission and Scientific Council
10. Adoption of Report
11. Adjournment

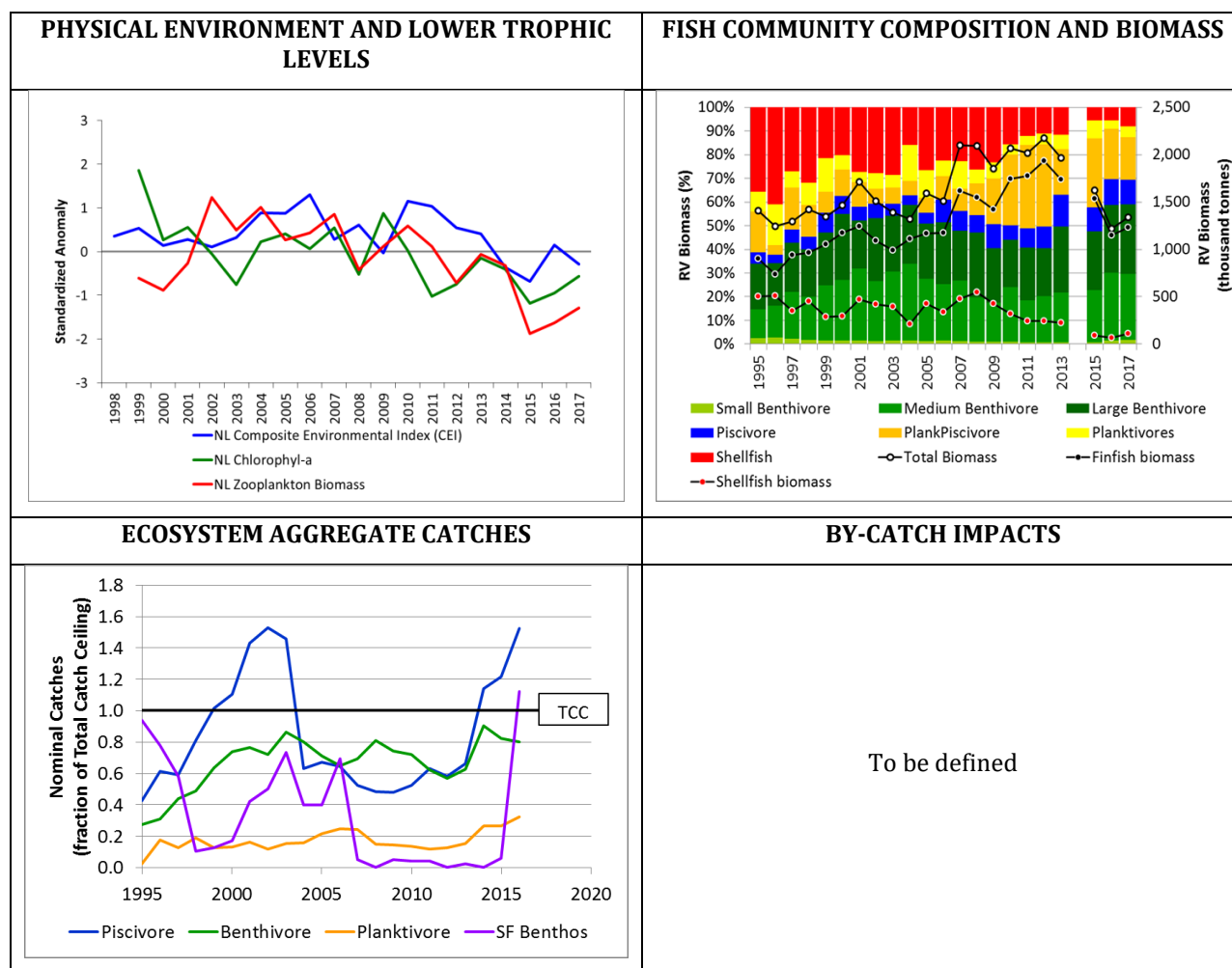
### Annex 3. Ecosystem-level advice on The Grand Bank (3LNO) Ecosystem Production Unit: An Example

*Example recommendation:* The Grand Bank (3LNO) EPU is currently experiencing low productivity conditions and biomass declines across multiple trophic levels and stocks. Although reduced productivity appears to be driven by bottom-up processes, current aggregate catches for piscivore species have been increasing and exceeding the guideline level for ecosystem sustainability. Reductions in piscivore catch levels are recommended.

ECOLOGICAL FEATURES					
Convention Principle					Comment
a	Ecosystem status and trends (long-term sustainability)		S	T	Summary of state (S) and trend (T)
	1	Physical Environment			No clear 5-yr trend but notable 10-yr cooling trend
	2	Primary Productivity			Reduced nutrients, phytoplankton standing stocks and productivity.
	3	Secondary Productivity			Reduced total zooplankton biomass, with increased abundance of small-sized taxa.
	4	Fish productivity			Declines in total, finfish, and shellfish biomass across all functional feeding groups since 2013-14. Overall biomass below pre-collapse levels.
	5	Community composition			Shellfish has declined in dominance, but piscivores have yet to regain their pre-collapse dominance.
b	Ecosystem productivity level and functioning				Summary of state (S) and trend (T)
	1	Current Fisheries Production Potential			Total biomass further declined from 50% to ~30% of the estimated pre-collapse level.
	2	Status of key forage components			Reduced levels of capelin, sandlance, arctic cod, and shrimp.
	3	Signals of food web disruption			Diet composition variable of key predators (cod and turbot), declining trend in stomach content weights.
e	State of biological diversity				Summary of indicators
	1	Status of VMEs			Metrics to quantify VME state and change of state in recent period need to be developed.
	2	Species depletion			Proportion of depleted species (<20% of maximum) based on survey indices. Work in development.
MANAGEMENT MEASURES					
Convention Principle					Comment
c/d	Precautionary Aspects		S	T	Summary of metrics on level of management action
	1	Total Catch Ceilings (TCC) and catches			Indications of ecosystem overfishing. Piscivores catches have been exceeding their TCC; suspension-feeding benthos exceed it in 2016.
	2	Multispecies and/or environmental interactions			No explicit consideration of species interactions and/or environmental drivers.
	3	Production potential of single species			Only 60% of managed stocks are supporting fisheries; some stocks have declining abundance trends.
d/e	Minimize harmful impacts of fishing on ecosystems				Summary of metrics on level of management action

	1	Level of protection of VMEs			Some VMEs without protection. Protection has improved. Fishing does not intrude in closed areas.
	2	Level of protection of exploited species			Total Catch Ceilings have been developed; 70% of managed stocks have LRPs or HCRs, but some stocks only have survey-based LRPs; No multispecies assessment are in place.
d/f		<b>Assess significance of incidental mortality in fishing operations</b>			<b>Summary of metrics on level of management action</b>
	1	By-catch level across fisheries			Integrative indicators/analyses need to be developed.
	2	By-catch of depleted species			Integrative indicators/analyses need to be developed for non-target taxa. This should include listed species.
<b>CONSIDERATIONS OF SPECIAL CONCERN (outside mandate of NAFO Convention)</b>					
		<b>Human Activities other than fisheries</b>			<b>Comment</b>
	1	Oil and gas activities			There are four offshore production fields on the Grand Bank and intense exploration activities along the eastern shelf break and Flemish Pass.
	2	Pollution			...
	3	...			...

Figure. Upper left-hand panel shows anomalies of the standardized composite environmental index (blue), composite index of chlorophyll *a* abundance (green) and the composite index of zooplankton biomass (red). Upper-right panel shows the relative composition of the fish and shellfish community functional feeding groups derived from research vessel trawl surveys (colour bars – referenced to the left axis with the legend at the bottom) and the total, finfish and shellfish biomass (referenced to the right axis). Lower left-hand panel shows the nominal total catch of functional groups (estimated from STATLANT21A data) scaled relative to the Ecosystem Production Potential model-derived Total Catch Ceilings estimates disaggregated for each functional group. The content of the lower-right panel has yet to be determined.



### 3LNO EXAMPLE Ecosystem Status Narrative

#### ECOLOGICAL FEATURES

##### Ecosystem Status and Trends

The last 5 years have been characterized by reduced levels of nutrients, phytoplankton standing stock and primary production, and total zooplankton biomass. Reduction in zooplankton biomass has been accompanied with changes in the composition of the zooplankton community, with small-sized taxa having significantly increased in abundance while the larger, lipid-rich taxa have declined. Since 2013, total fish biomass has lost the gains built-up since the mid-1990s. Fishes have increased their dominance in the community at the expense of shellfish, but the piscivore functional group has not regained its pre-collapse dominance.

##### Ecosystem productivity level and functioning

The Grand Bank is experiencing low productivity conditions. After the regime shift in the late 1980s and early 1990s, this ecosystem never regained its pre-collapse level. Improved conditions between the mid-2000s and early 2010s allowed a build-up of total biomass up to ~50% the pre-collapse level. This productivity was associated to good environmental conditions for groundfish, and modest increases in forage species (capelin). Since 2013, forage species have declined, and a reduction in total biomass to ~30% of pre-collapse levels has occurred across all fish functional groups. Although variable, diet composition of cod suggests reduced contributions of forage species, and average stomach content weights of cod and Greenland halibut have shown declines, suggesting poor foraging conditions.



**State of biological diversity**

Biological diversity is a multi-faceted concept. Out of its many dimensions, assessment of its state is being limited to Vulnerable Marine Ecosystems (VMEs) and the number of fish species considered depleted. Although identification and delineation of VMEs is being done, it is difficult to assess their status given the absence of a defined baseline and the unquantified impacts from historical fishing activities. Work on metrics to assess VME state and the evaluation of depleted species is ongoing, but results are not yet available.

**MANAGEMENT MEASURES****Precautionary Principles**

The NAFO Roadmap addresses sustainability of fishing at three nested levels of ecosystem organization: ecosystem, multispecies and stock levels. Catches of piscivore species have been above their Total Catch Ceiling (TCC) in the past, are currently increasing, and since 2014 are once again above their TCC, indicating overfishing at the ecosystem level. Catches for suspension feeding benthos were also above their TCC in 2016. Only 60% of the NAFO managed stocks in the Grand Bank are in conditions of supporting fishing, and some of these stocks are showing declining trends. Impacts of species interactions and/or environmental drivers are not currently being considered in advice or management.

**Minimize harmful impacts of fishing on ecosystems**

Minimization of harmful impacts of fishing on benthic communities has been focused on the protection of VMEs. Many coral and sponge VMEs in the Grand Bank are currently protected with dedicated closures, but the 30 coral closure does not provide protection for the identified VMEs in that area. Other non-coral/sponge VMEs have been identified in the tail of the Grand Bank but remain unprotected because of difficulties in delineation of areas of high concentration at appropriate spatial scales.

At the ecosystem level, Total Catch Ceilings for this ecosystem have been developed. At the stock level, 70% of managed stocks have LRPs or HCRs, although some LRPs are based on survey indices. At this time, there are no multispecies assessments to inform on trade-offs among fisheries, and no stock-assessment explicitly considers species interactions and/or environmental factors as drivers, but there is ongoing work on these issues.

**Assess significance of incidental mortality in fishing operations**

By-catch limits and move-on measures are in place for some fisheries, but there is no integrated assessment of by-catch in fisheries operations and their potential impact at the ecosystem scale. There are no dedicated measures to quantify and manage by-catch of listed species. Additional work on these topics is required.

**OTHER CONSIDERATIONS****Human activities other than fishing**

There are four offshore oil and gas fields currently in production in the southern Grand Bank, and exploration activities are ongoing along the eastern shelf break of the Grand Bank and the Flemish Pass. Exploration activities involve seismic surveys and exploratory drilling.

**Annex 4. FAO ASFIS 3-alpha FAO codes of VME indicator species**

The following table lists the current NAFO VME Indicator Species as found in Annex I.E Part VI. Of the NAFO CEM with the available ASFIS 3-Alpha codes.

Benthic Invertebrate VME Indicator Species			
Common name of taxonomic group	Known Taxon	Family	Phylum
Large-sized sponges (SPO)			Porifera
	<i>Iophon piceum</i> (WIP)	Acarinidae	
	<i>Stelletta normani</i>	Ancorinidae	
	<i>Stelletta</i> sp. (WSX)	Ancorinidae	
	<i>Stryphnus ponderosus</i>	Ancorinidae	
	<i>Axinella</i> sp.	Axinellidae	
	<i>Phakellia</i> sp.	Axinellidae	
	<i>Esperiopsis villosa</i> (ZEW)	Esperiopsidae	
	<i>Geodia barretti</i>	Geodiidae	
	<i>Geodia macandrewii</i>	Geodiidae	
	<i>Geodia phlegraei</i>	Geodiidae	
	<i>Mycale (Mycale) lingua</i> (YHL)	Mycalidae	
	<i>Thenia muricata</i>		
	<i>Polymastia</i> spp. (ZPY)	Pachastrellidae	
	<i>Weberella bursa</i>	Polymastiidae	
	<i>Weberella</i> sp. (ZWB)	Polymastiidae	
	<i>Asconema foliatum</i> (ZBA)	Rossellidae	
	<i>Craniella cranium</i>	Tetillidae	
Stony corals (CSS) (known seamount species may not occur in abundance in the NRA)	<i>Lophelia pertusa</i> (LWS)	Caryophylliidae	Cnidaria
	<i>Solenosmilia variabilis</i> (RZT)	Caryophylliidae	
	<i>Enallopsammia rostrata</i> (FEY)	Dendrophylliidae	
	<i>Madrepora oculata</i> (MVI)	Oculinidae	
Small gorgonian corals (GGW)	<i>Anthothela grandiflora</i> (WAG)	Anthothelidae	Cnidaria
	<i>Chrysogorgia</i> sp. (FHX)	Chrysogorgiidae	
	<i>Radicipes gracilis</i> (CZN)	Chrysogorgiidae	
	<i>Metallogorgia melanotrichos</i>	Chrysogorgiidae	
	<i>Acanella arbuscula</i>	Isididae	
	<i>Acanella eburnea</i>	Isididae	
	<i>Swiftia</i> sp.	Plexauridae	
Large gorgonian corals (GGW)	<i>Narella laxa</i>	Primnoidae	Cnidaria
	<i>Acanthogorgia armata</i> (AZC)	Acanthogorgiidae	
	<i>Iridogorgia</i> sp.	Chrysogorgiidae	
	<i>Corallium bathyrrubrum</i>	Coralliidae	
	<i>Corallium bayeri</i>	Coralliidae	

	<i>Keratoisis ornata</i> (KRY)	Isididae	
	<i>Keratoisis</i> sp.	Isididae	
	<i>Lepidisis</i> spp. (QFX)	Isididae	
	<i>Paragorgia arborea</i> (BFU)	Paragorgiidae	
	<i>Paragorgia johnsoni</i> (BFV)	Paragorgiidae	
	<i>Paramuricea grandis</i>	Plexauridae	
	<i>Paramuricea placomus</i>	Plexauridae	
	<i>Paramuricea</i> spp. (PZL)	Plexauridae	
	<i>Placogorgia</i> sp.	Plexauridae	
	<i>Placogorgia terceira</i>	Plexauridae	
	<i>Calyptrophora</i> sp.	Primnoidae	
	<i>Parastenella atlantica</i>	Primnoidae	
	<i>Primnoa resedaeformis</i>		
	(QOE)	Primnoidae	
	<i>Thouarella grasshoffi</i>	Primnoidae	
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Sea pens (NTW)	<i>Anthoptilum grandiflorum</i>	Anthoptilidae	Cnidaria
	<i>Funiculina quadrangularis</i>		
	(FQI)	Funiculinidae	
	<i>Halipteris</i> cf. <i>christii</i>	Halipteridae	
	<i>Halipteris finmarchica</i> (HFM)	Halipteridae	
	<i>Halipteris</i> spp. (ZHX)	Halipteridae	
	<i>Kophobelemnon stelliferum</i>		
	(KVF)	Kophobelemnidae	
	<i>Pennatula aculeata</i> (QAC)	Pennatulidae	
	<i>Pennatula grandis</i>	Pennatulidae	
	<i>Pennatula</i> sp.	Pennatulidae	
	<i>Distichoptilum gracile</i> (WDG)	Protoptilidae	
	<i>Protoptilum</i> sp.	Protoptilidae	
	<i>Umbellula lindahli</i>	Umbellulidae	
	<i>Virgularia</i> cf. <i>mirabilis</i>	Virgulariidae	
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Tube-dwelling anemones	<i>Pachycerianthus borealis</i>	Cerianthidae	Cnidaria
	(WQB)		
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Erect bryozoans (BZN)	<i>Eucratea loricata</i> (WEL)	Eucrateidae	Bryozoa
<hr/>			
Sea lilies (Crinoids) (CWD)	<i>Trichometra cubensis</i>	Antedonidae	Echinoder
	<i>Conocrinus lofotensis</i> (WCF)	Bourgueticrinidae	mata
	<i>Gephyrocrinus grimaldii</i>	Hyocrinidae	
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Sea squirts (SSX)	<i>Boltenia ovifera</i> (WBO)	Pyuridae	Chordata
	<i>Halocynthia aurantium</i>	Pyuridae	