

Northwest Atlantic  
Fisheries Organization  
(NAFO)



Meeting Proceedings  
of the General Council and Fisheries Commission  
for 2013/2014

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## Foreword

This issue of the Proceedings contains the reports of all meetings of the General Council (GC) and Fisheries Commission (FC) including their subsidiary bodies held in the twelve months preceding the Annual Meeting in September 2014 (between 1 September 2013 and 31 August 2014). This follows a NAFO cycle of meetings starting with an Annual Meeting rather than by calendar year.

This present 2013/2014 issue is comprised of the following sections:

**Section I** (1 to 62) contains the Report of the General Council and its Subsidiary Body (STACFAD) 35th Annual Meeting, 23–27 September 2013, Halifax, Nova Scotia, Canada.

**Section II** (63 to 186) contains the Report of the Fisheries Commission and its Subsidiary Body (STACTIC) 35th Annual Meeting, 23–27 September 2013, Halifax, Nova Scotia, Canada.

**Section III** (187–206) contains the Report of the Fisheries Commission and Scientific Council Ad hoc Working Group on Catch Reporting, 3–4 February 2014, Halifax, Nova Scotia, Canada.

**Section IV** (207–236) contains the Report of the Fisheries Commission and Scientific Council Joint Working Group on Risk-Based Management Strategies, 5–7 February 2014, Halifax, Nova Scotia, Canada.

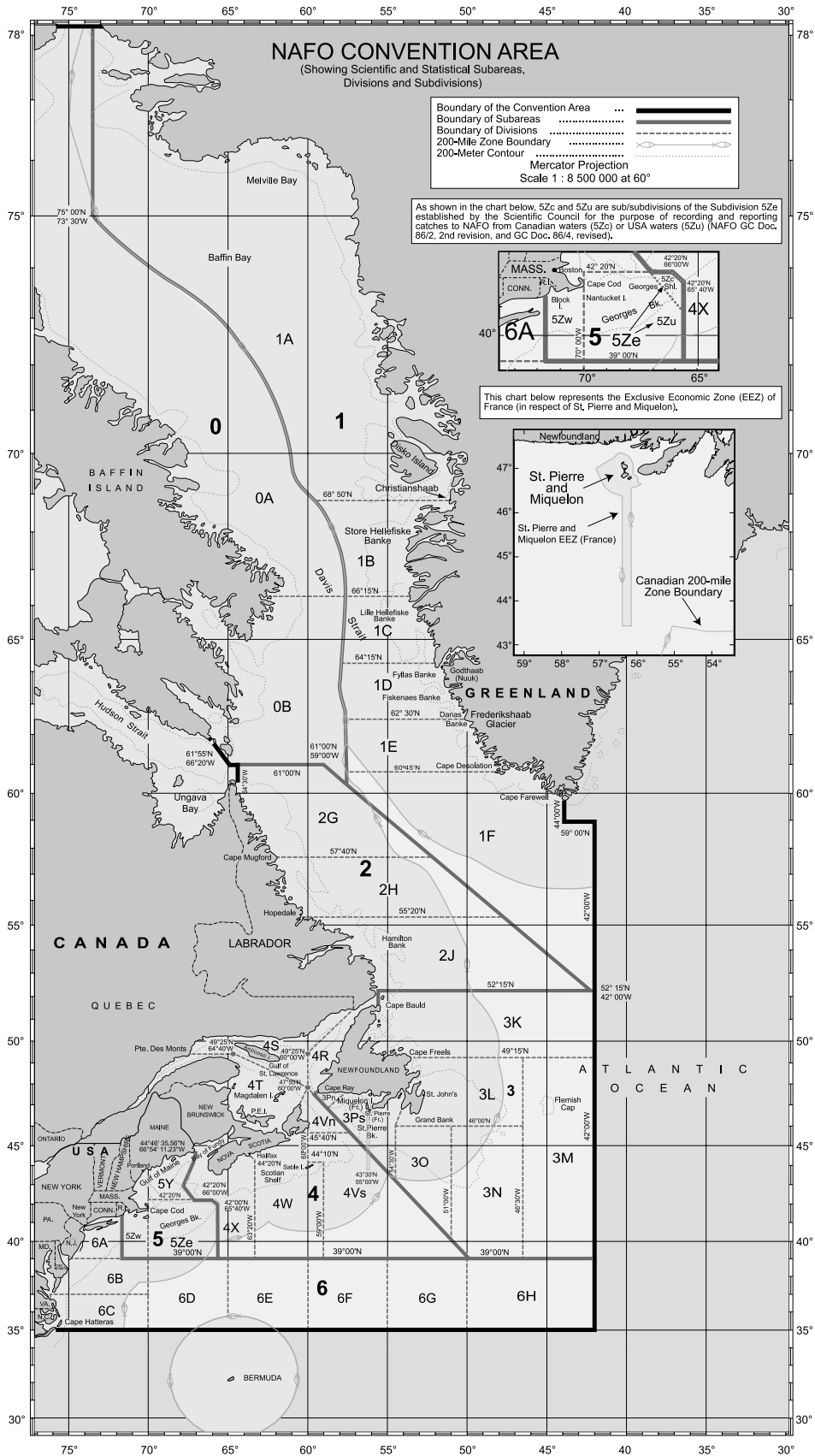
**Section V** (237–246) contains the Report of the Joint Advisory Group on Data Management (JAGDM) meeting, 18–19 March 2014, Halifax, Nova Scotia, Canada.

**Section VI** (247–272) contains the Report of the Standing Committee on International Control (STACTIC), 5–7 May, 2014, Copenhagen, Denmark.

**Section VII** (273–287) contains the Report of the Joint Advisory Group on Data Management (JAGDM) meeting, 17–18 June 2014, NEAFC Secretariat, London, UK.

**Section VIII** (289–316) contains the Report of the Fisheries Commission Ad hoc Working Group to Reflect on the Rules Governing Bycatches, Discards and Selectivity in the NAFO Regulatory Area, 7–8 July 2014, Dartmouth, Nova Scotia, Canada.

**Section IX** (317–355) contains the Report of the Fisheries Commission and Scientific Council Working Group on the Ecosystem Approach Framework to Fisheries Management, 9–11 July 2014, Halifax, Nova Scotia, Canada.



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## Structure of the Northwest Atlantic Fisheries Organization (NAFO)

(as at 01 August 2014)

### Contracting Parties

Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), European Union (EU), France (in respect of Saint-Pierre et Miquelon), Iceland, Japan, Republic of Korea, Norway, Russian Federation, Ukraine and United States of America (USA).

### President

Veronika Veits (EU)

### Constituent Bodies

General Council	Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), EU, France (in respect of Saint-Pierre et Miquelon), Iceland, Japan, Republic of Korea, Norway, Russian Federation, Ukraine and USA.	<i>Chair</i> – Veronika Veits (EU) <i>Vice-Chair</i> – Stephane Artano (France in respect of Saint-Pierre et Miquelon)
Scientific Council	Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), EU, France (in respect of Saint-Pierre et Miquelon), Iceland, Japan, Republic of Korea, Norway, Russian Federation, Ukraine and USA.	<i>Chair</i> – Don Stansbury (Canada) <i>Vice-Chair</i> – Katherine Sosebee (USA)
Fisheries Commission	Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), EU, France (in respect of Saint-Pierre et Miquelon), Iceland, Japan, Republic of Korea, Norway, Russian Federation, Ukraine and USA.	<i>Chair</i> – Sylvie Lapointe (Canada) <i>Vice-Chair</i> – Temur Tairov (Russian Federation)

### Standing Committees

General Council	Standing Committee on Finance and Administration (STACFAD)	<i>Chair</i> – Deirdre Warner-Kramer (USA) <i>Vice-Chair</i> – Elise Lavigne (Canada)
Scientific Council	Standing Committee on Fishery Science (STACFIS)	<i>Chair</i> – Brian Healey (Canada)
	Standing Committee on Research and Coordination (STACREC)	<i>Chair</i> – Katherine Sosebee (USA)
	Standing Committee on Publications (STACPUB)	<i>Chair</i> – Margaret Treble (Canada)
	Standing Committee on Fisheries Environment (STACFEN)	<i>Chair</i> – Estelle Couture (Canada)
Fisheries Commission	Standing Committee on International Control (STACTIC)	<i>Chair</i> – Gene Martin (USA) <i>Vice-Chair</i> – Aronne Spezzani (EU)

**Secretariat**

Executive Secretary	Vladimir Shibanov (to 31 Dec 2013) Fred Kingston (from 1 Jan 2014–present)
Deputy Executive Secretary / Senior Finance and Staff Administrator	Stan Goodick
Senior Fisheries Commission Coordinator	Ricardo Federizon
Scientific Council Coordinator	Neil Campbell
Administrative Assistant to the Executive Secretary	Tracey Ward (25 Mar 2013–9 Jan 2014)
Executive Assistant to the Executive Secretary	Lisa LeFort (1 Apr 2014–present)
Senior Information Officer	Barb Marshall
Senior Fisheries Information Manager	Cindy Kerr
IT Manager	Matthew Kendall
Publications Manager	Alexis Pacey
Database Manager	Mark Harley
Office Manager	Lisa LeFort (to 31 March 2014)
Office Administrator	Sarah Burton (9 Jun 2014–present)
NAFO Intern	Maria (Mariel) Elvira Murazzi (12 May–12 Aug)

**Headquarters Location**

2 Morris Drive, Suite 100, Dartmouth, Nova Scotia, Canada, B3B 1K8



**SECTION I**

(1 to 62)

**Report of the General Council and its Subsidiary Body (STACFAD)  
35<sup>th</sup> Annual Meeting,****23–27 September 2013  
Halifax, Nova Scotia, Canada****Contents**

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*Heads of Delegation – left to right; back row: Jong Hwa Bahng (Korea), Hrefna Karlsdóttir (Iceland), Dean Swanson (USA), Sigrun Holst (Norway), Stéphane Artano (SPM), Kenro Iino (Japan), Vasiliy Sokolov (Russia)*

*Front row: Nora Yong Mena (Cuba), Ulla Wang (DFG), Veronika Veits (President of NAFO and GC Chair), France Pegéot (Canada), Nicolas Dross (EU), Mads Trolle Nedergaard (DFG)*



*General Council in session*



*Vladimir Shibarov (Executive Secretary) and Veronika Veits (President of NAFO and GC Chair)*

**Part I**  
**Report of the General Council**  
(NAFO/GC Doc. 13/7)  
**35<sup>th</sup> Annual Meeting, 23–27 September 2013**  
**Halifax, NS, Canada**

**I. Opening Procedure (*Agenda items 1–6*)**

**1. Opening by the Chair**

The 35<sup>th</sup> Annual Meeting of NAFO was convened on 23 September 2013 at 1000 hrs at the Westin Hotel, Halifax, NS, Canada, with 160 delegates present from eleven NAFO Contracting Parties (Annex 1). Representatives from Ukraine were not present and no notification of intention to attend had been received. The NAFO President and GC Chair, Veronika Veits (EU) welcomed all delegates to the meeting (Annex 2).

Opening statements followed by Canada, the United States of America (USA), the European Union (EU), Norway, Cuba, Denmark (in respect of the Faroe Islands and Greenland), and Japan. (Annexes 3-9).

Opening statements were also made by the observers from the Food and Agriculture Organization of the United Nations (FAO), the World Wildlife Fund - Canada (WWF), the Ecology Action Centre (EAC) and Dalhousie University, Halifax, NS, Canada (Annexes 10-13).

**2. Appointment of Rapporteur**

Vladimir Shibanov, the NAFO Executive Secretary, was appointed as Rapporteur.

**3. Adoption of Agenda**

The Agenda was adopted as circulated (Annex 14).

**4. Admission of Observers**

In accordance with the Rules for Observers and in advance of the meeting, the Executive Secretary had formally invited the following intergovernmental organizations to attend: Food and Agricultural Organization (FAO), Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), Permanent Commission for the South Pacific (CPPS), International Commission for the Conservation of Atlantic Tunas (ICCAT), International Council for the Exploration of the Sea (ICES), 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 Marine Science Organization (PICES) and, South East Atlantic Fisheries Organisation (SEAFO).

During the 35<sup>th</sup> Annual Meeting NPAFC, NEAFC and SEAFO were represented by various Contracting Parties already attending the meeting. A representative from FAO was also present.

Furthermore, NGOs which had been granted accredited observer status were also present: the World Wildlife Fund (WWF), the Ecology Action Centre (EAC) and Dalhousie University.

**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 General Council, Fisheries Commission and Scientific Council.

**6. Guidance to STACFAD necessary for them to complete their work (Monday)**

With regard to the NAFO budget STACFAD was advised to consider financial situations of Contracting Parties without, however, compromising the services to the organization.

STACFAD was also requested to discuss amendments to the NAFO Financial Regulations to allow for external funding for NAFO Projects (e.g. NEREIDA) and current status of NEREIDA applications, and to resolve the outstanding issue of observer participation.



## **II. Supervision and Coordination of the Organizational, Administrative and other Internal Affairs (*Agenda Items 7–13*)**

### **7. Review of membership of the General Council and Fisheries Commission**

The membership has not changed since 2008. However, only eleven NAFO Contracting Parties were present at this meeting: Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), EU, France (in respect of Saint-Pierre and Miquelon), Iceland, Japan, Republic of Korea, Norway, the Russian Federation, and the USA. Ukraine was not present.

### **8. Status of Ratification process resulting from the adoption of the amended Convention and presentation of progress reports**

To date Norway, Canada, EU, Cuba and Russian Federation have completed the ratification process. The General Council Chair had requested, in advance of the Annual meeting, other Contracting Parties to report on the progress of ratification in their respective governments. Several indicated they were in the process of ratification. Noting that the Amended Convention had been adopted in 2007, Contracting Parties were encouraged to continue with the ratification process in their respective governments as soon as possible.

### **9. Status of the NAFO Headquarters Agreement**

Canada reported that once the final judgment is rendered on the court cases, the Government of Canada will examine if and how the decisions may impact the preparation of the new Headquarters Agreement and will inform NAFO of next steps.

### **10. Report of the GC WG on Development of Plans of Action for the Implementation of Recommendations of the NAFO Performance Review Panel and adoption of the Plan of Action (PAR)**

In 2012, it was agreed that the Secretariat would compile all feedback into a single document for circulation to Contracting Parties. The Secretariat presented a document (GC Doc. 13/2) and had set up a database that compiled all the actions related to the PAR (<http://www.nafo.int/about/activities/pr/status.html>). This document shows that implementation of the PAR was progressing well and that many actions had already been completed or were ongoing. It was agreed that such regular review of progress was a good way forward and the Chair noted that discussions and updates for the recommendations and implementations would take place annually in the respective meetings of subsidiary bodies and Committees.

### **11. Progress Report on Peer Review Expert Panel of the method of catch estimation on NAFO Stocks by STACFIS and Next Steps**

Following last year's interim report of the expert panel on the catch estimation process used by Scientific Council, the independent expert panel (Bruce Atkinson (CAN), Mike Sissenwine (USA) and Christoph Stransky (EU/DEU)) had continued their work and completed their review, based on further documentation produced by the constituent bodies of NAFO and the Secretariat. The report of the Expert Panel (GC Doc. 13/4) was presented by the Chair, Bruce Atkinson, followed by some clarifications.

The General Council Chair noted that although the report was being presented during the General Council Plenary, the substantive discussions would occur during the joint Fisheries Commission/Scientific Council meeting taking place during the week. Dr. Atkinson would be in attendance at this meeting.

At the closing session it was noted that significant progress had been made on the issue of catch discrepancy in the different NAFO bodies, in particular by adopting data sharing measures allowing Scientific Council access to catch data for cross checking with VMS data, improved reporting by observers and by deciding on the way forward regarding the standard conversion factors. As follow-up a joint *ad hoc* working group of Fisheries Commission and Scientific Council had been established to continue to discuss ways to improve catch reporting and consideration of the report and recommendations of the panel. Also STACTIC would continue to look into ways to improve the accuracy of catch reports. With that perspective, it was agreed there was no need to continue with the Peer Review Expert Panel as the Panel's work had been successfully concluded and NAFO was moving forward.

## 12. Administrative Report

The Executive Secretary presented the Administrative and Financial Report (GC Doc. 13/1) and gave an overview of the report to the meeting. The document was approved by Contracting Parties.

## 13. Selection of NAFO Executive Secretary for the 2014-2017 term

Heads of Delegation met on Sunday, 22 September, 2013 for the selection interviews and Monday, 23 September, 2013 for the vote on the candidates. Mr Fred Kingston was offered the position of Executive Secretary and had accepted the position beginning 1 January 2014. It was agreed that yearly performance objectives for the Executive Secretary would be developed and his performance would be assessed by the FC, SC and GC Chairs. Delegations congratulated Mr. Kingston on his appointment and looked forward to working with him in the future.

## III. Coordination of External Affairs (*Agenda items 14–15*)

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

Since the last Annual Meeting, the Executive Secretary was involved in and reported on the following external activities:

- NEAFC Advisory Group on Data Communications (AGDC) (January 2013) - NAFO received an invitation to co-establish an ad hoc joint NEAFC/NAFO Working Group on AGDC which mandate was to evaluate the possibility of making AGDC, currently a NEAFC body, a joint body of NEAFC and NAFO. The report and recommendations were presented to the STACTIC intersessional and Fisheries Commission for approval.
- International Fisheries Commission Pension Society (IFCPS) (April 2013)
- UN Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (August 2013) in observer capacity. While at the UN the Executive Secretary also attended an information session on the Areas Beyond National Jurisdiction (ABNJ) Program initiated by FAO.

As well other members of the Secretariat actively participated in V-Track Users Group (system used for monitoring the VMS), Coordinating Working Party on Fisheries Statistics (CWP), Fishery Resource Monitoring System (FIRMS) Steering Committee and two other NEAFC AGDC meetings.

### 15. International Relations

#### a) Reports from Observers

At the last Annual Meeting (2012) it was agreed that NAFO Contracting Parties would observe at the following meetings in 2012-2013: EU at ICCAT; USA at CCAMLR, NPAFC and NASCO; Norway at SEAFO and NAMMCO; and Denmark (in respect of Faroe Islands and Greenland) at NEAFC. Reports by Observers were presented. It was noted by Norway that due to a change in timing for the NAMMCO meeting no meeting was held in 2013 but would instead be held in early 2014.

It was agreed that NAFO Contracting Parties would observe at the following meetings of 2013-2014: EU at ICCAT; USA at CCAMLR, NPAFC and NASCO; Norway at SEAFO and NAAMCO; and Denmark (in respect of the Faroe Islands and Greenland) at NEAFC.

#### b) NAFO collaboration in the Deep Sea ABNJ Project

Delegates had been invited to a side-event hosted by Jessica Sanders of the FAO that presented details of the Areas Beyond National Jurisdiction (ABNJ) Deep-sea Project. This presentation has been made available on the NAFO website (<http://www.nafo.int/FAO/DeepSeasProject.pdf>). NAFO has been invited by FAO to become a partner to this project and as such provide a letter of commitment by the end of the year.

Contracting Parties were generally supportive of this project and could see its value but have requested FAO to provide more information on details of the project and the type and level of support NAFO could offer. It was agreed that the NAFO Secretariat would circulate the requested information and a draft commitment letter for comments and decision before the end of the year.



#### IV. Finance (*Agenda items 16–17*)

##### 16-17. Report of STACFAD at the Annual Meeting and Adoption of the Budget and STACFAD recommendations for 2014

The report of STACFAD was presented by the Chair, Deidre Warner-Kramer (USA). The report contained the adoption of the budget for 2014, the Auditor's Report for 2012, financial matters including the development of a draft contract for the incoming Executive Secretary, personnel matters, and an update on the implementation of the Performance Review Panel recommendations.

STACFAD recommended that:

- the 2012 Auditors' Report be adopted.
- Rule 7.10 of the NAFO Financial Regulations be amended as follows (*in italics*): The Auditors shall serve for a maximum term of *five (5) years*
- 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 2014, and of which \$85,000 would be a contingency fund available to be used for unforeseen and extraordinary expenses.
- the Heads of Delegation consider the Executive Secretary draft contract.
- increased internship program participation to be encouraged from as many member countries as possible, all Contracting Parties distribute and make available information on the internship program to prospective interns.
- Rules of Procedure should clearly indicate whether accredited observers shall be permitted to attend meetings other than plenary sessions of the General Council, Fisheries Commission, and Scientific Council and that Contracting Parties continue to work on this intersessionally and be prepared to present proposals at the 2014 Annual Meeting.
- an appropriate attendance fee be established and charged for accredited observers.
- the General Council endorse the progress achieved to implement the Performance Review Panel's recommendations in the area of finance and administration.
- the General Council adopt the communications strategy as presented.
- the budget for 2014 of \$1,890,000 be adopted.
- costs associated with the home leave allowance and repatriation grant be spread over a two year period and costs associated with recruitment and relocation be spread over eight years.
- General Council appoint the three staff committee nominees – Estelle Couture (Canada), Rafael Duarte (EU) and Deidre Warner-Kramer (USA).
- the dates of the 2016 Annual Meeting (to be held in Halifax, N.S., Canada, unless an invitation to host is extended by a Contracting Party and accepted by the Organization) to be as follows: 19–23 September 2016.

All of STACFAD's recommendations were adopted by the General Council and the work and report by STACFAD and its chair commended. The budget was adopted with zero growth. A Contracting Party stressed the need for sufficient financial backing for the future to allow NAFO as an international organisation to continue its ground breaking work.

#### V. Closing Procedure (*Agenda items 19–23*)

##### 19. Election of Chair

It was proposed that Veronika Veits (EU) the present Chair of General Council continue as Chair for the next two-year term. The Chair was honored and pleased to continue in this role and looked forward to continued support and future work.

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

It was agreed that the next Annual Meeting will be held 22-26 September 2014 as previously agreed upon. The EU was pleased to invite the 36th Annual Meeting to Galicia, Spain. The exact venue will be circulated to Contracting Parties in the near future.

## **21. Other Business**

NAFO was pleased to honour Bill Brodie (Canada) on the occasion of his upcoming retirement from the Canadian Government. Bill has provided excellent service to NAFO throughout his long career including work on the Precautionary Approach which paved the way for the current rebuilding plans and for his Chairmanship of the VME Working Group. It was noted too that Bill had received the Scientific Council Merit award for his extensive involvement in the Scientific Council.

NAFO also offered it thanks and best wishes to the current Executive Secretary, Dr Vladimir Shibanov. Dr. Shibanov's longstanding involvement in NAFO was highlighted as well as his important role in improving the performance of NAFO.

## **22. Press Release**

The Press Release of the Meeting was developed by the Executive Secretary through consultations with the Chairs of General Council, Fisheries 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, 27 September.

## **23. Adjournment**

The Chair thanked everyone for their productive and constructive work throughout the week. She thanked the Secretariat for organizing the 35<sup>th</sup> Annual Meeting and the venue. She especially thanked the Executive Secretary and his team for the excellent support during the meeting and throughout the year.

The meeting was adjourned at 1005 hrs on Friday, 27 September 2013.

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## **Annex 2. Opening Speech by Veronika Veits, NAFO President and GC Chair**

Distinguished Delegates, Observers, Ladies and Gentlemen,

It is a great honour and pleasure for me to open this meeting of the Northwest Atlantic Fisheries Organisation. After a successful meeting in the historical city of St Petersburg, this year's port of call for NAFO is the familiar location of Halifax.

Let me first of all welcome you to the 35<sup>th</sup> Annual Meeting and thank the Executive Secretary and his team for their excellent preparation of this meeting.

Before I outline the key issues that are on the agenda of this year's meeting let me briefly recall the achievements of the 34<sup>th</sup> Annual Meeting. Last year NAFO continued to move forward in many areas. Without giving you a complete list, let me mention the areas of which NAFO can be particularly proud of.

First and foremost, NAFO decided to further enhance its already high performance by adopting a comprehensive action plan to follow-up on the recommendations of the performance review. Simultaneously NAFO also put the plan into motion.

NAFO also continued to strengthen its protection of vulnerable marine ecosystems (VMEs). The rules on bottom fishing were made more explicit and the list of VME indicators was duly extended. New thresholds were set for fragile organisms on the seabed, such as seapens, whilst 11 vulnerable areas of coral and sponge concentration on seamounts continued to be closed to bottom fishing. Last but not least, NAFO continued its responsible conservation policy to fisheries management by taking science based measures.

I call on all Contracting Parties to firmly continue down this path and to build on the progress achieved last year and in previous years too.

NAFO needs to continue its efforts to rebuild fish stocks. There is important rebuilding for many stocks showing that such efforts are paying off. This is encouraging but we must bear in mind that some of the 20 stocks that are managed by NAFO remain at low levels.

Faced with such a situation, NAFO has decided to move towards risk-based management to strike the right balance between the biological risk and the stability of harvest over time. At this Annual Meeting NAFO will have the opportunity to consolidate this move by adopting a general framework on risk-based management strategies and extending the development of such strategies to other stocks. We will be looking to the Scientific Council for substantial input with reinforced cooperation between Fisheries Managers and Scientists.

Two proposals for new joint Working Groups, on Risk-Based Management Strategies and on the Ecosystem Approach Framework, illustrate NAFO's wish to enhance the dialogue between Managers and Scientists and to adopt a global modern approach for fisheries management and the protection of marine biodiversity.

NAFO will also have the opportunity to reaffirm its leadership on the protection of Vulnerable Marine Ecosystems. This will essentially be done by extending the already wide network of areas closed to bottom fishing and by further developing the Roadmap for the Ecosystems Approach to Fisheries Management.

Yes, I can happily say that NAFO has been an innovation hub amongst RFMOs on control and enforcement measures in the past and has a level of compliance which can serve as an example to many. I am confident that NAFO will continue to make big strides again this year and apply the highest standards, in particular for real time monitoring of fishing activities.

I also hope that at this meeting we will see further progress in the implementation of the performance review recommendations, in particular for the issue of data discrepancy between STATLANT 21 and the Scientific Council estimates. NAFO's credibility is on the line here, since best science and efficient management decisions go hand in hand with sound and reliable data. I call on all NAFO bodies and on Contracting Parties to work closely together on this matter.

Let me conclude with a word on the ratification process for the Amended Convention. We are now in the sixth year after its adoption and ratification is still far away, despite some ratifications that are underway. This is not an acceptable situation for a major RFMO such as NAFO. It prevents NAFO from fully applying a more modern framework for the management of living resources. I would like to ask all Contracting Parties to rally round and complete their ratification procedures without delay.

Ladies and Gentlemen,

Yes, you are aware that we have a formidable agenda and a heavy work programme before us. But I am confident that Delegations will work closely together to reach agreement on all issues by Friday noon. Cooperation among Contracting Parties is key for achieving our common goals of stock recovery, conservation and sustainable use of marine living resources. I am confident that together we will manage to meet these challenges and that we will have something to show for it.



### **Annex 3. Opening Statement of the Representative of Canada**

Good morning, Madame President, distinguished delegates, observers, ladies and gentlemen.

On behalf of Canada, it is a great pleasure to offer you a warm Atlantic Canadian welcome to Halifax for the 35<sup>th</sup> Annual Meeting of the Northwest Atlantic Fisheries Organization.

It's a pleasure for the Canadian delegation to participate at this annual meeting in Halifax. I want to commend the Secretariat for selecting this venue and the excellent arrangements that have been made.

Our Atlantic communities have a rich history linked to fishing. In this context, management of our fisheries sustainably is a critical goal. We believe that NAFO has shown its capacity to achieve this goal over the past few years, based on good cooperation and a lot of hard work.

As you know, NAFO had its first independent performance review in 2011, a critical point in the history of NAFO as the panel scrutinized the Organization's performance in meeting the great demands of an effective and sustainable regional fisheries organization. The report of the performance review highlighted the significant improvements NAFO has made over the past several years and opportunities for ongoing improvement. NAFO has grown into a robust, consensus-based organization, whose governing principles have been modernized and enforcement measures re: delivered in a co-operative manner.

These improvements are highlighted by the recovery in some groundfish stocks. Contracting Parties that made sacrifices can now look forward to the possibility of re-engaging in their traditional fisheries in the foreseeable future. At the same time we need to continue to apply a conservative management approach to these stocks to ensure they continue to improve.

As some stocks recover, other stocks may adjust, due to these changes or environmental influences. We must work towards a better understanding of how the changes in moratorium stocks affect other fisheries, and update our models and fishing practices accordingly.

As indicated in the performance review, NAFO must also continue to work towards the rebuilding of depleted stocks. We have taken important steps towards this with the development of Conservation Plans and Rebuilding Strategies for 3NO cod and 3LNO American plaice, and have also begun the process for similar plans for 3LN redfish, 3M cod and 3NO witch flounder.

We must also continue the implementation of an ecosystem approach. I am pleased to see that we continue to build on the suite of measures NAFO has adopted over the past several years to manage significant adverse impacts on vulnerable marine ecosystems in the NAFO Regulatory Area. This work has only been possible with the help of the ground-breaking, multilateral deep-sea research of the NEIRIDA program.

While significant progress has been achieved, the performance review also recommended areas that require further action. NAFO has now completed its first cycle of actions to address the recommendations of the Working Group with a plan of attack, ongoing work in multiple NAFO bodies, and with the development of our first progress report. As we see in the progress report, Contracting Parties have made progress since the publication of the Performance Review in 2011. The progress report also notes several areas where action is ongoing. We must continue to act on these issues, in particular the priority areas, which include:

- o Strengthening the accuracy of catch reports, and the overall confidence in NAFO's catch monitoring system;
- o Timely and effective follow-up on infringements;
- o Strengthening the working relationship between the Fisheries Commission and the Scientific Council; and of course
- o Further development and implementation of the ecosystem and precautionary approaches.

Ensuring accurate catch reports is a complicated task that requires continual adjustments, but is without question one of the most important elements of an effective and reliable regional fisheries management organization. We look forward to the discussion of the report of the Expert Panel, and working with other Contracting Parties to consider the recommendations of the panel to ensure we maintain our momentum of strengthening our catch reporting system to minimize or eliminate the need for catch estimates.

We must also take note of the economic challenges facing all of us, and ensure that NAFO operates as effectively and efficiently as possible. Canada will be seeking zero growth in our budget, and encourage all Contracting Parties to focus our capacity on our mandate and priorities.

We must also remember the importance the performance review attached to the Amendments to the 1978 NAFO Convention. As you know, at least nine of the twelve Contracting Parties must ratify the Amendments before they can come into force. Last year Cuba and the Russian Federation announced they had completed the process of ratification, bringing the total number to 5. We must continue to push for all Contracting Parties to ratify the Amendments, and secure NAFO's evolution.

The 35<sup>th</sup> Annual Meeting of NAFO provides an opportunity to build on the progress outlined in the performance review. Let us work towards the implementation of the recommendations of the review to support NAFO's evolution, and to help ensure a positive future for our precious fisheries and oceans resources for those who rely on them. I trust we will have a successful and productive meeting. Thank you.

#### **Annex 4. Opening Statement of the Representative of the United States of America**

Mr. Chairman, distinguished delegates, observers, ladies and gentlemen:

The United States is pleased to be back in beautiful Halifax, Nova Scotia, once again for the 35<sup>th</sup> NAFO Annual Meeting. We look forward to an interesting and productive week and would like to take this opportunity to communicate our thoughts regarding the work before us.

First, we would like to express our pleasure regarding the considerable work undertaken by NAFO bodies during the 2013 intersessional period. The United States was particularly happy with the amount and caliber of work done by both the NAFO Scientific Council and the Standing Committee on International Control in addressing the recommendations of the NAFO Performance Review Panel. We very much support the recommendations of both bodies and look forward to the implementation update to be provided by the Secretariat.

We were also pleased with the efforts undertaken by the Fisheries Commission and Scientific Council Chairs to develop the draft terms of reference needed to transition the VME and CPRS Working Groups to address their expanded mandates. We look forward to finalizing these documents during this meeting and participating in the future work of these joint FC-SC working groups on Ecosystem Approach Framework to Fisheries Management and Risk-Based Management Strategies.

Regarding vulnerable marine ecosystems, the United States supports Fisheries Commission adoption of all of the pending recommendations of the VME Working Group. We would also like to highlight the outstanding work undertaken by the Scientific Council in providing the basis for these recommendations. We truly feel that NAFO is at the forefront of RFMO efforts in terms of developing a regime for protection of vulnerable marine ecosystems, and we look forward to NAFO maintaining this leading position while expanding our work to implement the ecosystem approach to fisheries management using the excellent SC roadmap. During this week, it is our hope that further discussion can take place regarding the implications of new indicator species information from the SC and the future role of encounter provisions in NAFO. We would also like to examine how to ensure future WG meetings can be scheduled to allow necessary SC input.

Everything we do should support the sustainable conservation and management of NAFO fish stocks and habitats, rebuilding those stocks that need it. The United States continues to support NAFO work that will enhance the quality of science/data produced by the Scientific Council and other sources for use in NAFO fisheries conservation and enforcement. We support the way forward suggested by the GC Chair relative to the Peer Review Panel process and would also like to look at steps that can be taken to facilitate comparison of observer, VMS, and STATLANT data to ensure consistency and accuracy of stock assessments that rely on this information.

I thank you all for your attention and look forward to working with you.

## **Annex. 5. Opening Statement of the Representative of the European Union**

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

This year has been an important year for the European Union (EU). After long discussions we have agreed on a profound reform of the EU Common Fisheries Policy. This reform fully embraces both the ecosystem and precautionary approaches, it sets the objective of fishing at MSY, and most importantly it introduces a discard ban. We are fully committed to promote the same principles we apply internally in external fora. This is in this spirit that we will pursue our discussions this week.

As for the meeting ahead, the EU would first like to commend the excellent work of the different NAFO bodies and working groups throughout the year. This has paved the way for further progress. We are looking forward to seeing the recommendations of the Working Group on Conservation Plans (CPRS) and Rebuilding Strategies and Vulnerable Marine Ecosystems (VMEs) adopted and to see the Terms of Reference of these groups enhanced. This will allow NAFO to further improve the sound and efficient management of its fisheries resources and ecosystems.

In addition, the EU will give priority to actions that promote better science and compliance. Although NAFO's control and enforcement rules are already at high standards, we believe more can still be done, in particular for the real time monitoring of catches and the improvement of the observers' reporting. This is also important for the long-standing problem of discrepancies in catch estimates. We do hope that NAFO will decide this year on effective actions to resolve this issue. Reinforced cooperation between fisheries managers and scientists will be crucial to this end.

But NAFO will also have to pave the way for important reviews in 2014, in particular the review of closures for bottom fishing and of the provisions for the protection of VMEs. We do hope that our fundamental support to the NEREIDA project on seabed mapping will allow us to have all the decisive information.

Last but not least, the EU would like to recall the importance to ratify the amended Convention so as to allow NAFO to use the new provisions as soon as possible.

Thank you for your attention.

## **Annex. 6. Opening Statement of the Representative of Norway**

Let me first thank Dr. Shibanov and his team for organizing this meeting and for providing us with excellent meeting facilities.

Over the last years NAFO has introduced new measures to preserve marine ecosystems and biodiversity in the Convention area. By giving adequate protection to VMEs, NAFO has probably made more progress in this field than any other RFMO. At this meeting we hope to adopt the proposals put forward by the working group. While making progress in this field, the NAFO fisheries are gradually becoming more sustainable. Nevertheless, several stocks are still in critical condition. For this delegation it is therefore of utmost importance that we do not deviate from the advice on quota levels given to us by the Scientific Council. We should indeed avoid repeating yesterday's mistakes. We also need to find a solution to the problem of catch reporting, so that the Scientific Council can provide us with necessary management advice. It is also decisive that we further develop the work started to get in place management and rebuilding plans for the NAFO stocks. Broad participation is a key to moving forward. Hopefully, this meeting will contribute to enhance and further develop our cooperation so that we can be in line with the objectives of the New Convention. For our part we are ready to cooperate with all parties to ensure progress in all the tasks at hand.

## **Annex. 7. Opening Statement of the Representative of Cuba**

Good morning.

Miss President,

Distinguish delegates and observers.

On behalf of the Republic of Cuba and the Cuban delegation to this 35<sup>th</sup> Annual Meeting of the Northwest Atlantic Fisheries Organization, let us express our gratitude to the Canadian authorities for the opportunity to meet again in this beautiful city of Halifax.

The Organization has made significant progress in ensuring that all together, compromises ourselves in addressing the challenges before us and we are looking forward to a constructive meeting in an understanding atmosphere.

The Amendment to the Convention on Multilateral Cooperation in the Northwest Atlantic Fisheries, constitutes the first step towards a reformed Convention for NAFO and that is why we urge the Contracting Parties to do as much as possible for the ratification of this document, as a sign of their commitment with the Organization.

This year we will again face and discuss important matters resulting from the work of General Council Working Group on the development of Plan of Action for the implementation of the recommendations of the NAFO Performance Review Panel, the Working Groups of Fisheries Managers and Scientists, on Conservation Plans, rebuilding Strategies and Vulnerable Marine Ecosystems.

During this week we will have the opportunity to analyse the situation of stocks in the Convention area, the work of the Scientific Council, the plans for the recovery of several stocks that are still under moratoria or rebuilding process and all this need the compromise of all parties to ensure that those stocks have chance to recover.

We look forward to work with all delegations to achieve the common goal that is the conservation and sustainable use of the marine resources in the Convention Area for the sake of future generations.

Thank you very much.

### **Annex. 8. Opening Statement of the Representative of Denmark (in respect of the Faroe Islands and Greenland)**

Madame Chair, distinguished Delegates, Observers, Ladies and Gentlemen.

Our delegation from the Faroe Islands and Greenland are happy to be back in Halifax and enjoy this beautiful Indian summer. The Faroe Islands and Greenland will continue to work constructively with our NAFO partners in order to facilitate the implementation of the Performance Review Report recommendations. It is in the interest of all contracting parties that this work is carried out as soon as possible as the outcome will entail a more up-to-date and effective NAFO in all aspects of the organization's operations.

The shrimp stock at Flemish Cap has been under moratorium since 2011 and shows no sign of recovery. Furthermore the shrimp stock at Grand Bank is declining and we just received the scientific advice that there should be no direct fishery for 3L shrimp, which we consider a drastic step. We hope to find a solution with a reduction in order for the industry to adapt to reduced fishing possibilities. On the other hand we note with satisfaction that the cod stock in Division 3M continue to exhibit biomass improvements. However, the improvement of this stock may to some extent be at the expense of the declining shrimp stocks as cod prey on these stocks. Madame Chair, our delegation would like to take this opportunity to convey our sincere appreciation and warm thanks to the Secretariat for once again having prepared this annual meeting so well.

Finally Madame Chair, the Faroe Islands and Greenland can assure you that we are looking forward to work constructively with all delegations in the week ahead of us to bring the many issues on our agenda to successful conclusion.

Thank you.

## **Annex. 9. Opening Statement of the Representative of Japan**

Madam Chair, 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 35<sup>th</sup> Annual meeting of NAFO in beautiful Halifax and also thank the NAFO Secretariat for excellent arrangements of this meeting.

Recommended by the performance review, NAFO has been struggling to resolve the discrepancies between STATLANT fishing data and STACFIS data in recent years. In this Annual meeting, I hope NAFO will advance to the next steps with progress report by Peer Review Expert Panel. This solution is absolutely essential and great contribution to the fish stocks assessment in NAFO Convention area. Japan strongly support this solution and spare no effort to do.

NAFO also made a great progress in conservation of ecosystem. Last Annual meeting, we revised the values of encounter thresholds of VMEs and added the new VMEs indicators. In this Annual meeting, we will discuss and consider a lot of recommendations and suggestions by WGFMS-VME and SC. Ecosystem approach is one of the most important issues in NAFO and we need to take into consideration of precautionary approach, but at the same time sustainable use of the fish stocks based on scientific evidence should be harmonized and balanced with conservation of ecosystem.

We had planned to restart fishing in NAFO regulatory area last year, but finally gave it up due to some delay of preparing for the vessel. Thus we are thinking of restarting fishing again as soon as possible.

Lastly, Japanese delegation looks forward to working with all the colleagues for the success of this meeting.

Thank you.



## **Annex 10. Opening Statement by the Food and Agriculture Organization of the United Nations (FAO)**

(Jessica Sanders, Fishery Planning Analyst, Fisheries and Aquaculture Department)

Thank you madam Chair. It is a pleasure for me to represent FAO at this 35th Annual Meeting of the Northwest Atlantic Fisheries Organization (NAFO) in Halifax, Canada. I would like to thank the Secretariat for the invitation to attend this meeting as an observer. FAO has enjoyed a strong collaborative relationship with NAFO and, over the years, we have together faced many challenges in response to the ever changing nature of fisheries both worldwide and in the northeast Atlantic.

In the last few decades, fisheries have become an interest to a wide range of international organizations. For example, the Convention of Biological Diversity (CBD) at its Conference of the Parties in 2012, stated “Recognizing that fisheries management organizations are the competent bodies to manage fisheries and, depending on the situation in different regions, should have roles to play in addressing the impacts of fisheries on biodiversity, ...”. We are pleased to see the recognition of RFMOs roles in biodiversity conservation associated with fisheries and that many RFMOs, including of course, NAFO, with its leading role, have discussed how RFMO/As can act and help protect areas from adverse impacts of fisheries activities.

FAO continues to work at reducing IUU fishing through a range of instruments, including the 2009 *FAO Agreement on Port State Measures to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fishing* (now ratified/acceded or approved by seven States and the EU), the recently adopted *Voluntary Guidelines for Flag State Performance* which is to be endorsed by the FAO Committee on Fisheries (COFI) in 2014, as well as through the continued development of the *Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels* (or the “Global Record”). Earlier this year the International Maritime Organizations (IMO) Maritime Safety Committee approved a proposal, cosponsored by FAO, to amend an IMO Assembly resolution to allow for the voluntary application of the IMO Ship Identification Number Scheme to fishing vessels of 100 gross tons which will hopefully be adopted by the IMO Assembly this December thereby, completing one of as a key components of the Global Record to identify and track vessels as recognized by COFI.

FAO is also conducting a global capacity development programme, through a series of regional workshops, to facilitate accession to the Port State Measures Agreement to bring it into force as soon as possible and to ensure that it is accepted internationally in the widest possible manner.

Work related to traceability and ecolabelling is also moving ahead which will provide further important tools to promote sustainable fisheries. An evaluation framework to assess the conformity of public and private eco-labelling schemes with the *FAO Guidelines for the Eco-labelling of Fish and Fishery Products from Marine and Inland Capture Fisheries* has been developed and will be considered for adoption by the 14<sup>th</sup> COFI Sub Committee on Fish Trade in February 2014 and, in addition, a review of traceability best practice guidelines to combat IUU fishing will be presented.

FAO continues to work on the implementation of its International Plans of Action and has recently entered into a collaborative programme with the Convention on Trade on Endangered Species (CITES) Secretariat to support developing countries in meeting the CITES requirements for newly listed shark and ray species, kindly funded by the EU. Anyone interested in this work is encouraged to contact me this week or FAO colleagues for further information.

FAO looks forward to further strengthening collaboration with NAFO on the promotion and implementation of responsible fisheries management and conservation of living marine resources. To assist in this, in particular in areas beyond national jurisdiction, FAO and other partners are in the process of developing a programme through the Global Environment Facility (GEF) to promote responsible and sustainable fisheries and biodiversity conservation in the ABNJ. The project on “Sustainable fisheries management and biodiversity conservation of deep-sea ecosystems in the ABNJ” (the ABNJ Deep Sea Project) is most relevant to NAFO and we are hoping that a partnership commitment can be secured for the inclusion of NAFO at the time of submission of the project document at the end of this year. This partnership will further the excellent work that NAFO is already undertaking within the FIRMS partnership. Further details will be provided at the side-event that FAO will host this Wednesday evening.

We wish NAFO a successful meeting and we look forward to welcoming you at the 31<sup>st</sup> Session of COFI from the 9<sup>th</sup> to 13<sup>th</sup> of June, 2014.

## Annex 11. Opening Statement by the World Wildlife Fund – Canada (WWF)

(Dr. Bettina Saier, Director Oceans, World Wildlife Fund Canada)

On behalf of the World Wildlife Fund (WWF), I would like to thank our Canadian hosts and NAFO for welcoming us to this meeting in Halifax.

WWF has participated as an observer in NAFO annual and scientific council meetings for the past eight years. We are very pleased with the increased transparency in NAFO's decision-making processes. This change has led to increases in the number of plenary discussions. We congratulate the chairs of the Fisheries Commission, the General Council and the Scientific Council for these efforts. In the same vein, we also encourage NAFO members to open their doors to observers in the new working groups.

Each year, WWF consults broadly with experts and delegations. After consultations, we published a position with 19 recommendations and identified four issues that stand in the way of sustainable management.

- As a matter of highest priority, we urge NAFO to unravel the mystery of what the true catch is within Northwest Atlantic waters under its jurisdiction. NAFO's inability to correct long-standing discrepancies in catch data puts the organization's credibility on the line and threatens the health of the Grand Banks. NAFO must surely improve the way it collects, verifies and shares catch data. If NAFO members don't have a clear picture of what's being taken out of the Northwest Atlantic, they won't be able to rejuvenate the region's health and productivity, and the fishing industry might lose out on future economic opportunities. WWF believes that NAFO must develop a mechanism that cross checks all levels of data collection and ensures timely reporting of important fisheries data between member states and the NAFO Scientific Council. All these improvements are in accordance with the obligations contained in the 1995 UN Fish Stocks Agreement.
- WWF also urges NAFO to extend and close all areas known to contain small and large gorgonians and sea pens, all of which are VMEs. We also call for the complete closure of the Corner Rise Seamounts in the Sargasso Sea because, as of yet, no impact assessment has been submitted for the *Alfonsino* fishery.
- Nine of the 19 stocks NAFO manages are under moratorium. NAFO has made good progress on Conservation Plans and Rebuilding Strategies (CPRS). These CPRSs should have quantifiable, testable and science-based harvest control rules.

WWF also recommends that

(i) the current fishing level for Flemish Cap Cod be strictly enforced and

(ii) the Fisheries Commission considers revising Article 6 of its Conservation and Enforcement Measures to ensure that the amount of allowable bycatch is not based on the total catch retained on board a vessel. It should be based on specific limits that derive from the stock status of a particular bycatch species.

(iii) contracting parties take leadership on implementing a shark fin naturally-attached policy.

A world-class Ecosystem Approach to Fisheries Management (EAF) Roadmap has been developed by NAFO scientists. The roadmap is a milestone along NAFO's journey towards placing a healthy ecosystem at the centre of the complex fisheries management decisions. The NAFO Fisheries Commission should endorse the roadmap. WWF also proposes that NAFO take concrete steps to initiate a pilot EAF project in a selected area so that the ecosystem approach can be finally implemented and then refined over time.

WWF is also concerned about the effects of climate change on oceans and, therefore, urges NAFO to incorporate such effects into scientific assessments and relevant management decisions.

Finally, we'd like to call all Contracting Parties that haven't yet done so, to ratify the 2007 Amendment to the NAFO Convention to enable a true modernization of this RFMO in accordance with international law.

## **Annex 12. Opening Statement by the Ecology Action Centre (EAC) (Member of the Deep Sea Conservation Coalition (DSCC))**

(Susanna Fuller on behalf of EAC and DSCC)

Madam Chair, Distinguished Delegates, Fellow Observers, on behalf of the EAC and as members of the Deep Sea Conservation Coalition, we appreciate the opportunity to once again attend NAFO as official observers and to welcome everyone who has come to Halifax for this meeting.

It will be no surprise to many of you – that our primary concern remains the mitigation of fishing impacts on the marine ecosystem for which NAFO has competence. Over the past several years, NAFO has made good progress in implementing the United Nations General Assembly Sustainable Fisheries Resolutions 61/105 /, 64/72 and 66/68 which outline measures to and stress the urgency of protecting vulnerable marine ecosystems and sustainably managing deep sea fisheries. We view the work of NAFO in the full implementation of the UNGA Resolutions and recognizing the commitments made at Rio + 20 as a matter of continuous improvement.

This year, we sincerely hope that NAFO Contracting Parties take a positive decision to protect the additional areas recommended by the Scientific Council, through the work of the WG-EAFM, where significant concentrations of VMEs have been identified.

We are concerned about the lack of consistency in reporting of observer information, and need to make use of observer data in impact assessments and identification of VME areas. We urge Contracting Parties to agree to standardized observer reporting and to recommit to 100% observer coverage. The exploration of a scientific observer scheme is also recommended to ensure that maximum benefit is derived from having observers on board. We support the data flow model put forth by our colleagues at WWF as a way forward in ensuring quality data collection and reporting.

We look forward to the completion of analysis of data collected during the NERIEDA expedition and this information being fully applied to existing knowledge of VME areas, as well as contributing to a better understanding of the marine ecosystem in the NRA and surrounding waters.

While NAFO has made progress on protecting the marine ecosystem upon which all Contracting Parties depend for the provision of valuable fisheries resources, there remain key areas for improvement including the accurate catch reporting, ending fishing of unregulated species, lack of data collection on bycatch and ensuring best practices for management of all species in the NRA including sharks.

We urge NAFO to take action on exploring data sharing agreements and opportunities with oceans governance organizations, including the Canada Newfoundland Offshore Petroleum Board and the International Seabed Authority, and to agree to active participation and data sharing as part of the workshop hosted by the Convention on Biological Diversity to identify Ecologically or Biologically Significant Areas in the Northwest Atlantic – which is scheduled to take place in Spring 2014. These efforts are much needed to ensure that existing mechanisms are used to maximize protection of biodiversity beyond national jurisdiction.

We also urge Contracting Parties to support efforts to better understand the impacts of climate change and ocean acidification on rebuilding efforts of NAFO stocks.

Our specific recommendations will be circulated and are available on the table for observer information. We look forward to this week's meeting and seeing further progress at NAFO, and continued transparency of decision making.

Thank you.

### **Annex 13. Opening Statement by EIUI: (Environmental Information: Use and Influence), Dalhousie University**

(Suzette Soomai on behalf of EIUI Dalhousie University)

Chairman, Distinguished Delegates, Fellow Observers

The Environmental Information: Use and Influence research initiative (EIUI) thanks the Secretariat and Contracting Parties for our recent accreditation as Observer. As this is our first year as an Observer, we are pleased to be present at the 35<sup>th</sup> Annual Meeting of the Northwest Atlantic Fisheries Organization.

In our research, based in the Faculty of Management at Dalhousie University, Halifax, Nova Scotia, we are working with the NAFO Secretariat and a number of governmental and intergovernmental organizations, including Fisheries and Oceans Canada and the Food and Agriculture Organization of the United Nations, to study the awareness, use, and influence of their publications in formulating policy. We are also partnering in research with three NGOs about information use in marine conservation.

Since 2002 we have been studying the production and use of marine environmental and fisheries information of governmental, intergovernmental, and non-governmental organizations. The aim of our research is to advance understanding of the complexities of information use at the science-policy interface. Though case studies on grey literature, i.e., material not controlled by commercial publishing, we are determining how organizations produce and disseminate information on marine environmental and fisheries matters, and how they promote awareness of, access to, and use of this information by managers, policy-makers, and decision-makers. Our research leads to recommendations to increase use and influence of this information in policy and decision-making processes.

Our research objectives are in line with the aims and purposes of NAFO, namely the optimum utilization, rational management, and conservation of the fishery resources of the NAFO Convention Area. We will follow your deliberations this week with interest and members of our team, including faculty and graduate students, will benefit by observing how scientific advice is communicated within NAFO and how management advice and measures are developed. Our research initiative is pleased with the relationship it has developed with NAFO and looks forward to strengthening collaboration with NAFO in promoting responsible fisheries management.

We look forward to attending this week's meetings.

Thank you.

## **Annex 14. Agenda**

### **I. Opening Procedure**

1. Opening by the Chair, Veronika Veits (EU)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Admission of Observers
5. Publicity
6. Guidance to STACFAD necessary for them to complete their work (Monday)

### **II. Supervision and Coordination of the Organizational, Administrative and other Internal Affairs**

7. Review of Membership of the General Council and Fisheries Commission
8. Status of ratification process resulting from the adoption of the amended Convention and presentation of progress reports
9. Status of NAFO Headquarters Agreement
10. Status of Implementation of Recommendations of the NAFO Performance Review Panel relevant to GC
11. Progress Report on Peer Review Expert Panel of the method of catch estimation of NAFO stocks by STACFIS and next steps
12. Administrative Report
13. Selection of NAFO Executive Secretary for the 2014-2017 term

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

14. Report of Executive Secretary on external meetings
15. International Relations

### **IV. Finance**

16. Report of STACFAD at the Annual Meeting
17. Adoption of the Budget and STACFAD recommendations for 2014

### **V. Closing Procedure**

18. Election of Chair
19. Time and Place of Next Annual Meeting
20. Other Business
21. Press Release
22. Adjournment

## **Annex 15. 2013 Annual Meeting Press Release**

### **NAFO IMPROVES INFORMATION SHARING**

The Northwest Atlantic Fisheries Organization (NAFO) today announced measures to improve the quality of catch data it collects, strengthen its compliance measures and support the scientific base upon which management decisions are based.

Based on scientific advice existing moratoria were extended to allow rebuilding of depleted stocks, while quotas for others were set. See attached quota table for details.

At this meeting NAFO agreed to expand a number of areas closed to bottom fishing, designed to protect deep-sea corals and sea pens. In 2014 NAFO is set to carry out a full review of its closed areas.

The implementation of the Performance Assessment Panel recommendations continues to be addressed in all NAFO Bodies. A compilation of the status of these recommendations was prepared and NAFO was pleased with progress to date. In most cases action has been taken or is ongoing in order to address the recommendations from the Panel.

NAFO's Fisheries Commission and Scientific Council held a joint meeting this week to resolve discrepancies between official catch statistics and figures estimated by scientists. To improve transparency, daily catch reports submitted by vessels to the NAFO headquarters over a satellite system, currently used to monitor compliance with quotas, will be made available to scientists. This will help to validate their catch data from other sources.

Relations with our sister organization in the North East Atlantic, NEAFC, have been formalized with the establishment of a joint data management working group.

A general Framework for the ecosystem approach to fisheries management was adopted.

Terms of Reference for two new joint Working Groups of Fisheries Commission and Scientific Council were established at this meeting. In 2014 the groups will meet to discuss Vulnerable Marine Ecosystems and risk based management strategies for NAFO stocks.

A new Executive Secretary, Mr Fred Kingston was elected for a term beginning in January 2014. NAFO is pleased to welcome Mr Kingston and looks forward to working with him in the future.

Additional highlights of the meeting can be found in the attached backgrounder.

For more information contact: Barbara Marshall, NAFO Secretariat – [www.nafo.int](http://www.nafo.int)

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Northwest Atlantic Fisheries Organization  
2013 Annual meeting Press Release  
27 September 2013



## Backgrounder

NAFO is an international intergovernmental fisheries science and management body that manages the fishery in the international portion of the Northwest Atlantic. The 35th Annual Meeting was held during 23-27 September 2013 at the Westin Hotel, Halifax, NS, Canada. The meeting was attended by 160 delegates from eleven Contracting Parties (Canada, Cuba, Denmark (in respect of Faroe Islands and Greenland), European Union, France (in respect of Saint- Pierre et Miquelon), Iceland, Japan, Republic of Korea, Norway, Russian Federation and United States of America). Ukraine was unable to attend the meeting.

The meeting was also attended by IGO observers from the Fisheries and Agricultural Organisation of the UN (FAO), Northeast Atlantic Fisheries Commission (NEAFC), North Atlantic Marine Mammal Commission (NAMMCO), International Commission for the Conservation of the Atlantic Tunas (ICCAT), Southeast Atlantic Fisheries Organisation (SEAFO) and Conservation of Antarctic Marine Living Resources (CCAMLR), and NGOs, the World Wildlife Fund (WWF), the Ecology Action Centre and Dalhousie University.

The three bodies of NAFO, General Council (chaired by Veronika Veits, EU), Fisheries Commission (chaired by Sylvie Lapointe, Canada) and Scientific Council (chaired by Carsten Hvingel, Norway) and their subsidiary bodies met over the course of a week to deliberate on management measures and scientific assessment regarding the international fisheries of the Northwest Atlantic.

All existing moratoria on NAFO stocks were carried over. TACs and quotas were established for all other NAFO regulated stocks. See attached quota table for details.

Five NAFO Contracting Parties have now ratified the amended NAFO Convention. Other Members reported their progress to the meeting and were strongly encouraged to continue their efforts to ratify the amended Convention in their respective governments.

The status of the implementation of the recommendations from the 2012 NAFO Performance Review Panel were reviewed by NAFO. All constituent bodies continue to make progress and NAFO was pleased with work that has been and continues to be done.

NAFO continues to address issues surrounding catch discrepancies. On the basis of the Peer Review Expert Panel recommendations, NAFO held frank and fruitful discussion between fisheries managers and scientists as to the best way to build confidence in the reliability of the data available to the organization. An ad hoc working group will continue the discussions next year. A number changes to NAFO regulations, allowing scientists access to data previously collected for compliance purposes, were agreed.

NAFO took further steps to enhance the dialogue between scientists and managers through the establishment of two joint working groups, answering to both NAFO Scientific Council and Fisheries Commission, on the ecosystem approach and risk-based approaches to stock management. These groups will provide a review of Scientific Council advice and drafting of measures for consideration by Fisheries Commission. These meetings will support open dialogue between managers and scientists, and be open to accredited observer organizations, improving transparency and accountability of NAFO. NAFO will also convene an ad hoc working group to look at discards, bycatch and selectivity issues.

In order to contribute to harmonization and standardization in the development of fisheries related electronic recording and reporting systems and to enhance fisheries related data communications in the entire North Atlantic, a joint working group - NEAFC/NAFO Advisory Group on Data Management -has been established to review the design of relevant frameworks and any technical issue related to the generating, storing, transmitting and use of fisheries related data, including data processing, protocols, standards and data security and confidentiality.

NAFO welcomes a newly elected Executive Secretary, Mr Fred Kingston. Mr Kingston, a Canadian citizen, leaves a long career with European Union in Ottawa, Canada to begin a new job managing the NAFO Secretariat in Dartmouth, Canada in January. Thanks were offered to the out-going Executive Secretary, Dr Vladimir Shibanov for his service to NAFO. NAFO also welcomed new Scientific Council chair Don Stansbury (Canada).

The 36th Annual Meeting will be held in Galicia, Spain in September 2014.

Prior to the Annual Meeting, the following NAFO meetings were held: Scientific Council/NIPAG Meeting on Shrimp Assessment, Tromsø, Norway, 17-24 October 2012; Scientific Council WGEAFM, Dartmouth, NS, Canada, 21-30 November 2012; Joint NEAFC/NAFO Ad hoc Working Group on the future of AGDC, in London, UK, 29-31 January 2013, Joint NAFO/ICES Working Group on Deep-water Ecology (WGDEC), IMR Flodevigen,

Norway, 11-15 March 2013; International Fisheries Commissions Pension Society Annual Meeting, Victoria, BC, Canada, 09-11 April 2013; Fisheries Commission Working Group of Fishery Managers and Scientists on Vulnerable Marine Ecosystems (WGFMS-VME) in Halifax, NS, Canada, 23-25 April 2013; Standing Committee on International Control (STACTIC), London, UK, 7-9 May 2013; Scientific Council and its Standing Committees, Dartmouth, Nova Scotia, Canada, 7-20 June 2013; Fisheries Commission Working Group of Fishery Managers and Scientists on Conservation Plans and Rebuilding Strategies (WGFMS-CPRS) in Saint-Pierre et Miquelon, 9–11 July 2013; The World Conference on Stock Assessment Methods for Sustainable Fisheries (co-sponsored by NAFO) in Boston, MA, USA, 15-19 July 2013; Joint NAFO/ICES Working Group on Harp and Hooded Seals (WGHARP) at PINRO in Murmansk, Russia, 26-30 August 2013.

Reports of all NAFO meeting are finalized following the meeting end and are posted on the public NAFO website. Reports from General Council and Fisheries Commission (and Standing Committees) can be accessed at <http://www.nafo.int/publications/frames/proceedings.html> and Scientific Council Reports at <http://www.nafo.int/publications/frames/sci-reports.html>.

The table of NAFO TACs and quotas agreed at the 35th Annual meeting can be found at <http://www.nafo.int/fisheries/quota.pdf>

Dr. Vladimir Shibanov  
NAFO Executive Secretary

27 September 2013, Halifax, NS, Canada

For more information contact: Barbara Marshall, Information Officer, NAFO Secretariat, [www.nafo.int](http://www.nafo.int)  
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**Annual Quota Table**

**QUOTA TABLE. Total allowable catches (TACs) and quotas (metric tons) for 2014 of particular stocks in Subareas 1-4 of the NAFO Convention Area. The values listed include quantities to be taken both inside and outside the 200-mile fishing zone, where applicable.**

Species Division/Contracting Party	Cod				Redfish				American plaice		Yellowtail	
	3L	3M	% of 3M Cod TAC	3NO	3LN	% of 3LN Redfish TAC	3M	3O	Sub-Area 2 and Div. 1F+3K	3LNO	3M	3LNO
Canada		116	0.80	0	2982	42.60	500	6000	0 <sup>2,4</sup>	0	0	16575 <sup>5</sup>
Cuba		537	3.70	-	686	9.80	1750		0 <sup>2,4</sup>	-	-	-
Denmark (Faroe Islands and Greenland)		3246	22.35	-	-		69 <sup>19</sup>		0 <sup>2,3</sup>	-	-	-
European Union		8281 <sup>25</sup>	57.03	0 <sup>11</sup>	1276 <sup>26</sup>	18.23	7813 <sup>12</sup>	7000	0 <sup>2,3</sup> 0 <sup>2,15</sup>	0	0 <sup>11</sup>	-
France (St. Pierre et Miquelon)		-		-	-		69 <sup>19</sup>		0 <sup>2,4</sup>	-	-	340 <sup>5</sup>
Iceland		-		-	-		-		0 <sup>2,3</sup>	-	-	-
Japan		-		-	-		400	150	0 <sup>2,4</sup>	-	-	-
Korea		-		-	-		69 <sup>19</sup>	100	0 <sup>2,4</sup>	-	-	-
Norway		1343	9.25	-	-		-		0 <sup>2,3</sup>	-	-	-
Russian Federation		940	6.47	0	2014	28.77	9137	6500	0 <sup>2,3</sup>	-	0	-
Ukraine								150	0 <sup>2,4</sup>			
United States of America		-		-	-		69 <sup>19</sup>		0 <sup>2,4</sup>	-	-	-
Others		58	0.40	0	42	0.60	124	100	-	0	0	85 <sup>5</sup>
TOTAL ALLOWABLE CATCH	*9	14521 <sup>23</sup>	100.0	*20,9	7000 <sup>24</sup>	100.0	6500 <sup>8</sup>	20000 <sup>16</sup>	0 <sup>10,17</sup>	*21	*9,16	17000 <sup>21,22,16</sup>

Species	Witch		White hake	Capelin	Skates	Greenland halibut	Squid (Illex) <sup>1</sup>		Shrimp
	3L	3NO					Sub-areas 3+4	3L	
Division/Contracting Party									
Canada		0	294	0	1167	1716	N.S. <sup>6</sup>	3580	
Cuba		-		0		-	510	48	
Denmark (Faroe Islands and Greenland)		-		-		197	-	48	
European Union		0 <sup>11</sup>	588	0 <sup>11</sup>	4408	6709 <sup>18</sup>	N.S. <sup>6</sup> 611 <sup>13</sup>	240 <sup>14</sup>	
France (St. Pierre et Miquelon)		-		-		187	453	48	
Iceland		-		-		-	-	48	
Japan		-		0		1173	510	48	
Korea		-		-		-	453	48	
96*10Norway		-		0		-	-	48	
Russian Federation		0	59	0	1167	1460	749	48	
Ukraine						-		48	
United States of America		-		-		-	453	48	
Others		0	59	-	258	0 <sup>7</sup>	794	0	
<b>TOTAL ALLOWABLE CATCH</b>		*9,20	1000 <sup>27</sup>	*9,16	7000	11442	34000 <sup>20</sup>	4300	*9

\* Ban on fishing in force.

- Any quota listed for squid may be increased by a transfer from any "coastal state" as defined in Article 1, paragraph 3 of the NAFO Convention, provided that the TAC for squid is not exceeded. Transfers made to Contracting Parties conducting fisheries for squid in the Regulatory Area shall be reported to the Executive Secretary, and the report shall be made as promptly as possible.
- The Executive Secretary shall notify without delay all Contracting Parties the dates on which accumulated reported catch taken by vessels of Contracting Parties estimated equal to 50% and then 100% of that allocation.
- Quota to be shared by vessels from Denmark (Greenland and Faroe Islands), European Union, Iceland, Norway and Russia. Catches in the NAFO Convention Area shall be deducted from the quotas allocated in the NEAFC Convention Area.
- Quota to be shared by vessels from Canada, Cuba, France (St. Pierre et Miquelon), Japan, Korea, Ukraine and USA.
- Contracting Parties shall inform the Executive Secretary before 01 December 2013 of the measures to be taken to ensure that total catches do not exceed the levels indicated.
- The allocation 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 (= 29,458 tons).

7. In 2005, the previous 935 t “Others” quota was assigned to three Contracting Parties. When the TAC exceeds 30,000 t the next 1,300 t beyond 30,000 will be allocated to an Others quota which can be accessed by those who do not hold Greenland halibut allocation. In deciding the relevant contributions of Contracting Parties to the 1,300 t Others quota, the Fisheries Commission will take into account the fact that some Contracting Parties received a benefit from the 935 t quota which was reassigned in 2005.
8. Not more than 3250 tons may be fished before 01 July 2014.
9. The provisions of Article 6, paragraph 1.b) of the Conservation and Enforcement Measures shall apply.
10. In the case of the NEAFC decision which modifies the level of TAC in 2014 as compared to 2013, these figures shall be accordingly adjusted by NAFO and formalized through a mail vote.
11. Including fishing entitlements of Estonia, Latvia, and Lithuania following their accession to the European Union and in accordance with sharing arrangements of the former USSR quota adopted by the Fisheries Commission at its Annual Meeting in 2003 (FC Working Paper 03/7).
12. Including allocations of 1571 tonnes each for Estonia, Latvia and Lithuania out of a sharing of 20,000 tonnes, following their accession to the European Union.
13. Allocations of 128 tonnes each for Estonia, Latvia and Lithuania as well as 227 tonnes for Poland out of a TAC of 34,000 tonnes, following their accession to the European Union.
14. Including allocations of 48 tonnes each for Estonia, Latvia, Lithuania and Poland out of a TAC of 4,300 tonnes, following their accession to the European Union.
15. Allocation of 17.85% to Lithuania and 2.15% to Latvia following their accession to the European Union.
16. Applicable to 2014 and 2015.
17. The quota shares in footnotes 4 and 15 can only be fished in the NAFO Regulatory Area. If an increase in the overall TAC as defined in footnote 10 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 4.
18. Including an allocation of 375 tonnes for Estonia, Latvia, and Lithuania following their accession to the European Union.
19. Notwithstanding the provisions of footnote 8 and Article 5.2 (b) and without prejudice to future agreements on allocations, these quotas may be fished in their entirety by these Contracting Parties.
20. Applicable to 2014, 2015 and 2016.
21. In lieu of Article 6.1 (a) and (b) of the CEM, 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 6.1 (c). 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 Fisheries Commission.
22. Following the NAFO annual meeting and prior to January 1 of the succeeding year, at the request of the USA, Canada will transfer 1000 tonnes of its 3LNO yellowtail quota to the USA.
23. The allocation key of this stock is based on the 1998 Quota Table. In 1999, a moratorium on cod in Division 3M was declared.
24. The allocation key of this stock is based on the 1997 Quota Table. In 1998, a moratorium on redfish in Division 3LN was declared.
25. Including fishing entitlements of 161 tons each for Estonia, Latvia, and Lithuania in accordance with sharing arrangements of the former USSR quota adopted by the Fisheries Commission at its Annual Meeting in 2003 (FC Working Paper 03/7) and allocation of 552 tons for Poland following their accession to the European Union.
26. Including fishing entitlements of 346 tonnes each for Estonia, Latvia, and Lithuania in accordance with sharing arrangements of the former USSR quota adopted by the Fisheries Commission at its Annual Meeting in 2003 (FC Working Paper 03/7) following their accession to the European Union.
27. Should a Contracting Party experience higher than normal catches per unit of effort (CPUE) and conclude that a shift to high availability levels of white hake during the fishing season – such as what was apparently the case in 2002 and 2003 – is taking place, then that Contracting Party shall notify the Executive Secretary and submit a summary of evidence for its conclusion (higher than normal CPUE and any other additional relevant information) within one month. On this basis, a mail vote will be submitted to the Fisheries Commission as to whether an exceptional increase in the availability of fish occurs. The TAC shall remain at 1000t until the results of the vote are complete and the catch limitation provided for in Annex I. A. of the NCEM will apply. In case of a positive vote, the TAC is confirmed to be 2,000 metric tons. In the case of negative vote, the TAC shall remain at 1,000 metric tons.

**Effort Allocation Scheme for Shrimp Fishery in the  
NAFO Regulatory Area Div. 3M, 2014**

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

## Part II

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

#### 35<sup>th</sup> Annual Meeting, September 23-27, 2013

#### Halifax, Canada

### 1. Opening by the Chair

The first session of STACFAD was opened by the Chair, Deirdre Warner-Kramer (USA) on 23 September 2013. 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 Saint-Pierre et Miquelon), Iceland, Japan, Norway, Russian Federation, and the United States of America and members of the NAFO Secretariat (Annex 1).

### 2. Appointment of Rapporteur

Stan Goodick (NAFO Secretariat) was appointed as Rapporteur.

### 3. Adoption of Agenda

The provisional agenda was adopted (Annex 2) with the inclusion of two items: an update on the NEREIDA project and distribution method of future STACFAD working papers.

### 4. Auditors' Report for 2012

The auditing firm of WBLI Chartered Accountants performed the audit of the financial statements of the Organization for the fiscal year ended December 31, 2012. The financial statements and report to the General Council were circulated to the Heads of Delegation of the General Council and to STACFAD delegates in advance of the Annual Meeting.

The Senior Finance and Staff Administrator for NAFO presented the Draft Independent Auditors' Report and Financial Statements of the Northwest Atlantic Fisheries Organization for the year ended December 31, 2012. As auditing standards do not permit Auditors to sign and date the Auditors' Report until after the body responsible for approving the statements has reviewed and approved the statements, the financial statements will be shown as draft statements until they are reviewed by STACFAD and approved by the Organization at the Annual Meeting. It was noted that the total expenditures incurred for the fiscal period ending 2012 amounted to \$1,862,088, which was \$12,912 under the approved budget of \$1,875,000. It was also noted that only one Contracting Party had a partial contribution outstanding on December 31, 2012 in the amount of \$1,033.

The balance in the accumulated surplus account at year end amounted to \$506,292. At the 2012 Annual Meeting, General Council approved maintaining the level in the accumulated surplus account for 2013 at \$285,000 of which \$200,000 would be sufficient to finance operations during the first three months of 2013, and of which \$85,000 would be available for use in emergency situations.

The Independent Auditors' Report noted that the Organization: (1) has not recorded or met all disclosure requirements for employee future benefits, including the pension plan assets, liabilities and unfunded deficit, and (2) has a policy not to capitalize its capital assets. The audit determined the financial affairs of the Organization had been conducted in accordance with the Financial Regulations and budgetary provisions of NAFO and presented, in all material respects, a fair and accurate accounting of the financial affairs of the Organization.

As stated in note 2 of the Notes to the Financial Statements, following last year's recommendation, the Organization has elected to apply the International Financial Reporting Standards (IFRS) and that these are the first financial statement for which the organization has applied IFRS.

**STACFAD recommends that the 2012 Auditors' Report be adopted.**

A significant amount of time and resources are required both in the tendering process of selecting new Auditors and also during the transitional period for the new Auditors. STACFAD agreed the current maximum term Auditors may serve of three (3) years is too short and proposes extending the maximum term to five (5) years.

**STACFAD recommends that Rule 7.10 of the NAFO Financial Regulations be amended as follows (in *italics*):**

**The Auditors shall serve for a maximum term of *five (5) years***

The Committee also proposes that the Secretariat consult with the current Auditors, WBLI Chartered Accountants, to see if the current contract may be extended for an additional two years and at comparable rates.

## **5. Administrative and Activity Report by Secretariat**

Under this item, the Executive Secretary highlighted NAFO administrative matters and activities for the period September 2012 to August 2013 (GC Doc. 13/1).

## **6. Financial Statements for 2013**

The NAFO Senior Finance and Staff Administrator presented the Financial Statements for the fiscal year ending 31 December 2013.

### **Budgetary Expenses**

The operating budget for 2013 was approved at \$1,890,000. It was noted in the financial statements that 2013 expenditures are projected to be at \$2,006,000 or \$116,000 over the approved budget. This was due to: one) non-budgeted expenses for an external expert panel to provide an update on the issue of catch discrepancy between STATLANT 21A catch estimates and those of STACFIS; 2) non-budgeted expenses for the recruitment and relocation costs for the incoming and outgoing Executive Secretaries; and 3) over-expenditures for legal fees to defend a wrongful dismissal suit. The additional funds required for the above expenditures shall be paid from the contingency fund.

All remaining 2013 operating expenses are anticipated to be on or near budget for the year.

### **Assessed Contributions**

Following General Council's approval to maintain \$285,000 in the accumulated surplus for 2013, the accumulated surplus had \$221,292 deemed to be in excess of the needs of the Organization, which was allocated towards the 2013 operating budget. As a result, in order to meet the 2013 operations budget of \$1,890,000, assessed contributions issued to Contracting Parties for the 2013 fiscal year were \$1,668,708.

### **Balance Sheet**

The Organization's cash position at December 31, 2013 is estimated to be \$458,847. The cash balance should be sufficient to finance appropriations in early 2014 pending the receipt of annual payments by Contracting Parties in the spring of 2014.

It was noted that Cuba had a partial contribution outstanding in the amount of \$1,033 and Korea's contribution of \$41,718 was also outstanding.

## **7. Review of Accumulated Surplus and Contingency Funds**

According to the Financial Regulations of the Organization, STACFAD and General Council 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, 2013 is estimated to be \$410,000.

**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 2014, and of which \$85,000 would be a contingency fund available to be used for unforeseen and extraordinary expenses.**

## 8. Personnel Matters

The Executive Secretary presented to the Committee a summary report of the personnel matters that transpired during the year. Some of the staffing issues highlighted included: the retirement of the Senior Personal Assistant to the Executive Secretary; the subsequent hiring of the Administrative Assistant to the Executive Secretary; the hiring of a Database Manager to fill the creation of the new position as approved by the Organization at the last Annual Meeting; and the recruitment of the new Executive Secretary for the 2014-2017 term.

With the objective of fiscal prudence and maintaining a zero growth budget in future years, Canada proposed that a review of the NAFO Staff Classification system be performed. Canada also noted that in the Public Service of Canada, the separation indemnity has been eliminated and that they would be putting forward a proposal to remove this provision under NAFO Staff Rule 9.5. The Chair noted that there should be detailed written proposals distributed to STACFAD in advance of the meeting to allow delegates time to review and consult, if necessary. Some CP's were also cautious about any reduction to benefits already in the NAFO Staff Rules including what the implications would be for current staff contracts. Canada stated that it will work intersessionally with the Secretariat and other interested STACFAD members in developing proposals for consideration by STACFAD at the 2014 Annual Meeting.

## 9. Development of Draft Contract for incoming Executive Secretary

Following the decision by General Council at the last Annual Meeting and following further consultations with the NAFO President and Contracting Parties, a recruitment process for the selection of a new Executive Secretary for the 2014-2017 term was launched in early 2013 based on recruitment procedures applied in the past.

At the request of the General Council, STACFAD prepared a draft proposed contract between the newly elected Executive Secretary and the Organization.

**STACFAD recommends that the Heads of Delegation consider the draft contract.**

## 10. Internship Program

The Secretariat presented a report on the activities of the internship program which occurred during the year, including the tasks performed by two interns hosted at the Secretariat in 2013.

In the two years that the internship program has been established, the Secretariat feels that it has been very successful. Four very enthusiastic individuals joined the Secretariat and not only gained valuable experience for their careers, but provided the Secretariat with an enormous amount of professional assistance. Although the program has been considered a success, applications have only been received from four of twelve NAFO Contracting Parties.

The Committee once again endorsed the continuation of the internship program recognizing the substantial benefits to the Secretariat.

**To encourage increased program participation from as many member countries as possible, the Committee recommends all Contracting Parties distribute and make available information on the internship program to prospective interns.**

## 11. Rules of Procedure

During the three previous Annual Meetings, the Committee has been reviewing Rule 3 of the Rules of Procedure for Observers which states "Observer status shall apply to all non-restricted sessions." Agreement on the



principle of openness and transparency was previously achieved, but there was not consensus on whether accredited observers would be permitted to attend meetings of the Standing Committees and Working Groups, in addition to plenary sessions of the General Council, Fisheries Commission, and Scientific Council.

A proposal to amend the observer rules was reviewed. The proposal would allow a Contracting Party to request for any meeting, including those of the General Council, Fisheries Commission, and Scientific Council, that particular agenda items, or parts thereof, be restricted to delegates of Contracting Parties only. As it is currently at the discretion of the Chair to determine if a meeting should be restricted, the proposal would essentially transfer the responsibility from the Chair to that of a Contracting Party. Consensus could not be reached on the proposal. The Committee recognized that work is currently underway to establish the ToRs for two joint FC/SC Working Groups which directly address the issue of observer attendance at these Working Groups.

The Committee agreed that the Rules of Procedure should clearly indicate whether accredited observers shall be permitted to attend meetings other than plenary sessions of the General Council, Fisheries Commission, and Scientific Council.

**STACFAD recommends that Contracting Parties continue to work on this intersessionally and be prepared to present proposals at the 2014 Annual Meeting.**

The Committee also reviewed the additional costs associated with having accredited NGO observers attend an Annual Meeting and, in line with the NAFO Performance Assessment Review Panel's request to research any potential cost-recovery measures, the potential of establishing an attendance fee for observers was examined.

The general feeling of the Committee was that a fee should be established to offset any costs incurred by the Organization, although some Contracting Parties felt that an observer attendance fee would go against the Organization's efforts for transparency, could possibly be discriminatory, and that the additional cost recovery would be minimal.

The Committee noted that Rule 5(c) of the NAFO Rules of Procedures for Observers already includes a provision allowing for an observer attendance fee to be charged to offset the additional costs of their participation in meetings. The Committee requested the Secretariat to annually evaluate the estimated costs of such participation based on the planned meetings for each year and establish a per-person fee if appropriate to offset such costs. This fee should be applicable to all meetings in a given year and included on the NAFO website with the procedures for requesting observer accreditation.

**The Committee recommends an appropriate attendance fee be established and charged for accredited observers.**

## **12. Report of the Annual Meeting of the International Fisheries Commissions Pension Society (IFCPS)**

The Annual Meeting of the IFCPS was held April 9-11, 2013 in Victoria, British Columbia, Canada, and the Secretariat provided the Committee with an update on the highlights of the meeting. Background information on the pension plan, investment performance, financing/funding issues, as well as plan design changes which affect employee/employer contribution rates were distributed for the information of members. A copy of the Annual Statistical Report for NAFO was also included with the information paper.

It was noted that the next actuarial valuation of the pension plan will be done as of January 1, 2014 and the results of the valuation will be presented at the next Annual Meeting.

## **13. Update on implementation of Performance Review Panel recommendations tasked to STACFAD**

STACFAD reviewed the progress to date on the implementation of those particular recommendations of the PRP relevant to STACFAD on the basis of a report from the Secretariat. It was noted that majority of them have been implemented as summarized in STACFAD WP 13/11 (Annex 3). STACFAD considers that the recommendations which have been marked either as "action completed" or "action ongoing – no further actions necessary" will not have to be reported on in the future.



**STACFAD recommends that the General Council endorse the progress achieved to implement the Performance Review Panel's recommendations in the area of finance and administration.**

The Secretariat also presented a draft NAFO Communication Strategy (Annex 4) in response to the outstanding PRP recommendation Chapter 7, 7.2.

**STACFAD recommends that the General Council adopt the communications strategy.**

### 14. Budget Estimate for 2014

The Committee reviewed the 2014 budget estimate as detailed in GC Working Paper 13/3 (Revision 3). Keeping in mind the significant efforts undertaken at last year's Annual Meeting to keep the budget at or near the previous year's budget, the Committee was once again faced with the same challenges.

Canada noted that it is still facing cutbacks within its own civil service and requested that it would once again be requesting that the 2014 proposed budget show a zero percent budgetary growth over the 2013 approved budget. Some other CPs noted that they are also faced with reductions within their internal budgets and cannot afford any increases to their contributions. Other CPs raised concerns that the Organization cannot keep expecting the Secretariat to keep shouldering these deep budget cuts before it starts to have a significant impact on the core functions and services provided by the Secretariat.

The budget estimate already contained budget categories which were maintained at reduced levels from the previous year's cutbacks to achieve the near zero percent budget increase. In an effort to implement the current year's request for zero percent growth, reductions to the 2014 budget estimate were made to communications, materials and supplies, Inter-sessional Scientific Meetings and publications. There was also the need to eliminate the additional help budget and the internship program was reduced to only allow for a three (3) month period internship period during 2014. As noted earlier under the Internship agenda item, STACFAD supports the internship program and anticipates full funding be re-established the following year.

Following the above budget cuts from the original budget estimate proposal, the 2014 budget estimate was maintained at the same level as the approved 2013 budget. Some Committee Members emphasized the need to ensure that the Secretariat's core functions and services are still maintained, and to not create any unfunded mandates.

Approved Budget 2013	Preliminary Budget Forecast 2014	Budget Estimate 2014
\$1,890,000	\$1,991,000	\$1,890,000

**STACFAD recommends that the budget for 2014 of \$1,890,000 (Annex 5) be adopted.**

**A preliminary calculation of billing for the 2014 financial year is provided in Annex 6.** The preliminary calculation of billing is based on the budget estimate of \$1,890,000 and shall be reduced by any amount determined by the General Council to be in excess of the needs of the accumulated surplus account.

The accumulated surplus account at December 31, 2013 is estimated to be \$410,000 and the recommended minimum balance in the accumulated surplus account for operations and emergency use for the 2014 fiscal year is \$285,000. This allows for \$125,000 (\$410,000-\$285,000) to be applied towards the 2014 billing.

**Funds required to meet the 2014 administrative budget and appropriated from Contracting Parties are estimated to be \$1,765,000 (\$1,890,000 - \$125,000).**

### 15. Budget Forecast for 2015 and 2016

STACFAD reviewed the preliminary budget forecast for 2015 (\$1,956,000) and 2016 (\$2,003,000) (Annex 7).

There are various expenditures paid from the NAFO operating budget which only occur every two, four or even eight years. The cost of these expenditures can be fairly significant, and, when included in the NAFO budget, they can result in sharp increases to the budget and corresponding increases to the contributions paid by

Contracting Parties. At last year's Annual Meeting, General Council requested that STACFAD look at ways of anticipating these expenditures and to determine if the costs can be spread over a number of years, which would therefore help smooth the budget from year to year.

The Committee noted that costs associated with the home leave allowance and repatriation grant are earned every second year and these costs could be spread evenly over a two year period. Costs associated with the recruitment and relocation of the Executive Secretary may only occur every four or eight years. It was decided to budget for these costs over an eight year period.

**The Committee recommends that costs associated with the home leave allowance and repatriation grant be spread over a two year period and costs associated with recruitment and relocation be spread over eight years.**

As costs for all of the above items are already include in the 2014 budget estimate, the smoothing process would begin for the 2015 budget year.

## 16. Adoption of 2013/2014 Staff Committee Appointees

The Secretariat nominated the following people to serve as members of the Staff Committee for September 2013-September 2014: Estelle Couture (Canada), Rafael Duarte (EU) and Deirdre Warner-Kramer (USA).

**STACFAD recommends that General Council appoint the three nominees.**

## 17. Time and Place of 2014 – 2016 Annual Meetings

As previously agreed, the 2014 and 2015 Annual Meetings will be held 22-26 September and 21-25 September, respectively. The meetings will be held in Halifax, N.S., Canada, unless an invitation to host is extended by a Contracting Party and accepted by the Organization.

**STACFAD recommends that the dates of the 2016 Annual Meeting (to be held in Halifax, N.S., Canada, unless an invitation to host is extended by a Contracting Party and accepted by the Organization) to be as follows:**

**2016 - 19 – 23 September**

The Committee was informed that conference facilities in the Halifax area are limited and it is becoming more and more difficult to reserve and hold conference space on a short term basis. Hotels are seeking a long term commitment as they quite often will have other clients willing to book two years or more in advance. As offers from CP's to host a NAFO Annual Meeting can be issued up to one year prior to an Annual Meeting, the Organization may in the future be requested to make a deposit to hold onto conference space.

For budgetary and meeting venue planning purposes, STACFAD urges that any invitations by a Contracting Party to host an Annual Meeting be issued as early as possible.

## 18. Election of Vice-Chair

Elise Lavigne (Canada) was elected Vice-Chair.

## 19. Other Matters

- i. At the last Annual Meeting, General Council requested that the Secretariat establish a framework in order to manage a fund for the NEREIDA project and to also draft the necessary amendment to the NAFO Financial Regulations to clarify that NAFO is allowed to receive and disperse funding for projects that fulfil NAFO's objectives. The Committee was informed that amendment to the NAFO Financial Regulations and the NEREIDA Scientific Research Project Framework were both approved by General Council earlier this year.

The Secretariat is currently in the final stages of the applying for project funding from the EU authorities for the NEREIDA Project.

- ii. The Committee also had a discussion on how this year's STACFAD documentation was posted to the NAFO's Members Pages and was only accessible using the Heads of Delegation username and password. It was decided that it was not appropriate to use the Heads of Delegation username and password, and for the future, a STACFAD username and password should be created and distributed to heads of delegation. Each STACFAD representative would then be responsible to contact their head of delegation to receive access.

## **20. Adjournment**

The final session of the STACFAD meeting adjourned on 26 September 2013.

The Committee members thanked Deirdre Warner-Kramer for her excellent work chairing the meeting.

The Committee members expressed their gratitude to Executive Secretary, Vladimir Shibanov, for his diligent work over the past four years. The Secretariat's efficient contributions in making the meeting a success were noted.

### Annex 1. List of Participants

Name	Contracting Party
Elise Lavigne	Canada
Esben Ehlers	Denmark (in respect of the Faroe Islands and Greenland)
Fred Kingston Herbert Schuller	European Union
Jean-Marc Philippeau	France (in respect of Saint-Pierre et Miquelon)
Brynhildur Benediksdottir	Iceland
Akiko Onodera	Japan
Odd Gunnar Skagestad	Norway
Yulia Badina	Russian Federation
Deirdre Warner-Kramer Patrick Moran	United States of America
Vladimir Shibanov Stan Goodick Lisa LeFort	NAFO Secretariat



*STACFAD - back row, left to right: Pat Moran, Elise Lavigne, Brinhildur Benediksdottir, Yulia Bedina, Odd Gunnar Skagestad, Jean-Marc Philippeau, Lisa LeFort, Esben Ehlers, Fred Kingston.*

*Front row, left to right: Stan Goodick, Deirdre Warner-Kramer, Vladimir Shibanov, Akiko Onodera.*

## **Annex 2. Agenda**

1. Opening
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Auditors' Report for 2012
5. Administrative and Activity Report by NAFO Secretariat
6. Financial Statements for 2013
7. Review of Accumulated Surplus and Contingency Fund
8. Personnel Matters
9. Development of Draft Contract for incoming Executive Secretary
10. Internship Program
11. Rules of Procedure
12. Report of the Annual Meeting of the Fisheries Commissions Pension Society
13. Update on implementation of PRP recommendations tasked to STACFAD
14. Budget Estimate for 2014
15. Budget Forecast for 2015 and 2016
16. Adoption of 2014 Staff Committee Appointees
17. Time and Place of 2014 - 2016 Annual Meetings
18. Election of Vice-Chair
19. Other Matters
  - i. Update on the establishment of the framework to manage the funds for the NEREIDA project and amendment to the NAFO Financial Regulations
  - ii. Distribution method of future STACFAD Working Papers
20. Adjournment

**Annex 3. STACFAD Responses to PRP Recommendations**

Rec. No.	Recommendation Text	NAFO Doc. No.	Responsible Body	Comment	Timescale	Progress Status
4.4.3.3	In the PRP's view data formatting and standardization appear adequate to ensure reporting consistency, and to promote data compatibility and/or comparability. However, the PRP feels that the rather disparate way in which data requirements are outlined in the NCEM may promote confusion and inefficiency. Consequently, the PRP would like to see a very user-friendly NAFO data manual being produced and this could also set out a full meta-data record for all NAFO's data holdings and database.	STACFAD WP 12/5	GC	2011 preliminary response: STACFAD notes that work on several elements of this recommendation is already underway and the proposed creation of a new Data Management team within the Secretariat will further support it. STACFAD recommends that the Secretariat determine how best to address the financial and human resources implications of this work. 2012 Response by the Secretariat to STACFAD: The Secretariat proposes the creation of a new Data Manager position at the Secretariat to lead Data Management team. The new employee will be responsible for the development of the documentation as recommended. Committee response to GC: To create a Data Manager position to be effective mid-April 2013.	ST	Action Completed
4.4.3.4	The PRP was unable to examine in any detail the Secretariat's process for checking and validating the data it receives, other than being aware that most data validation is carried out by the Contracting Parties prior to submitting their data. Again, it is suggested that the Secretariat develop documentation to outline its data consolidation processes and the steps it takes to check data, including the continuation of communication with data providers after data have been submitted/used if necessary.	STACFAD WP 12/5	GC	2011 preliminary response: STACFAD recommends that the Secretariat undertake this work and report back to the Committee on its progress. 2012 Response by the Secretariat to STACFAD: The Secretariat notes that during the process of transferring responsibility for maintenance of the STACFAD 21 database of catches from the FC Coordinator to the SC Coordinator, documentation covering the consolidation and checking of data was produced, and communication with data providers to ensure the quality of submissions is ongoing. Committee response to GC: Item completed and no further action necessary.	ST	Action Completed
4.4.4.4	To improve the potential utility of such information, the PRP feels that it could be better linked and more 'user friendly'. In that respect, some thought could be given to providing a clear 'information map' on the NAFO Website to direct those seeking specific types of information to their source(s) in a more efficient manner.	STACFAD WP 12/5	GC	2011 preliminary response: STACFAD endorses the Secretariat's ongoing work in this regard and encourages that the Secretariat seek additional feedback from the Contracting Parties as necessary. 2012 Response by the Secretariat to STACFAD: The Secretariat notes that the Secretariat has been working on revamping the public web pages throughout the last year, creating a secure inspectors website area; continuing to digitize historic documents; and that the usage of WebEx and SharePoint by is increasing. Committee response to GC: Ongoing process and no further action necessary.	MT	Action Ongoing - No further actions necessary
4.6.2.5	In terms of documenting the PAF, the PRP felt that a clearly designated, and easily accessible, area of the NAFO website should set out a brief history of the Framework's development and a detailed explanation of its key contents and use, including in relation to recovery plans (see above) as well as new and exploratory fisheries (see below).	STACFAD WP 12/5	GC/FC/SC	2011 preliminary response: STACFAD notes that the Scientific Council Coordinator has already begun this work in cooperation with the Scientific Council and welcomes its conclusion. 2012 Response by the Secretariat to STACFAD: The Secretariat notes that a summary of the implementation of the Precautionary Approach in the NAFO context was prepared by the Secretariat and was posted on the revamped NAFO Website in advance of the 34th Annual Meeting. Committee response to GC: Item completed and no further action necessary.	ST	Completed
7.1.10	The PRP suggests that application of cost-recovery measures could be considered as a way of alleviating potential financial stress on NAFO Contracting Parties.	STACFAD WP 12/5	GC	2011 preliminary response: STACFAD recommends that the Secretariat provide to STACFAD's next meeting suggestions for areas where cost recovery measures could be implemented. 2012 Response by the Secretariat to STACFAD: The Secretariat notes that although any potential cost-recovery measures are negligible, options for observer attendance fees, data access and document user fees for NCPs taking into account transparency concerns and sponsorship for social events, etc. may be explored. Committee response to GC: The Secretariat will report to STACFAD at the next Annual Meeting.	MT	Action Ongoing

7.1.5	The PRP also noted that, according to Article XVI of the 1978 Convention, a Contracting Party which has not paid its contributions for two consecutive years shall not enjoy any right of casting votes and presenting objections until it has fulfilled its obligations, unless the General Council decides otherwise. The PRP urges NAFO to apply this provision.	GC Doc 12/1	CP/GC	The WG considers this recommendation implemented, and recommends that the GC continue to apply the provision contained in Article XVI of the 1978 Convention whereby a Contracting Party which has not paid its contributions for two consecutive years, shall not enjoy the right of casting votes and presenting objections until it has fulfilled its obligations, when necessary.	ST	Action Completed
7.1.8	In this regard, and in order to provide a more accurate and contemporary picture of the Organization's financial standing, the PRP suggests that consideration could be given to the application of accrual accounting principles to manage the budget. It noted that accrual-based accounting is largely the international norm.	STACFAD WP 12/5	GC	2011 preliminary response: STACFAD requests that the Secretariat provide to STACFAD's next meeting guidance on the pros and cons of this approach. 2012 Response by the Secretariat to STACFAD: The Secretariat the use of accrual accounting principles is being used in NAFO's financial records. The general idea is to recognize revenue and expenses at the time in which the transaction occurs rather than when payment is made (or received). Committee response to GC: Item already implemented and no further action necessary.	ST	Action Completed
7.1.9	Reimbursement of the budget surplus in one year to the following year's contributions is in keeping with many other international organizations. However, the PRP advises that consideration should be given to withholding any reimbursement of budget surplus amounts to Contracting Parties in arrears (see below) of their full contributions.	GC Doc 12/1	CP/GC	The WG recommends that the GC requests STACFAD to consider amending Rule 4.6 of the NAFO Financial Regulations.	MT	Action Proposed
7.2.2	To give more formal standing to the various Staff position descriptions, working conditions and appraisal procedures outlined in NAFO Secretariat Staff Structure document (Fischer & Goodick, 2009), the PRP suggests that development of a NAFO Staff Contract may be worth considering. In particular, a Contract would provide an opportunity to formally outline procedures for dealing with Staff grievances and dismissal specifically.	STACFAD WP 12/5	GC	2012 Response by the Secretariat to STACFAD: The Secretariat notes that Staff contracts have been implemented for all new employees (SC Coordinator and IT Manager). All current employees have a signed Employment Agreement which outlines the appointment in accordance with the appropriate section of the Rules of Procedure and Staff Rules and it also covers the nature of employment, remuneration, terms and conditions, etc. Committee response to GC: Item implemented and no further action necessary.	ST	Action Completed
7.2.3	Taking into account the relevant existing best practices, there is a need to amend certain provisions of the NAFO Staff Rules pertaining to the rights and obligations of NAFO Secretariat Staff, particularly dismissal or termination of appointment. In so doing, and given the Organization's intergovernmental nature, special attention should be given the relevant provisions of the prevailing Canadian legislation as well as international law in terms of Secretariat staff employment rights, obligations and conditions.	STACFAD WP 12/5	GC	2011 preliminary response: STACFAD recognizes the ongoing work to keep the Staff Rules current and requests the Secretariat to compile relevant best practices in this area and provide a report to its next meeting. 2012 Response by the Secretariat to STACFAD: The Secretariat notes that the expansion of this particular staff rule is under review by the Secretariat, although, in light of the current legal case before the Supreme Court of Canada; it is felt that this matter should be deferred until after the conclusion of the legal case. Committee Response to GC: The Secretariat will present proposed changes to the Staff Rules upon conclusion of the current legal case.	MT	Action Ongoing
7.2.4	The increasing task list for the Secretariat appears to have been efficiently handled up to this point. Nevertheless, the PRP feels that there is a need to ensure that a critical mass of essential skills is sustained and that functional continuity should be maintained whenever senior staff leave. To this end, the professional development of Staff and the sharing of essential task skills must continue to be encouraged.	STACFAD WP 12/5	GC	2012 Response by the Secretariat to STACFAD: The Secretariat recognizes the importance of the team work structure in place, professional development and training of staff in various tasks/departments, and to ensure a well-organized recruitment plan is in place for upcoming staff retirements. Committee response to GC: No further action necessary.	ST	Action Completed





7.2.5	<p>The Secretariat is close to a critical point in terms of its workload and the availability of personnel to meet daily work needs. The recent addition of new tasks (e.g. daily VMS reporting and archiving) has augmented such pressure. Therefore, the PRP feels that failure to provide additional Secretariat staff capacity will compromise service delivery in the not-too-distant future and should be addressed as a matter of urgency.</p>	STACFAD WP 12/5	GC	<p>2011 preliminary response: STACFAD Also highlights the recommendations to institute a formal internship program and to create a new Data Management team within the Secretariat. Also consideration could be given to part-time employees or service contracts. 2012 Response by the Secretariat to STACFAD: The Secretariat notes a comprehensive review of all staff duties/tasks was performed in 2012, that there is an urgent requirement to hire a Data Manager in 2013 to meet needs of the Organization; a Formal Internship program commenced in 2012; Service contracts and temporary help are being utilized when necessary i.e. – archival of historic documents, public relations/web pages, inspectors web page. Committee response to GC: To create a Data Manager position to be effective mid-April 2013.</p>	MT	Action Completed
7.2.6	<p>The structure of the Secretariat has recently been reorganized. Any future reorganization or expansion of NAFO's work is likely to be profoundly significant for how the Secretariat organizes its work to sustain a high-level of service delivery. Under such circumstances, the PRP urges that clear guidance should be given by the General Council to ensure that work priorities can be identified and that the need for any additional resources (human or fiscal) are adequately addressed sooner rather than later.</p>	STACFAD WP 12/5	GC	<p>2011 preliminary response: STACFAD Also highlights the recommendations to institute a formal internship program and to create a new Data Management team within the Secretariat. Also consideration could be given to part-time employees or service contracts. 2012 Response by the Secretariat to STACFAD: The Secretariat notes a comprehensive review of all staff duties/tasks was performed in 2012, that there is an urgent requirement to hire a Data Manager in 2013 to meet needs of the Organization; a Formal Internship program commenced in 2012; Service contracts and temporary help are being utilized when necessary i.e. – archival of historic documents, public relations/web pages, inspectors web page. Committee response to GC: To create a Data Manager position to be effective mid-April 2013.</p>	MT	Action Completed
7.2.7	<p>The Executive Secretary's role in disseminating high-quality information about NAFO should be recognized, along with that of other senior Staff. Consideration of an Organizational communications strategy and media policy may also be of merit. The PRP further suggests that it is worth considering clarification of the Executive Secretary's responsibilities, along with those of other office bearers, for the communication of such information.</p>	STACFAD WP 12/5	GC	<p>2011 preliminary response: STACFAD will review and, as appropriate, recommend revisions to the NAFO media policy at its next meeting. 2012 Response by the Secretariat to STACFAD: The Secretariat is currently researching the media/press release policies of other RFMO's. Committee response to GC: The Secretariat will report to STACFAD at the next Annual Meeting.</p>	MT	Action Ongoing
7.2.8	<p>To better determine the efficiency of Secretariat service delivery in particular, the Panel suggests that metrics be developed for Secretariat various duties/tasks. These could be based on a schedule of tasks/activities to be undertaken, the completion of tasks against identified guidelines/deadlines, and the final service outputs delivered in terms of delivery efficiency/standards.</p>	STACFAD WP 12/5	GC	<p>2011 preliminary response: While recognizing the potential benefits of this sort of performance management approach, STACFAD also cautions that any implementation should minimize both resource and bureaucratic burdens. 2012 Response by the Secretariat to STACFAD: The Secretariat notes various planning and scheduling tools/methods are being utilized by the Executive Secretary and Secretariat Staff. A Comprehensive review of all staff duties/tasks was performed in 2012. Committee response to GC: No further action necessary.</p>	ST	Action Completed
7.4.2	<p>The PRP recommended that the Secretariat be requested to undertake some scoping and some projection of its future accommodation needs.</p>	STACFAD WP 12/5	GC	<p>2012 Response by the Secretariat to STACFAD: The Secretariat notes as per the NAFO Convention "The headquarters of the Organization shall be in Dartmouth, Nova Scotia, Canada, or at such other place as may be decided by the General Council". The current accommodations are sufficient for the Secretariat to meet the needs of the Organization and to house its current staff members plus one intern. Some office modifications will have to be done to accommodate the proposed additional staff member (Data Manager). Boardroom facilities are sufficient to host a meeting up to a maximum of 20-25 people. Committee response to GC: In the event that the new Data Manager position is approved, the current budget allows for the Secretariat to make office modifications to accommodate a new staff member.</p>	MT	Action Completed



7.4.3	<p>The anticipated expansion of NAFO activities, especially those connected with data collection and sharing, indicates that new communication and information technologies may be required. This will necessitate an elaboration of rigorous professional training programs, and/or opportunities for Secretariat staff. The PRP therefore recommends timely, and adequate, planning for providing the Secretariat with appropriate human, financial and other resources for its future work.</p>	STACFAD WP 12/5	GC	<p>2011 preliminary response: STACFAD will continue this process with the input and guidance of the Secretariat. 2012 Response by the Secretariat to STACFAD: The Secretariat will continue this process with the input and guidance of STACFAD. Committee response to GC: This an ongoing process and no further action necessary.</p>	MT	Action Ongoing - No further actions necessary
7.5.2	<p>To improve documentation of meeting outcomes, reports should be as succinct as possible and confined to matters of substance only. Technical details can be provided in appendices and as far as possible reports should represent a distillation of collective views, unless otherwise decided for controversial/high priority subjects. Executive summaries of key conclusions and decisions should be provided if possible.</p>	GC Doc 12/1	CP/FC/GC/SC/Sec	<p>The WG recommends that all NAFO bodies strive for clear and succinct reporting as recommended by the review panel and that the Secretariat provides proper guidance to rapporteurs and Chairs to that end.</p>	ST	Action Ongoing - No further actions necessary

## **Annex 4: Proposed NAFO Communications Strategy**

NAFO is an intergovernmental fisheries science and management body. NAFO manages the fishery in the international waters of the Northwest Atlantic and reflects the effort to ensure the international cooperation in these waters and maintain the compatibility of conservation and management measures between the coastal state and the international areas. The mandate has recently been updated to include an ecosystem approach to fisheries management.

The NAFO Secretariat provides administrative support to the Organization and its chief administrative officer is the Executive Secretary who is appointed by the General Council.

Many specific duties of the Executive Secretary (or delegate) regarding distribution of information to Contracting Parties are contained in the Rules of Procedure. It is understood that, in the interest of transparency, information for the general public and other interested groups as appropriate, be communicated in an accurate, timely and professional manner.

NAFO has a clearly defined Media Policy as reported in GC Doc. 04/4 that outlines the conditions for attendance by Media Representatives at NAFO Meetings. This policy has been applied and seems to work well.

This Communications Strategy provides guidelines for external communications from the Secretariat using various mediums including:

- o Printed materials such as newsletters, articles, and brochures.
- o Electronic materials such as email, postings to web sites or social media sites.
- o Media relations such as requests for interviews, news releases, and media inquiries.

### **General Requests:**

Each staff member is responsible for communicating basic and routine information to the public and others in relation to their specific job duties. Requests for private data or information outside of the scope of an individual's job duties should be routed to the Information Officer for discussion with the Executive Secretary.

General Requests received by the Information Officer may be forwarded to the appropriate staff member to reply.

### **Official Requests:**

Throughout the year requests may be received from the UN, FAO or other RFMOs or intergovernmental organizations. These could be in the form of requests for responses to UNGA Resolutions or questionnaires. Depending on the subject matter, the requests are reviewed by the Executive Secretary and with input from the Coordinators and the Information Officer and the response is prepared and compiled. After completion and depending on the topic, the responses may be circulated to all Contracting Parties for comments and review before being finalized and returned.

### **Reports of NAFO Activities:**

From time to time NAFO Secretariat staff participate in outside events and meetings. The participating staff member may be requested to supply a report of recent NAFO activities. These reports are usually summary accounts of information available to the public or a description of Secretariat work. Examples of this are reports to RSN, CWP, FIRMS and ASFA.

### **Media Requests:**

All requests for interviews or information from the media are routed through the Information Officer. Media requests include anything intended to be published or viewable to others in some form such as television, radio, newspapers, newsletters, and web sites. If the Information Officer is unavailable, staff are requested to ask the media representative's name, contact information, questions and deadline and refer to the Executive Secretary (or delegate).

Interview requests will be first considered by the Executive Secretary. Based on type or subject of request these may be delegated to either of the Coordinators. Coordinators may decide to contact the Chair or other appropriate NAFO official (such as Designated Experts).

**Press Releases:**

In general a Press Release is circulated only after the Annual Meeting. No public statements are made by any participants until after the conclusion of the meeting when an official Press Release is prepared by the Executive Secretary in collaboration with the Chairs of the General Council, Fisheries Commission and Scientific Council. The Information Officer is responsible for drafting the Press Release and coordinating input from the Coordinators and other members of the Secretariat.

The Press Release is circulated to a broad distribution list which is updated annually.

In some recent years Scientific Council Highlights have been prepared by Scientific Council Chairs in conjunction with the SC Coordinator. These have been placed on the website.

**Public Information:**

NAFO has a well-developed public website and it is the responsibility of the Secretariat to ensure information presented there is timely and up-to-date. Meeting Reports are uploaded after reports are finalized by the respective Constituent Bodies and all deadlines have passed. Each Team is responsible for ensuring the content of pages pertaining to their field of expertise is current and correct.

Posters of various NAFO highlighted work, such as VMS, Advice to Management, etc. have been developed to use in presentations for the public.

**Publications:**

Electronic publication is an efficient, cost-saving method of disseminating information. If a report is available to the public electronically, there are no specific requirements to print and distribute hard copies of the documents for general distribution.

However, NAFO does maintain a print publication distribution list. These print publications are distributed mainly to Contracting Party libraries and key individuals as well as other RFMOS and international fishery bodies. A “purchase list” is maintained where recipients are invoiced and payment is received before a print publication is mailed.

Print and electronic versions (DVD) of the previous year’s reports are circulated to meeting participants during the June Scientific Council meeting and the Annual Meeting.

The Journal of Northwest Atlantic Fishery Science has its own website and pdf articles are available for anyone to download for free. As well there is a limited paper publication distribution list. The NAFO Scientific Council Studies is mainly an electronic publication. Recently identification guides have been circulated on waterproof paper to those working on the water.

THE NAFO Conservation and Enforcement Measures remains a key NAFO publication. Over 600 paper copies are distributed each year to Contracting Parties, inspectors and fishery monitoring centers. This publication is also available on the NAFO website as a downloadable pdf file.

## Annex 5. Budget Estimate for 2014

### NORTHWEST ATLANTIC FISHERIES ORGANIZATION

#### Budget Estimate for 2014

(Canadian Dollars)

	Approved Budget 2013	Projected Expenditures 2013	Preliminary Budget Forecast 2014	Budget Estimate 2014
1. Personal Services				
a) Salaries	\$983,000	\$979,000	\$1,031,000	\$996,000
b) Superannuation and Annuities	294,000	294,000	298,000	291,000
c) Medical and Insurance Plans	90,000	89,000	95,000	95,000
d) Employee Benefits	66,000	66,000	103,000	77,000
Subtotal Personal Services	<u>1,433,000</u>	<u>1,428,000</u>	<u>1,527,000</u>	<u>1,459,000</u>
2. Additional Help	15,000	15,000	15,000	0
3. Communications	28,000	28,000	28,000	26,000
4. Computer Services	39,000	39,000	41,000	31,000
5. Equipment	31,000	31,000	32,000	31,000
6. Fishery Monitoring	35,000	35,000	36,000	36,000
7. Hospitality Allowance	3,000	3,000	3,000	3,000
8. Internship	16,000	16,000	16,000	5,500
9. Materials and Supplies	30,000	30,000	31,000	28,500
10. NAFO Meetings				
a) Sessional	94,000	94,000	95,000	103,000
b) Inter-sessional Scientific	40,000	40,000	40,000	31,000
c) Inter-sessional Other	30,000	30,000	30,000	30,000
Subtotal NAFO Meetings	<u>164,000</u>	<u>164,000</u>	<u>165,000</u>	<u>164,000</u>
11. Other Meetings and Travel	35,000	35,000	35,000	35,000
12. Performance/External Reviews	0	20,000	0	0
13. Professional Services	46,000	89,000	46,000	46,000
14. Publications	15,000	15,000	16,000	13,000
15. Recruitment and Relocation	0	58,000	0	12,000
	<u>\$1,890,000</u>	<u>\$2,006,000</u>	<u>\$1,991,000</u>	<u>\$1,890,000</u>

## Notes on Budget Estimate 2014

(Canadian Dollars)

Item 1(a)	<b>Salaries</b> Salaries budget estimate for 2014.	\$996,000
Item 1(b)	<b>Superannuation and Annuities</b> Employer's pension plan which includes employer's contributions, administration costs and actuarial fees. Also includes the required annual payment towards the pension plan deficit.	\$291,000
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.	\$95,000
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.	\$77,000
Item 2	<b>Additional Support</b> Digitization of historical documents, translation of NAFO Fisheries Information (e.g. Observer Reports) and other assistance as required.	\$0
Item 3	<b>Communications</b> Phone, fax and internet services Postage Courier/Mail service	\$26,000 \$18,000 5,000 3,000
Item 4	<b>Computer Services</b> Computer hardware, software, supplies and support. Inspectors Website	\$31,000 \$26,000 5,000
Item 5	<b>Equipment</b> Leases (print department printer, photocopier and postage meter) Purchases Maintenance	\$31,000 \$21,000 5,000 5,000
Item 6	<b>Fishery Monitoring</b>	\$36,000

	Vessel Monitoring System (VMS) annual maintenance fee including programming changes as required due to changes to CEM	\$36,000
Item 10(a)	<b>NAFO Sessional Meetings</b> Annual Meeting, September 2014, Halifax, Canada SC Meeting, June 2014, Halifax, Canada SC Meeting, September 2014, Greenland	\$103,000
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 FC.	\$31,000
Item 10(c)	<b>NAFO Inter-sessional Other</b> General provision for GC and FC inter-sessional meetings.	\$30,000
Item 11	<b>Other Meetings and Travel</b> International Meetings regularly attended by the NAFO Secretariat: Aquatic Sciences and Fisheries Abstracts (ASFA) Co-ordinating Working Party on Fishery Statistics (CWP), Fisheries Resources Monitoring Systems (FIRMS) International Fisheries Commissions Pension Society (IFCPS) NEAFC Advisory Group for Data Communication (AGDC) Regional Fishery Body Secretariats Network (RSN) United Nations Fish Stock Agreement (UNFSA)	\$35,000
Item 13	<b>Professional Services</b> Professional Services (audit, consulting, legal fees, and insurance) Professional Development and Training Public Relations	\$46,000 \$35,000 8,000 3,000
Item 14	<b>Publications</b> Production costs of NAFO publications 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.	\$13,000

## Annex 6. Financial Statements for 2013

Preliminary calculation of billing for Contracting Parties  
against the proposed estimate of \$1,890,000 for the 2014  
financial year (based on 12 Contracting Parties to NAFO)  
(Canadian Dollars)

Budget Estimate	\$1,890,000
Deduct: Amount from Accumulated Surplus (pending approval from General Council)	125,000
Funds required to meet 2014 Administrative Budget	\$1,765,000

60% of funds required = \$1,059,000  
30% of funds required = \$529,500  
10% of funds required = \$176,500

Contracting Parties	% of Total Catch in the Convention Area			2013 Billing for comparison purposes	
	Nominal Catches for 2011	10%	30%	60%	2013 Annual Contribution
Canada	383,994	51.29%	\$97,633.66	\$543,161.10	\$719,402.55
Cuba	1,438	0.19%	-	2,012.10	42,718.93
Denmark (in respect of Faroe Islands and Greenland) (1)	162,059	21.64%	41,204.84	44,125.00	275,265.58
European Union	41,612	5.56%	-	58,880.40	87,073.18
France (in respect of St. Pierre et Miquelon)	902	0.12%	229.34	44,125.00	43,370.13
Iceland	126	0.02%	-	44,125.00	41,917.94
Japan	-	-	-	44,125.00	41,717.70
Republic of Korea	-	-	-	44,125.00	-
Norway	3,497	0.47%	-	4,977.30	45,021.74
Russian Federation	7,889	1.05%	-	11,119.50	49,527.25
Ukraine	-	-	-	44,125.00	42,118.19
United States of America	147,221	19.66%	37,432.16	44,125.00	238,857.11
	748,738	100.00%	\$176,500.00	\$1,059,000.00	\$1,668,708.00
Funds required to meet 1 January - 31 December 2014 Administrative Budget					\$1,765,000.00
(1) Faroe Islands					4,432 metric tons
Greenland					157,627 metric tons

## Annex 7. Preliminary Budget Forecast for 2015 and 2016

### NORTHWEST ATLANTIC FISHERIES ORGANIZATION

#### Preliminary Budget Forecast for 2015 and 2016

(Canadian Dollars)

	Preliminary Budget Forecast 2015	Preliminary Budget Forecast 2016
1. Personal Services		
a) Salaries	\$1,032,000	\$1,063,000
b) Superannuation and Annuities	291,000	294,000
c) Medical and Insurance Plans	99,000	99,000
d) Employee Benefits	69,000	63,000
Subtotal Personal Services	1,491,000	1,519,000
2. Additional Help	15,000	15,000
3. Communications	26,000	27,000
4. Computer Services	31,000	34,000
5. Equipment	31,000	36,000
6. Fishery Monitoring	36,000	37,000
7. Hospitality Allowance	3,000	3,000
8. Internship	16,000	21,000
9. Materials and Supplies	30,000	33,000
10. NAFO Meetings		
a) Sessional	101,000	102,000
b) Inter-sessional Scientific	40,000	40,000
c) Inter-sessional Other	30,000	30,000
Subtotal NAFO Meetings	171,000	172,000
11. Other Meetings and Travel	35,000	35,000
12. Professional Services	46,000	46,000
13. Publications	13,000	13,000
14. Recruitment and Relocation	12,000	12,000
	\$1,956,000	\$2,003,000



**SECTION II**  
(63–185)

**Report of the Fisheries Commission and its Subsidiary Body (STACTIC)**  
**35<sup>th</sup> Annual Meeting**

**23–27 September 2013**  
**Halifax, Nova Scotia, Canada**

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*Fisheries Commission in session*



*Veronika Veits - (President of NAFO and General Council Chair) and Sylvie Lapointe - (Fisheries Commission Chair)*

**Part I**  
**Report of the Fisheries Commission**  
(FC Doc. 13/30)  
**35<sup>th</sup> Annual Meeting, 23–27 September 2013**  
**Halifax, NS, Canada**

**I. Opening Procedure (*Agenda items 1–5*)**

**1. Opening by the Chair, Sylvie Lapointe (Canada)**

The meeting was opened by the Chair, Sylvie Lapointe (Canada), at 1415 hrs on Monday 23 September 2013. Representatives from the following Contracting Parties were in attendance: Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), European Union (EU), France (in respect of Saint-Pierre et Miquelon), Iceland, Japan, Republic of Korea, Norway, Russian Federation, and the United States of America (USA). The delegation from Ukraine was absent (Annex 1).

The presence of the observers was acknowledged. They represented Food and Agriculture Organization of the United Nations, Dalhousie University, Ecology Action Center, and World Wildlife Fund.

**2. Appointment of Rapporteur**

Ricardo Federizon, Fisheries Commission Coordinator (NAFO Secretariat), was appointed Rapporteur. The summary of decisions and actions taken by the Fisheries Commission is presented in Annex 2.

**3. Adoption of Agenda**

The provisional agenda as previously circulated was adopted (Annex 3).

**4. Review of Commission Membership**

It was noted that the membership of the Fisheries Commission is currently twelve (12). All Contracting Parties have voting rights in 2013.

**5. Guidance to STACTIC necessary for them to complete their work**

The Chair of the Standing Committee on International Control (STACTIC), Gene Martin (USA) presented the results of the STACTIC May 2013 intersessional meeting which was held in London, UK (FC Doc 13/4). He reported on the status of the proposals on changes in the NAFO Conservation and Enforcement Measures (NCEM). Two proposals regarding observer report templates and editorial changes on the NCEM will be forwarded. The STACTIC Chair advised that STACTIC will also work on reviewing port state measures in the context of the FAO Port State Agreement and exploring the possibility of standardized conversion factors for NAFO Regulatory Area (NRA) catch at this meeting. Regarding the Performance Review Panel (PRP) recommendation concerning catch discrepancies, it was noted that STACTIC will also continue to reflect on the methods of conducting catch comparisons on available data sources in accordance with the instructions of the Contracting Parties.

The Fisheries Commission commended STACTIC for its hard work and encouraged STACTIC to continue working on the pending issues.

**II. Implementation Review of Performance Review Panel (PRP) and Peer Review Expert Panel (PREP) (*Agenda items 6–8*)**

**6. Implementation Review of 2011 PRP Recommendations addressed to the Fisheries Commission and its subsidiary body STACTIC**

The Secretariat introduced FC WP 13/11 presenting the status of implementation of PRP recommendations addressed to FC and STACTIC. It was noted that there were eight recommendations originally addressed exclusively to FC, three of which were already acted upon by STACTIC.

The Chair noted three items on which FC could initiate action: development of framework for the presentation of key management decision (Recommendation 4.6.1), management of fishing capacity (Recommendation 4.7), and allocation of fishing rights (Recommendation 4.9). FC would continue to reflect on these items. Iceland reiterated its position that it is not favor of Recommendation 4.7.

As decided at the 34<sup>th</sup> Annual Meeting, FC will review the status of implementation of these recommendations next year.

#### **7. Implementation Review of 2011 PRP Recommendations addressed to more than one NAFO Body including the Fisheries Commission**

The Secretariat introduced FC WP 13/12 presenting the FC/STACTIC's latest actions and status of implementation of PRP recommendations addressed to more than one NAFO body including FC. The Chair noted that FC could initiate action on Compatibility of Measures (Recommendation 1 in GC Doc 12/1).

The Chair indicated that at this meeting FC is expected to continue addressing major PRP recommendations covering catch estimates discrepancies, FC-SC dialogue, catch reporting and data sharing, conservation plans and rebuilding strategies, biodiversity and ecosystem approach to fisheries management, Precautionary Approach, etc. A joint FC-SC session was held to reflect on these recommendations and identify more specific ways forward in addressing them. Actions and decisions taken at this meeting, as a result of the joint session, addressing these recommendations are reflected in various sections of the report.

As decided at the 34<sup>th</sup> Annual Meeting, FC will review the status of implementation of these recommendations next year.

#### **8. Review of 2012 PREP Recommendations addressed to the Fisheries Commission**

The Secretariat presented FC WP 13/13 which provided the background on the establishment of PREP and its mandate to examine the issue of catch estimates discrepancy as elaborated in the PRP Report (Recommendation 24 in GC Doc 12/1). The working paper also provided update and the latest actions of FC and STACTIC in response to the PREP recommendations which was delivered at the 34<sup>th</sup> Annual Meeting by the PREP Chair Bruce Atkinson.

It was noted that the response has been already incorporated or considered when the PREP completed its work and its final report was presented at the General Council (see GC Report). In the joint FC-SC session, Recommendation 24 and the PREP Report were discussed.

FC **created** an ad hoc working group chaired by the FC Chair and SC Chair. The ad hoc working group shall develop a plan to address any outstanding recommendation of the PREP, including an evaluation of potential approaches and data sources (e.g. daily catch data, tow by tow data, log books) in validating STATLANT 21 data and/or providing catch estimates. The ad hoc working group shall report back to FC and SC at the Annual Meeting in 2014 (Annex 4)

### **III. Scientific Advice (*Agenda items 9–10*)**

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

The Scientific Council (SC) Chair, Carsten Hvingel (Norway), presented the comprehensive and detailed scientific advice to the Fisheries Commission. The scientific advice on fish stocks and on other topics were mainly formulated during the June 2013 Scientific Council meeting (SCS Doc 13/17). Advice on shrimps was formulated during its meeting in September 2013 (SCS Doc 13/20). Advice on mesh size for 3LN redfish fisheries and Sargasso Sea was finalized at this meeting (SCS Doc 13/21). The scientific advice represents the response of SC to the requests from the FC formulated at the 34<sup>th</sup> Annual Meeting (FC Doc 12/25).

The following represents an overview of the scientific advice on the fish stocks which were fully assessed or monitored at the SC meetings. For brevity, only selected topics from special request items on fish stocks, Conservation Plans and Rebuilding Strategies (CPRS) and Vulnerable Marine Ecosystem are presented here. The complete list of request and the advice thereon are documented in FC Doc 12/25 and in the above mentioned SC meeting reports. The advice may contain special comments and caveats. The SC Chair urged FC to consult the details in the relevant SC meeting reports when considering conservation and management measures.



### 9.1 Scientific advice on fish stocks

- o **Shrimp in 3M.** No directed fishery.
- o **Shrimp in 3LNO.** No directed fishery.
- o **Capelin in 3NO.** No directed fishery for 2014-2015.
- o **Cod in 3M.** In the short term the stock can sustain values of  $F$  up to  $F_{max}$ .
- o **Redfish in 3M.** Scientific Council recommends not increasing the current TAC (6 500 t)
- o **White hake in 3NO.** Recommendation for 2014-2015: catches of white hake in Div. 3NO should not exceed their current levels of 100-300 t
- o **Yellowtail in 3LNO.** Fishing mortality up to 85%  $F_{msy}$  corresponding to a catch of 26 000 t in 2014 and 23 500 t in 2015 has low risk (<5%) of exceeding  $F_{lim}$ , and is projected to maintain the stock well above  $B_{msy}$
- o **Cod in 3NO.** Recommendation for 2014-2016: No directed fishery.
- o **Redfish in 3O.** Catches have averaged about 13 000 t since the 1960s and over the long term, catches at this level appear to have been sustainable. SC is unable to advise on a more specific TAC level.
- o **Northern Squid in SA 3+4.** Recommendation for 2014-2016: TAC of no more than 34 000 t/yr.
- o **Witch flounder in 2J3KL.** Recommendation for 2014-2016. No directed fishery.
- o **American plaice in 3M.** Re-iterated 2011advice: No directed fishery in 2014.
- o **Witch flounder in 3NO.** Re-iterated 2011advice: No directed fishery in 2014.
- o **Redfish in 3LN.** Re-iterated 2012 advice: Fishing mortality in 2014 should be kept around the current level.
- o **Thorny skate in 3LNO.** Re-iterated 2012 advice: Catches in Div. 3LNO in excess of recent levels (2009-11 average = 4 700 t) will increase the risk of the stock failing to rebuild.
- o **American plaice in 3LNO.** Re-iterated 2012 advice: No directed fishing in 2014.
- o **Greenland Halibut in 2+3KLMNO.** The Total Allowable Catch (TAC) for 2014 derived from the HCR is 15 441 t.

### 9.2 Scientific advice on Conservation Plans and Rebuilding Strategies (CPRS)

The SC Chair presented the responses and advice on the CPRS-related topics of  $B_{msy}$  and  $F_{msy}$  for 3M cod, Productivity and MSY reference points for 3NO cod, exploitable biomass, spawning stock biomass and reference points for 3NO witch flounder, and Consideration for reopening stocks under moratorium and sustainable harvest rates for healthy stocks. The responses and advice are referenced in pages 26-27, 34-35, 38-39 of SCS Doc 13/11.

### 9.3 Scientific advice on Vulnerable Marine Ecosystems (VMEs)

The SC Chair presented the responses and advice on the VME-related topics of encounter thresholds for VME indicator species, Analysis of fishing effort and assessment of risk Significant Adverse Impacts (SAI) on VMEs, and Sargasso Sea. The responses and advice are referenced in pages 27-34, 36-38, and 48-51 of SCS Doc 13/17 and in SCS Doc 13/21.

### 9.4 Other issues (as determined by the Chair of the Scientific Council)

The SC Chair informed FC of its increasing workload within the last few years such that it is reaching the limits of its resources and capabilities. The increase is due to the increasing amount of request items and the diversity of the request. SC appealed for more support in its capacity building from the Contracting Parties by sending more scientists and experts to the SC meetings.

### 9.5 Feedback to the SC regarding the advice and its work during this Meeting

The SC Chair's presentation engendered questions and enquiries for further clarification to which the SC

prepared responses during the meeting. The questions from FC and the responses from SC are compiled in Annex 5. These concern VMEs, 3LN redfish, 3M redfish, 3M cod, 3NO cod, 2+3KLMNO Greenland halibut, and 3O redfish. Questions on other stocks were also posed and responded to verbally at the meeting (e.g. 3L Shrimp).

#### **10. Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 2015 and on other matters**

In accordance with the new process adopted at the 34<sup>th</sup> Annual Meeting in developing questions and formulating requests to the SC (FC Doc 12/26), FC confirmed the composition of the steering committee: Neil Campbell (SC Coordinator), Estelle Couture (Canada) and Rafael Duarte (EU). The committee is tasked to coordinate with FC and SC in the drafting of the FC requests.

FC **adopted** FC WP 13/14 Rev2 containing its request to the Scientific Council for scientific advice on management in 2015 and beyond of certain stocks in Subareas 2, 3, and 4 and on other matters (Annex 6).

### **IV. Conservation of Fish Stocks in the Regulatory Area (*Agenda items 11–15*)**

#### **11. Meeting Report of the FC Working Group of Fishery Managers and Scientists on Conservation Plans and Rebuilding Strategies, July 2013 (WGFMS-CPRS)**

The Secretariat, on behalf of the Chair Jean-Claude Mahé (EU), presented the meeting report (FC Doc 13/5) and forwarded the recommendations for consideration and adoption.

FC **adopted** the recommendations presented in Annex 7. Regarding recommendation 1, FC noted the square-bracketed text relating to *Closing of Directed Fishing* in paragraph 5.d of the *General Framework on Risk-based Management Strategies*. It was decided that the matter will be forwarded for further evaluation to the new Joint FC-SC Working Group on Risk-based Management Strategies (see item 12).

#### **12. Draft Terms of Reference and workplan of the proposed Joint Fisheries Commission-Scientific Council Working Group on Risk-Based Management Strategies**

FC **adopted** the Terms of Reference of the new Joint Fisheries Commission-Scientific Council Working Group on Risk-Based Management Strategies (WG-RBMS) (Annex 8). Kevin Anderson (Canada) and Carsten Hvingel (Norway) were confirmed to be the co-Chairs of the working group.

#### **13. Management and Technical Measures for Fish Stocks in the Regulatory Area, 2014**

The Quota Table for 2014 and the Effort Allocation Scheme for the shrimp fishery in Division 3M is presented in Annex 9 of this report. Allocation schemes for the fish stocks mentioned in items 13 and 14 are the same as in 2013.

##### **13.1 Cod in Division 3M**

It was **agreed** to set the TAC 14 521 t, corresponding to the  $F_{max}$  as estimated by SC.

##### **13.2 Shrimp in Division 3M**

It was **agreed** that the fishing moratorium continues.

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

##### **13.3 Redfish in Division 3M**

It was **agreed** to rollover the TAC of 6 500 t. Articles 5.2 and 6.1 were amended to reflect changes to the closure notification process and to provide additional clarity with respect to by-catch provisions (see item 23).

#### **14. Management and Technical Measures for Fish Stocks Straddling National Fishing Limits, 2014**

##### **14.1 Redfish in Divisions 3LN**

It was **agreed** to increase the TAC to 7 000 t.

Article 13.2.f was **amended** setting the minimum mesh size of mid-water trawls to 90 mm (Annex 10).

#### 14.2 **Redfish in Divisions 3O**

It was agreed to set the TAC at 20 000 t, applicable in 2014 and 2015.

#### 14.3 **Pelagic *Sebastes mentella* (oceanic redfish) in the NAFO Convention Area**

It was **agreed** that the fishing moratorium continues in accordance with the most recent NEAFC decision adopted subsequently by NAFO and bearing in mind footnote 10 of the quota table.

The Russian Federation maintained its position that there is a single stock of pelagic *Sebastes mentella* in the Irminger Sea and adjacent waters, including the NAFO Convention Area, and expressed its intention to pursue studies into the population structure of pelagic reddish in the Irminger Sea and adjacent waters until agreed recommendations on the stock structure of this species are accepted within the ICES community.

#### 14.4 **American plaice in Divisions 3LNO**

It was **agreed** that the fishing moratorium continues.

#### 14.5 **Yellowtail flounder in Divisions 3LNO**

It was **agreed** to set the TAC at 17 000 t, applicable in 2014 and 2015.

#### 14.6 **Witch Flounder in Divisions 3NO**

It was **agreed** that the fishing moratorium continues.

#### 14.7 **White hake in Divisions 3NO**

It was **agreed** to set the TAC at 1 000 t.

Footnote 27 was **revised**, strengthening the mechanism for considering an in-season adjustment to the TAC along with a reduction in the amount to 2 000 t instead of 5 000 t (Annex 11).

#### 14.8 **Greenland halibut in Subarea 2 and Divisions 3KLMNO**

Consistent with the Management Strategy Evaluation (MSE) approach and applying the Harvest Control Rule (HCR), it was **agreed** to set the TAC at 15 441 t (11 442 t in Divisions 3LMNO).

FC **agreed** to continue using the current Management Strategy for additional three years (2015-2017). It requested the WG RBMS to provide a recommendation to FC at the 36<sup>th</sup> Annual Meeting on an approach and workplan to review the Management Strategy in 2017 (Annex 12). Article 10.1 of the NCEM would be revised to reflect this extension.

#### 14.9 **Shrimp in Division 3LNO**

It was **decided** that the TAC is set at 4 300 t, representing 50% of the 2013 TAC.

It was not a consensus decision. Some CPs were in favour of a reduced TAC, while others were in favour of a moratorium as noted in the advice for the stock. The decision was reached through a voting procedure in accordance with Article XIV of the NAFO Convention. On the proposition:

*An interim measure for 2014 of a 50% reduction of the TAC from the current level with a condition that additional measures would be adopted for 2015 if the 2013 fall survey point estimate from Scientific Council falls below the limit reference point.*

six CPs voted in favour, four CPs voted against, and one CP abstained.

Norway gave the following statement:

For the sake of transparency Norway would have preferred the vote on the management of shrimps in 3L to take place in the plenary. We do, however, respect that this was not the view of the majority. Whereas the majority of the Parties wanted to continue to fish in 2014 despite the very clear



scientific advice from the Scientific Council on no directed fishery, other Parties, including Norway, were in favor of following the scientific advice. In fact, the shrimp stock in 3L has been declining since 2007 and the Scientific Council has for some years now clearly indicated the downwards trend in the stock. So this year's advice could hardly have come as a surprise to anyone.

It has been argued that the stock decline is not due to fishery alone although there is no scientific evidence that this is the case. If this were the case, continued fishing would still worsen the state of the stock. It has also been argued that certain fishermen are dependent on this fishery for their livelihood. We fully understand the difficulties that closing of fisheries represents. Nevertheless, we remain convinced that overfishing on collapsing stocks will not contribute to the future of any fishermen. As I understand it the management model that has now been adopted is based on the model adopted a few years ago for 3M shrimp. Our experience in this respect speaks for itself. The 3M shrimp stock is now under moratorium. In our deliberations it has been stated that it is harmful for NAFO's image when we do not reach consensus on the management of stocks. In our view it would be very good for NAFO's image if we started to respect the advice given by the organization's own scientific body.

Iceland expressed that it did not support the 50% reduction and concurred with the view made by Norway. USA explained that its vote had been based on its acceptance of the advice of the Scientific Council.

#### **14.10 Northern shortfin squid in Subareas 3+4**

It was **agreed** to rollover the TAC of 34 000 t, applicable in 2014-2016.

#### **14.11 Capelin in 3NO**

It was **agreed** that the fishing moratorium continues in years 2014-2015.

#### **14.12 Cod in 3NO**

It was **agreed** that the fishing moratorium continues in years 2014-2016.

#### **14.13 Witch flounder in 2J +3KL**

It was **agreed** that the fishing moratorium continues in years 2014-2016.

### **15. Other Matters pertaining to Conservation of Fish Stocks**

A proposal aiming to ensure that shark finning is not applied in the NAFO Regulatory Area was tabled by the European Union and USA. The proposal did not garner universal support and it was eventually withdrawn.

Norway referred to the unregulated fishery for alfonsino in the NAFO Regulatory Area, and suggested that a precautionary TAC be set for this fishery. Due to lack of support, Norway then proposed that this issue should be considered by the new Working Group on Ecosystem Approach Framework to Fisheries Management (see item 17).

## **V. Ecosystem Considerations (Agenda items 16–19)**

### **16. Meeting Report of the FC Working Group of Fishery Managers and Scientists on Vulnerable Marine Ecosystems, April 2013 (WGFMS-VME)**

Bill Brodie (Canada) presented the meeting report (FC Doc 13/3) and forwarded the recommendations for consideration and adoption.

FC **adopted** the recommendations 1 and 2 as presented in Annex 13. The adopted recommendations entail extension of existing closed Areas 2, 7, 8, and 10 and addition of a new closed Area 12.

Regarding recommendation 3, FC did not decide on specific measures on Areas 13 and 14. Instead, the matter was referred to the new Working Group on Ecosystem Approach Framework to Fisheries Management for further evaluation (see item 17). Also, with new information from the EU Flemish Cap survey expected to be available later in 2013, FC requested SC to provide preliminary results or analysis regarding occurrence of sea pens in areas towed close to areas 13 and 14 and advise if these reveal significant concentrations of VME indicators (see Annex 6).

### **17. Draft Terms of Reference and workplan of the proposed Joint Fisheries Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management**

FC **adopted** the Terms of Reference of the new Joint Fisheries Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management (WG-EAFFM) (Annex 14). Robert Day (Canada) and Andrew Kenny (EU) were confirmed to be the co-Chairs of the working group.

### **18. Offshore petroleum exploration and production and their impact on fisheries and VMEs in the NAFO Regulatory Area**

The Secretariat reported on its participation to the stakeholders' meeting held on 17 September 2013 in St. John's Newfoundland, in connection with the development of Strategic Environment Assessment (SEA) conducted by Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB), the government agency responsible for the regulation of the petroleum offshore Newfoundland and Labrador (FC WP 13/15). The issues relevant to NAFO identified during that meeting were:

- What is the role of RFMO's in conducting environmental assessment studies in international waters, in this particular setting?
- How to deal with situations where seismic research activities (related to petroleum production) impact the fishery resources and interfere with fish stock assessment field research activities (related to fishing)
- How should petroleum and oil exploration and production activities respect the VME closures in international waters
- How to address this potential conflict of interest – while responsibility for seabed resources on the extended continental shelf lies with the coastal state, responsibility for living resources in the overlying waters resides with the relevant RFMO, like NAFO.

FC acknowledged the issues are very important that need to be addressed. Some CPs expressed their concerns that the petroleum activities of the coastal state impact the NAFO scientific research in the Regulatory Area. Some CPs also expressed concern that future oil and gas activities could potentially have an impact on fisheries and VMEs. They also indicated the need for more transparency from the side of the organizers of exploratory activities. NAFO should work in the best possible approach to find ways of co-existence with the petroleum sector. Canada indicated that there are established communications and coordination between those responsible for petroleum and fisheries activities, and through these mechanisms efforts are made to avoid overlaps and to mitigate potential conflicts.

It was agreed that NAFO should be engaged in the dialogue and in the SEA process. To that end, NAFO should provide input and comments through the WG-EAFFM within the established timeline of the SEA development, i.e. by February 2014 during the public review of the draft SEA Report. The comments have to be endorsed by the General Council before being submitted to C-NLOPB.

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

No other matter was discussed.

## VI. Conservation and Enforcement Measures (*Agenda items 20–23*)

### 20. Review of Chartering Arrangements

A report on chartering arrangements was presented by the Secretariat (FC WP 13/2). There were four (4) charter arrangements made during 2012 and three (3) during January - August 2013. The Secretariat noted full compliance with all the chartering requirements, specifically with regards to documentation, notification of implementation date, and reporting of charter catches, as stipulated in Article 23 of the NCEM.

### 21. Reports of STACTIC (from May 2013 intersessional meeting and this Annual Meeting)

The May 2013 intersessional meeting report was presented under item 5. The STACTIC Chair presented the results of the STACTIC meeting. The following NCEM recommendations coming from both meetings were forwarded to Fisheries Commission:

- a) *Proposed changes to NCEM – EDG* (STACTIC WP 13/4 Rev.2, Annex 15)
- b) *Standardization of observer program data and reporting requirements in the NRA* (STACTIC WP 13/14 Annex 16)
- c) *Proposed revisions to Article 3, 5 and 6 of the NCEM (Phase II)* (STACTIC WP 13/5 Rev. 4, Annex 17)
- d) *Fishing operations under a charter arrangement* (STACTIC WP 13/23 Rev, Annex 18)
- e) *Observer reporting* (STACTIC WP 13/25 Rev. 2, Annex 19)
- f) *Directed Species DS in Authorization message for transshipment* (STACTIC WP 13/29, Annex 20)

FC **adopted** recommendations a) - f).

In addition, FC **accepted** the *Annual Compliance Review 2013, for fishing year 2012* (STACTIC WP 13/17 Rev 3, Annex 21).

FC **adopted** the STACTIC Report as presented in Part II of this Report.

### 22. Draft Terms of Reference and Rules of Procedure for the proposal joint NEAFC/NAFO Advisory Group on Data Management

Mads Nedergaard (DFG), Chair of the *ad hoc joint NEAFC/NAFO Working Group on the possibility of making Advisory Group Data Communications (AGDC) a joint body of NEAFC and NAFO*, presented the meeting report (FC WP 13/3) and forwarded the following recommendations for consideration and adoption (Annex 22).

1. NEAFC and NAFO jointly establish a “Joint Advisory Group on Data Management” (JAGDM) as a joint body of NEAFC and NAFO, with the attached Terms of Reference and Rules of Procedure.
2. JAGDM be a successor body to the current AGDC
3. The establishment of JAGDM will become effective on the next 1 January after both NEAFC and NAFO have formally agreed to its establishment.

FC **adopted** the three recommendations.

### 23. Other Matters pertaining to Conservation and Enforcement Measures

Articles 5.2.b and 6.1.b of the NAFO Conservation and Enforcement Measures (NCEM) were **amended** to elaborate on the notification process when 50% and then 100% of the 3M redfish TAC is reached and to clarify a by-catch provision (Annex 23).

FC **amended** Article 28.5 of the NCEM making the daily catch reporting data specified in Article 28.2.c more easily accessible to SC and working groups (Annex 24). It was noted that this action addresses PRP recommendations concerning data access and catch estimates.

An ad hoc working group was **created** to reflect on the rules governing by-catches, discards and selectivity. The Terms of Reference is presented in Annex 25.

## **VII. Closing Procedure** (*Agenda items 24–27*)

### **24. Election of Chair**

Lapointe (Canada) was re-elected.

### **25. Time and Place of the Next Meeting**

This item was deferred to the General Council.

### **26. Other Business**

No other business was discussed.

### **27. Adjournment**

The meeting was adjourned at 9:30 hrs on Friday, 27 September 2013.

## Annex 1. List of Participants

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## Annex 2. Record of Decisions and Actions by the Fisheries Commission

(Annual Meeting 2013)

Substantive Issues (Agenda item):	Decision/Action:
8. Review of 2012 PREP Recommendations addressed to the Fisheries Commission	<b>Created</b> an ad hoc working group tasked to develop a plan to address any outstanding recommendation of the PREP, including an evaluation of potential approaches and data sources in validating STATLANT21 data and/or providing catch estimates (FC WP 13/25 Rev).
9. Presentation of scientific advice by the Chair of the Scientific Council	<b>Noted</b> Scientific Council Chair's presentation of the scientific advice and the SC Meeting Reports that contained the scientific advice (SCS Doc. 13/17, 13/20 and 13/21).
10. Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 2015 and on other matters	<b>Adopted</b> the FC Request to the SC for scientific advice (FC WP 13/14 Rev2).
11. Meeting Report of the Working Group of Fishery Managers and Scientists on Conservation Plans and Rebuilding Strategies, July 2013 (WGFMS-CPRS)	<b>Noted</b> the WG Meeting Report of July 2013 (FC Doc 13/5). <b>Adopted</b> the General Framework on Risk-based Management Strategies (FC WP 13/4 Rev2).
12. Draft Terms of Reference and workplan of the proposed Joint Fisheries Commission-Scientific Council Working Group on Risk-based management Strategies	<b>Adopted</b> the Terms of Reference of the Joint FC-SC Working Group (FC WP 13/7 Rev).
13. Management and Technical Measures for Fish Stocks in the Regulatory Area, 2014	(see 2014 Quota Table)
13.1 Cod in Division 3M	<b>Set</b> the TAC at 14 521 t.
13.2 Shrimp in Division 3M	<b>Agreed</b> to continue the moratorium.
13.3 Redfish in Division 3M	<b>Agreed</b> to rollover the 6 500-t TAC.
14. Management of Technical Measures for Fish Stocks Straddling National Fishing Limits, 2014	(see 2014 Quota Table)
14.1 Redfish in Divisions 3LN	<b>Set</b> the TAC at 7 000 t. <b>Amended</b> Article 13.2.f of the NCEM setting the minimum mesh size of mid-water trawls to 90 mm.
14.2 Redfish in Divisions 3O	<b>Set</b> the TAC at 20 000 t, applicable in 2014 and 2015.
14.3 Pelagic <i>Sebastes mentella</i> (oceanic redfish) in the NAFO Convention Area	<b>Agreed</b> to continue the moratorium.
14.4 American plaice in Divisions 3LNO	<b>Agreed</b> to continue the moratorium.
14.5 Yellowtail flounder in Divisions 3LNO	<b>Set</b> the TAC at 17 000 t, applicable in 2014 and 2015.
14.6 Witch flounder in Divisions 3NO	<b>Agreed</b> to continue the moratorium

14.7 White hake in Divisions 3NO	<b>Set</b> the TAC at 1 000 t. <b>Revised</b> Footnote 27 in the Quota Table, strengthening the mechanism for considering an in-season adjustment of the TAC. In-season adjustment of the TAC limited to of 2 000t instead of 5 000t (FC WP 13/32).
14.8 Greenland halibut in Subarea 2 and Divisions 3KLMNO	<b>Set</b> the TAC at 15 441 t (11 442 t in Divisions 3LMNO). <b>Agreed</b> to extend the implementation of the Management Strategy for additional three years (2015-2017) (FC WP 13/19 Rev).
14.9 Shrimp in Division 3LNO	<b>Decided</b> on TAC of 4 300 t.
14.10 Northern shortfin squid in Subareas 3+4	<b>Agreed</b> to rollover the TAC of 34 000 t, applicable in 2014-2016.
14.11 Capelin in Division 3NO	<b>Agreed</b> to continue the moratorium, applicable in years 2014-2015.
14.12 Cod in Division 3NO	<b>Agreed</b> to continue the moratorium, applicable in years 2014-2016.
14.13 Witch flounder in Divisions 2J + 3KL	<b>Agreed</b> to continue the moratorium, applicable in years 2014-2016.
16. Meeting Report of the Working Group of Fishery Managers and Scientists on VMEs, April 2013 (WGFMS-VME)	<b>Noted</b> the WG Meeting Report of April 2013 (FC Doc 13/3). <b>Adopted</b> the recommendation of extending the existing closed Areas 2, 7, 8, 10 and adding a new closed Area 12 (FC WP 13/5).
17. Draft Terms of Reference and workplan of the proposed Joint Fisheries Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management	<b>Adopted</b> the Terms of Reference of the Joint FC-SC Working Group (FC WP 13/8 Rev).
21. Reports of STACTIC (from May 2013 intersessional meeting and this Annual Meeting)	<b>Noted</b> the STACTIC May 2013 Intersessional Meeting Report (FC Doc 13/4) and the current meeting report (see Part II of this Report). <b>Adopted</b> Proposed changes to NCEM (STACTIC WP 13/4 Rev.2). <b>Adopted</b> Standardization of observer program data and reporting requirements in the NRA (STACTIC WP 13/14). <b>Adopted</b> Proposed revisions to Article 3, 5 and 6 of the NCEM (Phase II) (STACTIC WP 13/5 Rev. 4). <b>Adopted</b> Fishing operations under a charter arrangement (STACTIC WP 13/23, Revised). <b>Adopted</b> Observer reporting (STACTIC WP 13/25 Rev2). <b>Adopted</b> Directed Species DS in Authorization message for transshipment (STACTIC WP 13/29 Rev 2). <b>Accepted</b> Annual Compliance Review 2013, for fishing year 2012 (STACTIC WP 13/17 Rev3).
22. Draft Terms of Reference and Rules of Procedure for the proposed joint NEAFC/NAFO Advisory Group on Data Management	<b>Established</b> the joint NEAFC/NAFO Advisory Group on Data management and adopted its Terms of Reference and Rules of Procedure (FC WP 13/3).

23. Other Matters pertaining to Conservation and Enforcement Measures	<p><b>Amended</b> Articles 5.2.b and 6.1.b of the NCEM regarding notification process when 50% and then 100% of the TAC of 3M redfish is reached and clarification of a by-catch provision (FC WP 13/18 Rev4).</p> <p><b>Amended</b> Article 28.5 of the NCEM making daily catch report (CAT) data easily accessible to SC and working groups (FC WP 13/16 Rev).</p> <p><b>Created</b> an ad hoc working group tasked to reflect on the rules governing by-catches, discards and selectivity (FC WP 13/31).</p>
24. Election of Chair	<p><b>Re-elected</b> Sylvie Lapointe as the Chair of the Fisheries Commission.</p>

## **Annex 3. Agenda**

### **I. Opening Procedure**

1. Opening by the Chair, Sylvie Lapointe (Canada)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Review of Commission Membership
5. Guidance to STACTIC necessary for them to complete their work

### **II. Implementation Review of Performance Review Panel (PRP) and Peer Review Expert Panel (PREP) Recommendations**

6. Implementation review of 2011 PRP Recommendations addressed to the Fisheries Commission and its subsidiary body STACTIC
7. Implementation review of 2011 PRP Recommendations addressed to more one than one NAFO Body including the Fisheries Commission
8. Review of 2012 PREP Recommendations addressed to the Fisheries Commission

### **III. Scientific Advice**

9. Presentation of scientific advice by the Chair of the Scientific Council
  - 9.1 Scientific advice on fish stocks
  - 9.2 Scientific advice on Conservation Plans and Rebuilding Strategies (CPRS)
  - 9.3 Scientific advice on Vulnerable Marine Ecosystems (VMEs)
  - 9.4 Other issues (as determined by the Chair of the Scientific Council)
  - 9.5 Feedback to the SC regarding the advice and its work during this Meeting
10. Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 2015 and on other matters

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

11. Meeting Report of the Working Group of Fishery Managers and Scientists on Conservation Plans and Rebuilding Strategies, July 2013 (WGFMS-CPRS)
12. Draft Terms of Reference and workplan of the proposed Joint Fisheries Commission-Scientific Council Working Group on Risk-Based Management Strategies
13. Management and Technical Measures for Fish Stocks in the Regulatory Area, 2014
  - 13.1 Cod in Div. 3M
  - 13.2 Shrimp in Div. 3M
  - 13.3 Redfish in Div. 3M
14. Management and Technical Measures for Fish Stocks Straddling National Fishing Limits, 2014
  - 14.1 Redfish in Div. 3LN
  - 14.2 Redfish in Div. 3O
  - 14.3 Pelagic *Sebastes mentella* (oceanic redfish) in the NAFO Convention Area
  - 14.4 American plaice in Div. 3LNO
  - 14.5 Yellowtail flounder in Div. 3LNO

- 14.6 Witch flounder in Div. 3NO
  - 14.7 White hake in Div. 3NO
  - 14.8 Greenland halibut in Subarea 2 and Div. 3KLMNO
  - 14.9 Shrimp in Div. 3LNO
  - 14.10 Northern shortfin squid in Subareas 3+4
  - 14.11 Capelin in Div. 3NO
  - 14.12 Cod in Div. 3NO
  - 14.13 Witch flounder in Div. 2J+3KL
15. Other matters pertaining to Conservation of Fish Stocks

#### **V. Ecosystem Considerations**

- 16. Meeting Report of the Working Group of Fishery Managers and Scientists on Vulnerable Marine Ecosystems, April 2013 (WGFMS-VME)
- 17. Draft Terms of Reference and workplan of the proposed Joint Fisheries Commission-Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management
- 18. Offshore petroleum exploration and production and their impact on fisheries and VMEs in the NAFO Regulatory Area
- 19. Other matters pertaining to Ecosystem Considerations

#### **VI. Conservation and Enforcement Measures**

- 20. Review of Chartering Arrangements
- 21. Reports of STACTIC (from May 2013 intersessional meeting and this Annual Meeting)
- 22. Draft Terms of Reference and Rules of Procedure for the proposed joint NEAFC/NAFO Advisory Group on Data Management
- 23. Other matters pertaining to Conservation and Enforcement Measures

#### **VII. Closing Procedure**

- 24. Election of Chair
- 25. Time and Place of Next Meeting
- 26. Other Business
- 27. Adjournment

#### **Annex 4. Ad hoc Working Group on Catch Reporting**

(FC Working Paper 13/25 Revised **now** FC Doc. 13/24)

Recalling that the NAFO Performance Review Panel recommended that the Fisheries Commission and the Scientific Council promptly resolve any discrepancies between STATLANT 21A catch estimates and those of STACFIS (*Report of the NAFO Performance Review 2011*)

Recalling that the Contracting parties have identified the resolution of this issue as a priority (GC Doc 12/1)

Noting the work of the peer-review panel established to review STACFIS estimates, and their recommendations regarding the methodology used for scientific catch estimates

Mindful that the reliability of catch data continues to be one of the most significant issues facing NAFO

Mindful that accurate reporting and / or estimation of catches is critical for scientific assessment and sustainable management of NAFO stocks

Noting the many valuable recommendations of the peer-review panel, including:

- o The need for a more coordinated analysis of data, including STATLANT data; enforcement data; and scientific information, in particular to help verify the accuracy of STATLANT data;
- o The continued exploration of VMS and other data sources for innovative approaches to verify and compare information, while respecting confidentiality;
- o A transparent accounting of the scientific catch estimates process, including when and they are required, clear justification for lack of faith in STATLANT data, and how estimates can be used more consistently and effectively when necessary; and
- o The need for more coordination of scientific and NAFO observer data, in particular on a tow-by-tow basis

Noting that related work is ongoing in the Fisheries Commission, including STACTIC, and the Scientific Council and the importance that this work be done in a coherent way

Recognizing the importance of ongoing communication between the Fisheries Commission and the Scientific Council

Recognizing that the NAFO Secretariat can play an active support role in the provision of data and analyses

*Recommend that:*

1. Based on recommendations received to date from the peer review, an *ad hoc* technical working group be established to provide recommendations on ensuring accurate catch data to support the sustainable management of NAFO stocks and in particular the associated scientific assessments.
2. The *ad hoc* working group be chaired by Chairs of the Fisheries Commission and the Scientific Council and include participants from FC and SC with support from the Secretariat.
3. The *ad hoc* working group would also develop a plan to , *inter alia*:
  - a. address any outstanding recommendations of the Peer Review,
  - b. 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
  - c. recommend priority stocks for initial consideration
  - d. provide advice on possible terms of reference (governance, participation) if it is advised that this *ad hoc* group continue.
4. The *ad hoc* working group report back to the Scientific Council and to Fisheries Commission during the Annual Meetings of 2014 on progress and recommendations which may include the continuation of working group.
5. The FC Chair is asked to forward this WP to the SC Chair for SC consideration.

## Annex 5. Scientific Council Responses to Questions from the Fisheries Commission (FC Working Paper 13/27)

Clarification and additional advice from the Scientific Council on the subject indicated below to be considered for management options in 2014.

### VMEs

1. *The Fisheries Commission Working Group on Vulnerable Marine Ecosystems (WGFMS-VME) considered the scientific advice available at the time of its last meeting held in April 2013. No consensus was reached between Contracting Parties regarding specific management measures that are best suited in protecting areas 13 and 14 as reflected in Figure 2 of the Working Group report (NAFO/FC Doc. 13/3) and defined by the coordinates indicated in page 10 of that report.*

*New information from the EU Flemish Cap survey was expected to be available on sea pens later in 2013, which would help to clarify what type of management measures would best suit areas 13 and 14.*

The Fisheries Commission requests the Scientific Council to provide the Fisheries Commission with the preliminary results or analysis, regarding occurrence of sea pens in areas towed close to areas 13 and 14 and advise if these reveal significant concentrations of VME indicators.

#### Scientific Council responded:

The Flemish Cap survey finished in late July 2013 and data is still preliminary. This will be examined by WG-ESA in November 2013, as part of their review of VME closures, and presented to Scientific Council at its next meeting. Scientific Council deferred answering this request until this analysis has been carried out.

### Stocks

2. *Regarding 3LN redfish, the Scientific Council recommends for 2013 and 2014 a fishing mortality “around the current level” (corresponding to a TAC of 6 346 t), which is around 1/6 of  $F_{msy}$  (TAC of 6 287 t) and a relatively low level when compared to the advice of other NAFO stocks. The Scientific Council also advised that increases should be treated with “caution”. In 2012 the Fisheries Commission adopted a TAC of 6 500 t.*

The Fisheries Commission requests the Scientific Council to consider the most recent survey trends and advice if an increase in TAC to 7 000 t for 2014 is sustainable.

#### Scientific Council recommended:

A range of catch options for this stock was provided in 2012 for 2013 and 2014. This advice was reviewed in 2013 and Scientific Council concluded that there was no basis to change this advice. As this stock is estimated to be above  $B_{msy}$ , the level of acceptable risk should be set by managers. Scientific Council does not have the capacity to fully evaluate stock management advice at the September meeting.

3. *The catch composition of 3M redfish includes three species (*Sebastes mentella*, *S. marinus* and *S. fasciatus*). The assessment is focused on beaked redfish, which is a composition of only two species (*S. mentella* and *S. fasciatus*) that dominated catches and stock biomass as estimated by surveys, up to 2005. Since 2005, catches of *S. marinus* increased and this species is not directly accounted for by the assessment. The Fisheries Commission requests the Scientific Council to clarify how *S. marinus* is accounted for in the advice and if the recent change in catch composition is reflected in the recommended TAC.*

#### Scientific Council responded:

Div. 3M Redfish advice already incorporates *S. marinus*. Once the advised TAC for beaked redfish is determined, it is raised using the two most recent year average proportion of *S. marinus* found in the redfish catches of the Spanish, Portuguese and Russian fleets.

A separate Div. 3M *S. marinus* assessment may be considered for the future.

4. *The results of the 3M cod stock assessment and analysis on biological reference points for 3NO cod (SCR Doc. 13/40) show that there is an apparent inconsistency between the two cod stocks regarding fishing mortality reference points. For 3M cod,  $F_{max}$  is at the level of natural mortality while for 3NO cod it is  $F_{0.1}$  which is at the level of natural mortality. Both stocks are at different conservation status and 3NO cod is under a*



*moratorium. The Fisheries Commission requests the Scientific Council to analyse the apparent inconsistency between reference points of the two cod stocks, considering the selectivity patterns and if fishing mortality reference points for 3M cod could be underestimated.*

**Scientific Council responded:**

In the calculation of the  $F_{max}$  for Div. 3M and 3NO cod, two different age ranges are used to estimate average fishing mortality ( $F_{bar}$ ). Their absolute values can therefore not be directly compared. The use of a different reference age range in the  $F_{bar}$  calculation of the Div. 3M cod would change the value of  $F_{max}$ , however result in the same yield advice.

5. *For 3M redfish the Scientific Council recommends not to increase the current TAC of 6500 t, based on weaker incoming recruitment and uncertainty on current levels of natural mortality. Projections performed assuming current fishing mortality and natural mortality levels of 0.125 and 0.4 estimate median yields of respectively 9518 t and 5812 t for 2014. The Fisheries Commission requests advice on whether it would be reasonable to assume an intermediate scenario of natural mortality, with corresponding yield levels for 2014 and 2015 under the current fishing mortality.*

**Scientific Council responded:**

Scientific Council reiterates its advice from June 2013. Given the uncertainty about the actual level of current natural mortality (M) (see STACFIS 2013) and its impact on short term model projections, Scientific Council decided not to use model predictions as basis for the recommendation.

6. *Regarding the productivity of 3NO cod and the definition of MSY reference points, the Scientific Council recommended  $F_{0.1}$  or  $F_{35\%SPR}$  as an interim target for fishing mortality and the level of 180 000-185 000 t of SSB as an interim B target. The Fisheries Commission seeks clarification from the Scientific Council on the derivation of the target reference points and on the possibility to use B target as a proxy for  $B_{msy}$ .*

**Scientific Council responded:**

One of the difficulties with estimating reference points for this stock is the poorly defined stock recruit relationship. When there are clear fit problems of the stock recruitment relationship, one of the recommended  $F_{msy}$  or  $F_{lim}$  proxies is the Yield per Recruit reference point  $F_{max}$ .

In 2012 Scientific Council noted that the approach used in estimation of the Div. 3NO cod maximum sustainable yield (MSY) reference points in 2011 may not be advisable due to the high uncertainty in the stock recruit relationship for this stock. Scientific Council recommended the use of proxies based on the yield per recruit (YPR) and spawner per recruit (SPR) to estimate the reference points for cod in Div. 3NO.

Using the NAFO Precautionary Approach Framework, the Scientific Council proposed  $F_{0.1}$  (0.19) or  $F_{35\%}$  (0.20) as a possible  $F_{target}$ . The reason to choose these value is that a small reduction in the YPR gives a precautionary level of  $F$  that has a very low probability to be higher than  $F_{lim} = F_{max}$  (less than 5%).

Scientific Council noted that the level of Biomass reference points estimated from YPR and spawners-per-recruit (SPR) depends on assumptions about the level of recruitment. Only recruits from spawning stocks larger than  $B_{lim}$  were sampled because only recruitment in a fully productive stock should be taken into account when calculating MSY reference points.

The recommended  $B_{target}$  and  $F_{target}$  values have a very low probability of being above  $F_{lim}$  or below  $B_{lim}$ . These interim targets are proposed until more stock recruitment and productivity regime information is available to better estimate MSY based reference points.

7. *A number of Contracting Parties have expressed willingness to postpone the review of the Greenland Halibut management strategy to 2016. In view of its workload and especially of the foreseen reassessment of the impact of bottom fishing activities in 2016, the Fisheries Commission requests the advice from the Scientific Council on the feasibility to evaluate the Greenland Halibut management strategy by 2016 (or alternatively by 2017).*

**Scientific Council responded:**

Scientific Council considers that a postponement of the review of the Greenland halibut management strategy would be appropriate. Given the current lack of catch data it would not be possible to fully review



the MSE in 2014. It is suggested that such a review be carried out in 2017, to allow evaluation against performance statistics (biomass in 2016, relative to 2011) and to avoid excessive workload in light of the reassessment of bottom-fishing activities due in 2016. Scientific Council will continue to monitor primary indicators.

8. *Re Div. 30 Redfish: The 2012 TAC seems to be based on average catches over a very long period of time. The SC has advised on TACs based on catches over a much shorter period of time. In the case of Div. 3NO white hake and Div. 3LNO skates. What is the scientific basis of setting a TAC based on a fifty-year average of catches?*

**Scientific Council responded:**

Redfish are a long lived species, compared to thorny skate and white hake. To evaluate sustainable catch levels for a long-lived species like redfish, an extensive time series of catches and biomass is needed and catch data exists for the Div. 30 redfish stock since 1960.

## **Annex 6. Fisheries Commission’s Request for Scientific Advice on Management in 2015 and Beyond of Certain Stocks in Subareas 2, 3 and 4 and Other Matters**

(FC Working Paper 13/14 Rev2 **now** FC Doc. 13/22)

1. The Fisheries Commission with the concurrence of the Coastal State as regards to the stocks below which occur within its jurisdiction (“Fisheries Commission”) requests that the Scientific Council provide advice in advance of the 2014 Annual Meeting, for the management of Northern shrimp in Div. 3M and in Div. 3LNO in 2015. The advice should be provided as a range of management options and a risk analysis for each option (rather than a single TAC recommendation) in accordance to Annex A or B as appropriate.
2. Fisheries Commission requests that the Scientific Council provide advice for the management of the fish stocks below according to the assessment frequency presented below. The advice should be provided as a range of management options and a risk analysis for each option (rather than a single TAC recommendation).

### **Two year basis**

American plaice in Div. 3LNO  
 Capelin in Div. 3NO  
 Cod in Div. 3M  
 Redfish in Div. 3LN  
 Redfish in Div. 3M  
 Thorny skate in Div. 3LNO  
 White hake in Div. 3NO  
 Yellowtail flounder in Div. 3LNO

### **Three year basis**

American plaice in Div. 3M  
 Cod in Div. 3NO  
 Northern shortfin squid in SA 3+4  
 Redfish in Div. 3O  
 Witch flounder in Div. 2J+3KL  
 Witch flounder in Div. 3NO

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

In 2014, advice should be provided for 2015 only for Witch Flounder in Div. 3NO, for 2015 and 2016 for American plaice in Div. 3LNO, Redfish in Div. 3LN, Thorny skates in Div. 3LNO and for 2015, 2016 and 2017 for American plaice in Div. 3M.

Advice should be provided using the guidance provided in **Annexes A or B as appropriate**, or using the predetermined Harvest Control Rules in the cases where they exist.

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

3. The Fisheries Commission adopted in 2010 an MSE approach for Greenland halibut stock in Subarea 2 + Division 3KLMNO (FC Doc. 10/12). This approach considers a survey based harvest control rule (HCR) to set a TAC for this stock on an annual basis. The Fisheries Commission requests the Scientific Council to:
  - a) Monitor and update the survey slope and to compute the TAC according to HCR adopted by the Fisheries Commission according to Annex 1 of FC Document 10/12.
  - b) Advise on whether or not an exceptional circumstance is occurring.
4. The scientific advice for Div. 3LNO shrimp is based on the assessment of fishable biomass and the trends of exploitation rates. Interactions between stocks are likely to occur and may substantially contribute to the total mortality of shrimp.

The Fisheries Commission requests the Scientific Council to incorporate as much as possible information on stock interaction between these stocks in the management advice of Div. 3LNO shrimp and to provide sustainable exploitation rates on that basis.

5. The Fisheries Commission requests the Scientific Council to continue the work on reference points and provide  $B_{msy}$  and  $F_{msy}$  for cod in Div. 3M.
6. The Fisheries Commission requests the Scientific Council to provide reference points for Div. 3NO witch flounder including  $B_{lim}$ ,  $B_{msy}$  and  $F_{msy}$  through modelling or proxies.
7. The Fisheries Commission requests the Scientific Council to conduct a full assessment of Div. 3M cod and provide advice for 2015 on a range of management options and associated risks regarding reference points, according to Annexes A or B.
8. The Fisheries Commission requests the Scientific Council to develop a work plan to perform a Management Strategy Evaluation for Div. 3M cod, to explore operating models that could be used and report back through the Working Group on Risk-Based Management Strategies.
9. The Fisheries Commission requests the Scientific Council to analyze and provide advice on management measures that could improve selectivity in the Div. 3M cod and Div. 3M redfish fishery in the Flemish Cap in order to reduce possible by catches and discards. The objective is to reduce the mixed fisheries between cod and redfish, the by-catch of non-targeted stocks and to analyze if the selectivity pattern could be improved to reduce the catch of undersized fish.
10. The Scientific Council provides advice for a number of stocks based only on qualitative assessments of survey trends and catches (e.g. Div. 3NO white hake, Div. 3O redfish). For some of these stocks the advice is to lower the TAC to recent level of catches. On the other hand, there is an important effort in biological sampling, collection of fishing activity data and fishery independent surveys. There is also an important progress in providing more data to the Scientific Council such as VMS. In spite of these efforts, no progress has been reached regarding quantitative assessments of many stocks. The Fisheries Commission requests the Scientific Council to provide an overview for all stocks on what biological and fishery information is currently available by Contracting Party and what is necessary to improve in terms of data collection in order to develop quantitative assessments and biological reference points for stocks managed by NAFO.
11. The Fisheries Commission requests the Scientific Council to explore models that could be used to conduct a Management Strategy Evaluation for Div. 3LN redfish and report back through the Working Group on Risk-Based Management Strategies during their next meeting.
12. The Fisheries Commission requests the Scientific Council to continue to develop work on Significant Adverse Impacts in support of the reassessment of NAFO bottom fishing activities required in 2016, specifically an assessment of the risk associated with bottom fishing activities on known and predicted VME species and elements in the NRA.
13. Considering that the current closures for VME indicators (i.e. species and elements in Annex I.E VI and VII) established under Chapter II of the NAFO Conservation and Enforcement Measures (NCEM) are due for revision in 2014, the Fisheries Commission requests the Scientific Council to:
  - a. Summarize and assess all the data available collected through the NEREIDA project, CP RV surveys, and any other suitable source of information, to identify VMEs in the NRA, in accordance to FAO Guidelines and NCEM.
  - b. Based on these analyses, evaluate and provide advice in the context of current closures specified in the NCEM for the protection of VMEs and prioritize areas for consideration by the Ecosystem Approach to Fisheries Working Group.
14. Recognizing the work done in NAFO to prevent significant adverse impacts to vulnerable marine ecosystems, and the need for effective stock assessments;

Further recognizing that modifications to survey designs occur on regular basis in fisheries surveys in many cases,

Fisheries Commission requests that Scientific Council investigate the impacts of removing the closed areas from the survey design for relevant stock surveys for consideration in the review of closed areas in 2014.

15. The Fisheries Commission Working Group on Vulnerable Marine Ecosystems (WGFMS-VME) considered the scientific advice available at the time of its last meeting held in April 2013. No consensus was reached between Contracting Parties regarding specific management measures that are best suited in protecting areas 13 and 14 as reflected in Figure 2 of the Working Group report (NAFO/FC Doc. 13/3) and defined by the coordinates indicated in page 10 of that report.

New information from the EU Flemish Cap survey was expected to be available on sea pens later in 2013, which would help to clarify what type of management measures would best suit areas 13 and 14.

The Fisheries Commission requests the Scientific Council to provide the Fisheries Commission with the preliminary results or analysis, regarding occurrence of sea pens in areas towed close to areas 13 and 14 and advise if these reveal significant concentrations of VME indicators.

16. The Fisheries Commission requests the Scientific Council to evaluate and provide recommendations on the methodology for establishing standardized conversion factors outlined in STACTIC WP 13/3.

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

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

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

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

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

- For stocks opened to direct fishing:  $2/3 F_{msy}$ ,  $3/4 F_{msy}$ ,  $85\% F_{msy}$ ,  $75\% F_{2013}$ ,  $F_{2013}$ ,  $125\% F_{2013}$
- For stocks under a moratorium to direct fishing:  $F_{2013}$ ,  $F = 0$ .

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

Results from stochastic short term projection should include risks of stock population parameters increasing above or falling below available biomass and fishing mortality reference points. The table indicated below should guide the Scientific Council in presenting the short term projections.

				Limit reference points												
				P(F>Flim)			P(B<Blim)			P(F>Fmsy)			P(B<BmsyP)			P(B2016 > B2013)
F in 2014 and following years*	Yield 2014 (50%)	Yield 2015 (50%)	Yield 2016 (50%)	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	
	$2/3 F_{msy}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%
$3/4 F_{msy}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$85\% F_{msy}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$0.75 \times F_{2013}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$F_{2013}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$1.25 \times F_{2013}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$F=0$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%

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

- historical yield and fishing mortality;
- spawning stock biomass and recruitment levels;
- Stock trajectory against reference points

And any information the Scientific Council deems appropriate

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

- For stocks opened to direct fishing:  $F_{0.1}$ ,  $F_{max}$ ,  $2/3 F_{max}$ ,  $3/4 F_{max}$ ,  $85\% F_{max}$ ,  $75\% F_{2013}$ ,  $F_{2013}$ ,  $125\% F_{2013}$ ,
- For stocks under a moratorium to direct fishing:  $F_{2013}$ ,  $F = 0$ .
- The first year of the projection should assume a catch equal to the agreed TAC for that year.

Results from stochastic short term projection should include:

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

				Limit reference points												
				$P(F > F_{lim})$			$P(B < B_{lim})$			$P(F > F_{0.1})$			$P(F > F_{max})$			$P(B_{2016} > B_{2013})$
F in 2014 and following years*	Yield 2014	Yield 2015	Yield 2016	2014 2015 2016			2014 2015 2016			2014 2015 2016			2014 2015 2016			
				2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	
$F_{0.1}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$F_{max}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$66\% F_{max}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$75\% F_{max}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$85\% F_{max}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$0.75 \times F_{2013}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$F_{2013}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
$1.25 \times F_{2013}$	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%

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

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

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

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

And any information the Scientific Council deems appropriate.



## **Annex 7. 2013 Recommendations from the WGFMS-CPRS to the Fisheries Commission** (FC Working Paper 13/4 Rev2 **now** FC Doc. 13/29)

The FC Working Group of Fishery Managers and Scientists on Conservation Plans and Rebuilding Strategies (WGFMS-CPRS) met on 9-11 July 2013 in Saint-Pierre et Miquelon and agreed on the following recommendations (meeting report, FC Doc. 13/5):

### **1. On General Framework**

**The WG recommends that General Framework on Risk-based Management Strategies (Annex 1) be adopted.**

### **2. On Development of alternative strategies for stocks that may not be suited to formulaic rules and/or for stocks where reference points do not exist or cannot be developed**

**The WG recommends that this item be retained in the agenda of the proposed joint FC-SC WG-RBMS.**

### **3. On Update of 3NO cod CPRS**

**The WG recommends FC to request SC clarify in September 2013 the derivation of target reference points, including on the possible use of  $B_{target}$  as a proxy for  $B_{msy}$ .**

### **4. On Development of CPRS for 3NO witch flounder, 3LN redfish and 3M cod**

4.1 Concerning 3NO witch flounder, the WG recommends FC to request SC in providing reference points including  $B_{lim}$ ,  $B_{msy}$  and  $F_{msy}$  (e.g. through modelling or proxy). The WG further recommends that FC, jointly with SC, request the FC-SC WG-RBMS continue the consideration of CPRS development during scheduled meetings.

4.2 Concerning 3LN redfish, the WG recommends that FC, jointly with SC, request the WG-RBMS to meet intersessionally (in person or electronically) as needed to continue the development of the CPRS possibly in the form of MSE. An initial meeting would occur prior to the June 2014 SC meeting.

4.3 Concerning 3M cod, the WG recommends FC to request SC continue the work on reference points and provide  $B_{msy}$  and  $F_{msy}$  proxies. The WG further recommends that FC, jointly with SC request the FC-SC WG-RBMS to meet intersessionally (in person or electronically) and continue to develop the CPRS, including defining management objectives and performance statistics.

### **5. On Management Strategy Evaluation (MSE) Greenland halibut and shrimp**

5.1 Concerning 2+3KLMNO Greenland halibut, the WG recommends a review focusing on the performance of the current Management Strategy and HCR in order to assess if the initial objectives of the rebuilding programme are being met. The WG further recommends FC to consider developing a work plan for the Greenland halibut MSE review with a view to take a decision in September 2014.

5.2 Concerning 3L Shrimp, the WG recommends FC to consider requesting the WG-RBMS to start developing a management strategy, including HCR.

## Annex 1. General Framework on Risk-based Management Strategies

### 1. Introduction:

The purpose of this document is to provide guidance on the development and implementation of risk management strategies based on the application of the Precautionary Approach framework.

While not intended to be a template, the following are recommended elements for the development and implementation of risk based management strategies

### 2. Biological Synopsis / Fishery Overview:

A brief overview outlining the main biological characteristics of the stock with emphasis on the aspects which impact rebuilding of the stock, as appropriate, including:

- A species' **life history characteristics** (e.g. growth rates, fecundity, longevity, age-at-maturity, size-at-maturity) - critical elements to consider in determining a stock's response to both fishing pressures and rebuilding measures
- **Multispecies interactions** – these can have a strong influence on stock recovery potential and ability of all stocks to reach MSY
- **Environmental conditions** (e.g. temperature, salinity) - will impact the rebuilding dynamics of a stock by affecting life history characteristics, such as fecundity, growth and general productivity. Environmental conditions will also influence predator and prey abundance, which in turn impacts a stocks' overall health and recruitment.

A brief overview of the fisheries in which the stock is captured, including both targeted catch and by-catch, including:

- Impacts of rebuilding on other fisheries - rebuilding efforts for a depleted stock harvested in a mixed-stock or multispecies fishery may have impact on / be impacted by fishing opportunities on targeted stocks/species whose populations are healthy

### 3. Objective(s):

Objectives (fishery and conservation related) should be clearly stated and direct the development of specific measures. Milestones may also be established as interim steps to achieving objectives.

Objectives and milestones may take into account the following components:

- A target, which is preferably quantifiable (e.g. specified biomass goal)
- A desired time to reach the target (e.g. specified # of years/ generations)
- An acceptable probability level for reaching the target within the specified timeframe

The long-term objective of a Risk-based Management Strategy is to achieve and to maintain the Stock Biomass and the Fishing Mortality in the 'safe zone', as defined by the NAFO Precautionary Approach framework and to ensure that fisheries resources are maintained at or restored to levels capable of producing maximum sustainable yields, according to the Convention objectives (resolution NAFO/GC Doc. 08/3).

### 4. Reference Points:

The level of information available to perform a quantitative assessment and to define biological reference points may vary considerably between stocks. There are currently stocks with an adopted quantitative assessment and with limit and/or potential target reference points defined but there are stocks with inadequate information to perform a quantitative assessment and for which the definition of reference points is difficult or not possible.

Where limit reference points can be defined, they should be calculated by the Scientific Council (SC).

SC should also provide advice and analysis in support of the development of other reference points (e.g. targets).

## 5. Guidance on Management Strategies and Harvest Control Rules<sup>1</sup>

### a. Stocks below limit reference point

- no directed fishing, and
- by-catch should be restricted to unavoidable by-catch in fisheries directing for other species

### b. Re-opening to direct Fishing:

A decision to reopen the fishery should only be considered when Biomass is above  $B_{lim}$ .

When a stock has recovered beyond  $B_{lim}$ , initial TAC levels should be set at conservative levels to allow for continued recovery and growth.

Decisions to reopen a fishery should take into account any available risk analysis.

Where quantitative risk analysis is available, reopening the fishery should only be considered when there is a very low<sup>2</sup> probability of Biomass actually being below  $B_{lim}$ .

In the absence of a quantitative risk analysis, a decision to reopen a fishery would only occur when FC has a high degree of confidence, taking into account any available advice/analysis from SC, that biomass is above  $B_{lim}$  or its proxy. Any subsequent increases in TAC should be gradual in order to allow for monitoring of the stock response to the fishery.

### c. Open fisheries:

The NAFO Precautionary Approach framework should be applied and Harvest Control Rules (HCR) should be developed in order to specify actions to be taken.

Fisheries specific harvest control rules should be designed with the objective of keeping the fishery in the safe zone.

There should be a low probability that fishing mortality will exceed  $F_{lim}$ .

Scenarios may be considered which mitigate decline in biomass and/or limit increases in TACs as a means to balance fishery socio-economics and long-term conservation objectives.

### d. Closing of Directed Fishing:

(As noted in NAFO's PA Framework, a fishery will be closed when it is below  $B_{lim}$ . Fisheries Managers will consider the probability and establish risk tolerance taking into consideration short term projections and stock fluctuations.)

### e. Additional management measures

When practical, considerations may be given to specific management measures to reduce fishing mortality associated with bycatch including discards, and/or improve selectivity.

## 6. Ecosystem Considerations:

Risk-based management strategies should be consistent with the ecosystem approach and take into consideration the associated species.

## 7. By-catch provisions:

For closed fishery, by-catch provisions in the CEMs should be reviewed periodically, to coincide with scheduled assessments of the stock by Scientific Council, and adjusted to reflect the overall trend in spawning stock biomass.

<sup>1</sup> Noting the merits of quantifiable and testable harvest control rules, these aspects should be considered, on a stock by stock basis, in the development of risk-based management strategies.

<sup>2</sup> The actual level of risk should be specified by managers.

## **8. Monitoring and Review:**

Reviews should be completed on a regular basis at intervals such that failures of the plan (e.g. prolonged declining or stagnant stock growth) can be detected, and changes made as required.

On-going changes in stock status, resulting in implementation of associated harvest decision rules should be continuously examined; trends observed in long-term monitoring are an essential element for consideration in reviewing rebuilding plan performance.

Additional management action may be considered if the stock does not show signs that rebuilding is occurring.

## **Annex 8. Terms of Reference of the Joint Fisheries Commission-Scientific Council Working Group on Risk-Based Management Strategies**

(FC Working Paper 13/7 Rev **now** FC Doc 13/18)

### **Structure:**

The Working Group shall be comprised of fishery managers and scientists from Contracting Parties supported by experts and advisors.

The work form may be an open forum/dialogue at the discretion of the chairs of the working group and with the consent of Contracting Parties.

Recommendations to Fisheries Commission shall be developed through formal sessions of official delegations.

The Co-Chairs shall be selected from participating fishery managers and scientists with both a fishery manager and a scientist represented in the two positions.

Accredited observers may attend meetings of the working group Participation will be subject to the *NAFO Rules of Procedure*.

If a Contracting Party so requests, particular agenda items of the meeting, or parts thereof, shall be restricted to delegates representing Contracting Parties and Scientific Council. A total of up to two persons per non-governmental organizations that have been given the right to participate as observers shall be permitted.

The Working Group on Risk-Based Management Strategies reports to both the Fisheries Commission and Scientific Council; considers the advice of Scientific Council; and provides recommendations to Fisheries Commission.

### **Objective:**

The main objectives of the Working Group are to make recommendations to the Fisheries Commission and feedback to Scientific Council on the development and effective implementation of management strategies, based on the application of the precautionary approach, including conservation plans and rebuilding strategies, and to facilitate dialogue between SC and FC

### **Specific Duties:**

In responding to requests for advice and recommendations from the Fisheries Commission, considering the associated advice of Scientific Council, the Working Group shall:

- Review, update and further develop a general framework including management objectives and performance statistics for the elaboration of management strategies, conservation plans and rebuilding strategies for all NAFO managed stocks.
- Evaluate, and as appropriate update and develop new ones where none exist, all management strategies, conservation plans and rebuilding strategies implemented in NAFO with respect to the Precautionary Approach framework, management objectives and performance statistics.
- Develop alternative strategies for stocks that may not be suited to formulaic rules and/or for stocks where reference points do not exist or cannot be developed.
- Consider all matters related to use of the NAFO Precautionary Approach framework.
- Consider risk management approaches in the review, update and future development of Conservation Plans and Rebuilding Strategies.

### **Meetings:**

Meetings may be held at the request of the Fisheries Commission or the Scientific Council, in consultation with Contracting Parties and the NAFO Secretariat. Timing should be decided on a case by case basis.

The working group shall communicate regularly through teleconferences and electronically, as required.

**Reporting**

The Working Group will issue a written report to the Fisheries Commission and the Scientific Council.

An oral update can be provided to both SC and FC during the annual meeting.

## Annex 9. Quota Table 2014 and Effort Allocation Scheme 2014

**QUOTA TABLE. Total allowable catches (TACs) and quotas (metric tons) for 2014 of particular stocks in Subareas 1-4 of the NAFO Convention Area. The values listed include quantities to be taken both inside and outside the 200-mile fishing zone, where applicable.**

Species Division/Contracting Party	Cod				Redfish				American plaice		Yellowtail	
	3L	3M	% of 3M Cod TAC	3NO	3LN	% of 3LN Redfish TAC	3M	3O	Sub-Area 2 and Div. 1F+3K	3LNO	3M	3LNO
Canada		116	0.80	0	2982	42.60	500	6000	0 <sup>2,4</sup>	0	0	16575 <sup>5</sup>
Cuba		537	3.70	-	686	9.80	1750		0 <sup>2,4</sup>	-	-	-
Denmark (Faroe Islands and Greenland)		3246	22.35	-	-		69 <sup>19</sup>		0 <sup>2,3</sup>	-	-	-
European Union		8281 <sup>25</sup>	57.03	0 <sup>11</sup>	1276 <sup>26</sup>	18.23	7813 <sup>12</sup>	7000	0 <sup>2,3</sup> 0 <sup>2,15</sup>	0	0 <sup>11</sup>	-
France (St. Pierre et Miquelon)		-		-	-		69 <sup>19</sup>		0 <sup>2,4</sup>	-	-	340 <sup>5</sup>
Iceland		-		-	-		-		0 <sup>2,3</sup>	-	-	-
Japan		-		-	-		400	150	0 <sup>2,4</sup>	-	-	-
Korea		-		-	-		69 <sup>19</sup>	100	0 <sup>2,4</sup>	-	-	-
Norway		1343	9.25	-	-		-		0 <sup>2,3</sup>	-	-	-
Russian Federation		940	6.47	0	2014	28.77	9137	6500	0 <sup>2,3</sup>	-	0	-
Ukraine								150	0 <sup>2,4</sup>			
United States of America		-		-	-		69 <sup>19</sup>		0 <sup>2,4</sup>	-	-	-
Others		58	0.40	0	42	0.60	124	100	-	0	0	85 <sup>5</sup>
<b>TOTAL ALLOWABLE CATCH</b>	<sup>*9</sup>	14521 <sup>23</sup>	100.0	<sup>*20,9</sup>	7000 <sup>24</sup>	100.0	6500 <sup>8</sup>	20000 <sup>16</sup>	0 <sup>10,17</sup>	<sup>*21</sup>	<sup>*9,16</sup>	17000 <sup>21,22,16</sup>



## Annex 9 (contd)

Species	Witch		White hake	Capelin	Skates	Greenland halibut	Squid ( <i>Illex</i> ) <sup>1</sup>		Shrimp	
	3L	3NO					Sub-areas 3+4	3L	3NO	
Canada		0	294	0	1167	1716	N.S. <sup>6</sup>	3580		
Cuba		-		0		-	510	48		
Denmark (Faroe Islands and Greenland)		-		-		197	-	48		
European Union		0 <sup>11</sup>	588	0 <sup>11</sup>	4408	6709 <sup>18</sup>	N.S. <sup>6</sup> 611 <sup>13</sup>	240 <sup>14</sup>		
France (St. Pierre et Miquelon)		-		-		187	453	48		
Iceland		-		-		-	-	48		
Japan		-		0		1173	510	48		
Korea		-		-		-	453	48		
Norway		-		0		-	-	48		
Russian Federation		0	59	0	1167	1460	749	48		
Ukraine						-		48		
United States of America		-		-		-	453	48		
Others		0	59	-	258	0 <sup>7</sup>	794	0		
TOTAL ALLOWABLE CATCH	* <sup>9,20</sup>	* <sup>9</sup>	1000 <sup>27</sup>	* <sup>9,16</sup>	7000	11442	34000 <sup>20</sup>	4300		* <sup>9</sup>

\* Ban on fishing in force.

- Any quota listed for squid may be increased by a transfer from any "coastal state" as defined in Article 1, paragraph 3 of the NAFO Convention, provided that the TAC for squid is not exceeded. Transfers made to Contracting Parties conducting fisheries for squid in the Regulatory Area shall be reported to the Executive Secretary, and the report shall be made as promptly as possible.
- The Executive Secretary shall notify without delay all Contracting Parties the dates on which accumulated reported catch taken by vessels of Contracting Parties estimated equal to 50% and then 100% of that allocation.
- Quota to be shared by vessels from Denmark (Greenland and Faroe Islands), European Union, Iceland, Norway and Russia. Catches in the NAFO Convention Area shall be deducted from the quotas allocated in the NEAFC Convention Area.
- Quota to be shared by vessels from Canada, Cuba, France (St. Pierre et Miquelon), Japan, Korea, Ukraine and USA.
- Contracting Parties shall inform the Executive Secretary before 01 December 2013 of the measures to be taken to ensure that total catches do not exceed the levels indicated.

## Annex 9 (contd)

6. The allocation 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 (= 29,458 tons).
7. In 2005, the previous 935 t "Others" quota was assigned to three Contracting Parties. When the TAC exceeds 30,000 t the next 1,300 t beyond 30,000 will be allocated to an Others quota which can be accessed by those who do not hold Greenland halibut allocation. In deciding the relevant contributions of Contracting Parties to the 1,300 t Others quota, the Fisheries Commission will take into account the fact that some Contracting Parties received a benefit from the 935 t quota which was reassigned in 2005.
8. Not more than 3250 tons may be fished before 01 July 2014.
9. The provisions of Article 6.3 of the Conservation and Enforcement Measures shall apply.
10. In the case of the NEAFC decision which modifies the level of TAC in 2014 as compared to 2013, these figures shall be accordingly adjusted by NAFO and formalized through a mail vote.
11. Including fishing entitlements of Estonia, Latvia, and Lithuania following their accession to the European Union and in accordance with sharing arrangements of the former USSR quota adopted by the Fisheries Commission at its Annual Meeting in 2003 (FC Working Paper 03/7).
12. Including allocations of 1571 tonnes each for Estonia, Latvia and Lithuania out of a sharing of 20,000 tonnes, following their accession to the European Union.
13. Allocations of 128 tonnes each for Estonia, Latvia and Lithuania as well as 227 tonnes for Poland out of a TAC of 34,000 tonnes, following their accession to the European Union.
14. Including allocations of 48 tonnes each for Estonia, Latvia, Lithuania and Poland out of a TAC of 4,300 tonnes, following their accession to the European Union.
15. Allocation of 17.85% to Lithuania and 2.15% to Latvia following their accession to the European Union.
16. Applicable to 2014 and 2015.
17. The quota shares in footnotes 4 and 15 can only be fished in the NAFO Regulatory Area. If an increase in the overall TAC as defined in footnote 10 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 4.
18. Including an allocation of 375 tonnes for Estonia, Latvia, and Lithuania following their accession to the European Union.
19. Notwithstanding the provisions of footnote 8 and Article 5.2 (b) and without prejudice to future agreements on allocations, these quotas may be fished in their entirety by these Contracting Parties.
20. Applicable to 2014, 2015 and 2016.
21. In lieu of Article 6.3 of the CEM, 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 Fisheries Commission.
22. Following the NAFO annual meeting and prior to January 1 of the succeeding year, at the request of the USA, Canada will transfer 1000 tonnes of its 3LNO yellowtail quota to the USA.
23. The allocation key of this stock is based on the 1998 Quota Table. In 1999, a moratorium on cod in Division 3M was declared.
24. The allocation key of this stock is based on the 1997 Quota Table. In 1998, a moratorium on redfish in Division 3LN was declared.
25. Including fishing entitlements of 161 tons each for Estonia, Latvia, and Lithuania in accordance with sharing arrangements of the former USSR quota adopted by the Fisheries Commission at its Annual Meeting in 2003 (FC Working Paper 03/7) and allocation of 552 tons for Poland following their accession to the European Union.
26. Including fishing entitlements of 346 tonnes each for Estonia, Latvia, and Lithuania in accordance with sharing arrangements of the former USSR quota adopted by the Fisheries Commission at its Annual Meeting in 2003 (FC Working Paper 03/7) following their accession to the European Union.
27. Should a Contracting Party experience higher than normal catches per unit of effort (CPUE) and conclude that a shift to high availability levels of white hake during the fishing season – such as what was apparently the case in 2002 and 2003 – is taking place, then that Contracting Party shall notify the Executive Secretary and submit a summary of evidence for its conclusion (higher than normal CPUE and any other additional relevant information) within one month. On this basis, a mail vote will be submitted to the Fisheries Commission as to whether an exceptional increase in the availability of fish occurs. The TAC shall remain at 1000t until the results of the vote are complete and the catch limitation provided for in Annex I. A. of the NCEM will apply. In case of a positive vote, the TAC is confirmed to be 2,000 metric tons. In the case of negative vote, the TAC shall remain at 1,000 metric tons.



Annex 9 (contd)

**Effort Allocation Scheme for Shrimp Fishery in the  
NAFO Regulatory Area Div. 3M, 2014**

Contracting Party	Number of fishing days <sup>1</sup>	Number of vessels <sup>1</sup>
Canada	0	0
Cuba	0	0
Denmark Faroe Islands Greenland	0	0 0
European Union	0	0
France (in respect of St. Pierre et Miquelon)	0	0
Iceland	N/A	N/A
Japan	0	0
Korea	0	0
Norway	0	0
Russia	0	N/A
Ukraine	0	0
USA	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 10. Decrease in Mesh Size for Redfish in Div. 3LN** (FC Working Paper 13/29 **now** FC Doc. 13/28)

### **Background:**

In 2007, Fisheries Commission adopted a decision to decrease mesh size in mid-water trawls from 130 mm to 90 mm in the redfish fishery in **Div. 3O**.

The decision to decrease mesh size in trawls from 130 mm to 90 mm for redfish pelagic fishery in **Div. 3M** was adopted by Fisheries Commission in 2012.

In September 2013, *“Scientific Council concluded that the reduction of mesh size from 130 mm to not less than 90 mm for the pelagic redfish fishery appears not to be harmful to the Div. 3LN redfish stock.*

*However, measures should be taken to ensure one source of unaccounted mortality i.e. escape mortality at the surface is not replaced by another, i.e. discarding and/or high-grading”* (FC Working Paper 13/24).

To harmonize regulation measures for the mid-water trawl fishery for redfish in the NAFO Regulatory Area, the Russian Federation proposes an amendment to Article 13.2.f) of the NAFO CEM.

### **Proposed Amendment:**

New text of Article 13.2.f):

90 mm for redfish (RED) in the fishery using mid-water trawls in Division 3O, 3M **and** 3LN. Within this fishery mid-water trawl means trawl gear that is designed to fish for pelagic species, no portion of which is designed to be or is operated in contact with the bottom at any time. The gear shall not include discs, bobbins or rollers on its footrope or any other attachments designed to make contact with the bottom. The trawl may have chafing gear attached.

## **Annex 11. White Hake in Divs. 3NO**

(FC Working Paper 13/32 **now** FC Doc. 13/10)

*Recalling* that White hake came under quota regulation when NAFO, at its Annual Meeting in 2004, set a Total Allowable Catch (TAC) of 8 500 t for 2005-2007 in Divisions 3NO

*Further Recalling* that the TAC for white hake in Divisions 3NO was reduced to 6,000 t for 2010 and 2011, with subsequent reductions to 5,000 t (2012) and 1,000 t (2013);

*Noting* the 2013 Scientific Council Advice which indicates that:

- the stock biomass remains at relatively low levels;
- recruitment has been low since 2000;
- fishing mortality is low; and
- catches of White hake in Div. 3NO in 2014-15 should not exceed their current levels;

*Further noting* that the assessment is considered data limited and as such associated with a relatively high uncertainty;

*Considering* that recruitment was higher in 2011 but not comparable to the high recruitment observed in 2000;

*Mindful* that adjustments of the TAC should be based upon scientific advice

It is *recommended* that:

- 1. The overall TAC for 3NO White hake be maintained at 1 000 t for 2014**
- 2. The current provision (NCEMs Footnote 27) which allows for the in-season adjustment of the TAC be revised to state:**

**Should a Contracting Party experience higher than normal catches per unit of effort (CPUE) and conclude that a shift to high availability levels of white hake during the fishing season – such as what was apparently the case in 2002 and 2003 – is taking place, then that Contracting Party shall notify the Executive Secretary and submit a summary of evidence for its conclusion (higher than normal CPUE and any other additional relevant information) within one month. On this basis, a mail vote will be submitted to the Fisheries Commission as to whether an exceptional increase in the availability of fish occurs. The TAC shall remain at 1000t until the results of the vote are complete and the catch limitation provided for in Annex 1 A of the NCEM will apply. In case of a positive vote, the TAC is confirmed to be 2,000 metric tons. In the case of negative vote, the TAC shall remain at 1000 metric tons.**

## **Annex 12. Greenland Halibut Management Strategy – Review and Evaluation**

(FC Working Paper 13/19 Rev **now** FC Doc. 13/23)

Recalling that Contracting Parties agreed in 2003 to implement a rebuilding programme for the Greenland halibut stock in Subarea 2 + Divisions 3KLMNO;

Recalling that the Greenland halibut management strategy (MS) in Subarea 2 + Divisions 3KLMNO was adopted by NAFO in 2010 and *shall be in force initially until 2014* (NCEM article 10);

Further recalling that the Rebuilding program was updated in 2011 (FC Doc 11/15) to reflect the adoption of the MS and included the adoption of an *Exceptional Circumstances Protocol*;

Recalling the established performance targets for the MSE (FC Doc 10/30);

Noting that the first exploitable biomass target can only be assessed in 2016;

Mindful that a review should assess if the Management Strategy (MS) adopted in 2010 is allowing the stock to reach the defined targets;

Taking into account that in accordance with the *Exceptional Circumstances Protocol*, Scientific Council have annually monitored the survey biomass indicator and have provided advice to Fisheries Commission on implementation of the MS;

Noting that SC has advised that the survey biomass has not fallen below the expected range;

Further noting that the TACs generated by the harvest control rule have been within the expected range (FC doc. 10/30); and,

Taking into account the available information, the MS is performing as expected.

### ***Recommendations:***

- 1. FC continue to use the current Management Strategy for three additional years 2015-2017. Request the WG RBMS to provide a recommendation to FC at the 36<sup>th</sup> Annual Meeting of NAFO (September 2014) on an approach and workplan to review the MS in 2017.**

### Annex 13. 2013 Recommendations from the WGFMS-VME to the Fisheries Commission

(FC Working Paper 13/5 Revised **now** FC Doc. 13/7 Revised)

The FC Working Group of Fishery Managers and Scientists on Vulnerable Marine Ecosystems (WGFMS-VME) met on 23-25 April 2013 in Halifax, Nova Scotia, Canada, reviewed the existing VME closed areas (see Figure 13 of FC Doc 12/30) and agreed on the following recommendations (meeting report FC Doc 13/3):

#### 1. Extension of the Existing Closed Areas

**1.1 The WG *recommends* to extend the boundaries of Closed Area 2 to protect significant concentrations of large gorgonians; amend the coordinates of Closed Area 2 in Article 16.5 NCEM as follows (see Figure 1):**

Point No.	Latitude	Longitude
2.1	44° 50' 56.4" N	48° 43' 45.48" W
2.2	46° 18' 54.72" N	46° 47' 51.72" W
2.3	46° 25' 28.56" N	46° 47' 51.72" W
2.4	46° 46' 32.16" N	46° 55' 14.52" W
2.5	47° 03' 29.16" N	46° 40' 4.44" W
2.6	47° 11' 47.04" N	46° 57' 38.16" W
2.7	46° 40' 40.8" N	47° 03' 4.68" W
2.8	46° 24' 24.12" N	46° 51' 23.04" W
2.9	46° 21' 4.78" N	46° 58' 53" W
2.10	46° 26' 32" N	46° 58' 53" W
2.11	46° 30' 22.20" N	47° 11' 2.93" W
2.12	46° 17' 13.30" N	47° 15' 46.64" W
2.13	46° 07' 1.56" N	47° 30' 36.36" W
2.14	45° 49' 6.24" N	47° 41' 17.88" W
2.15	45° 19' 43.32" N	48° 29' 14.28" W
2.16	44° 53' 47.4" N	48° 49' 32.52" W

and adjust the map in Figure 3 of the NCEM accordingly.



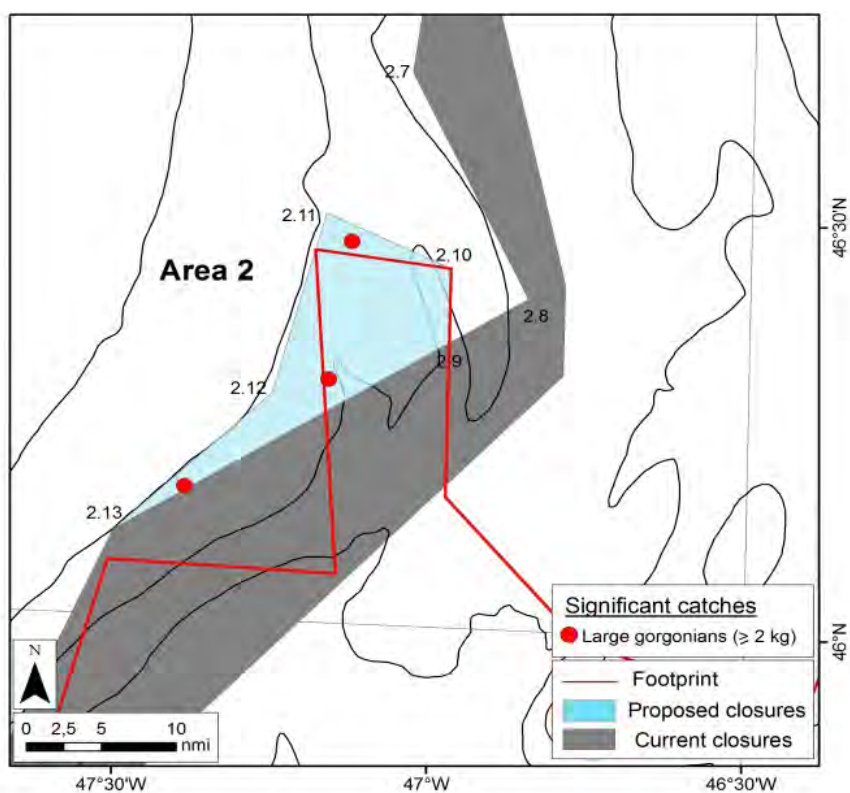


Fig. 1. Polygons Delineating the Extention of Area 2

**1.2 The WG recommends to extend the boundaries of Area 7 to protect significant concentrations of sea pens; amend the coordinates of Closed Area 7 in Article 16.5 of the NCEM as follows (see Figure 2):**

Point No.	Latitude	Longitude
7.1	48° 25' 02.28"N	45° 17' 16.44"W
7.2	48° 25' 02.28"N	44° 54' 38.16"W
7.3	48° 19' 08.76"N	44° 54' 38.16"W
7.4	48° 19' 08.76"N	45° 01' 58.56"W
7.5	48° 20' 29.76"N	45° 01' 58.56"W
7.6	48° 20' 29.76"N	45° 17' 16.44"W

and adjust the map in Figure 3 of the NCEM accordingly.

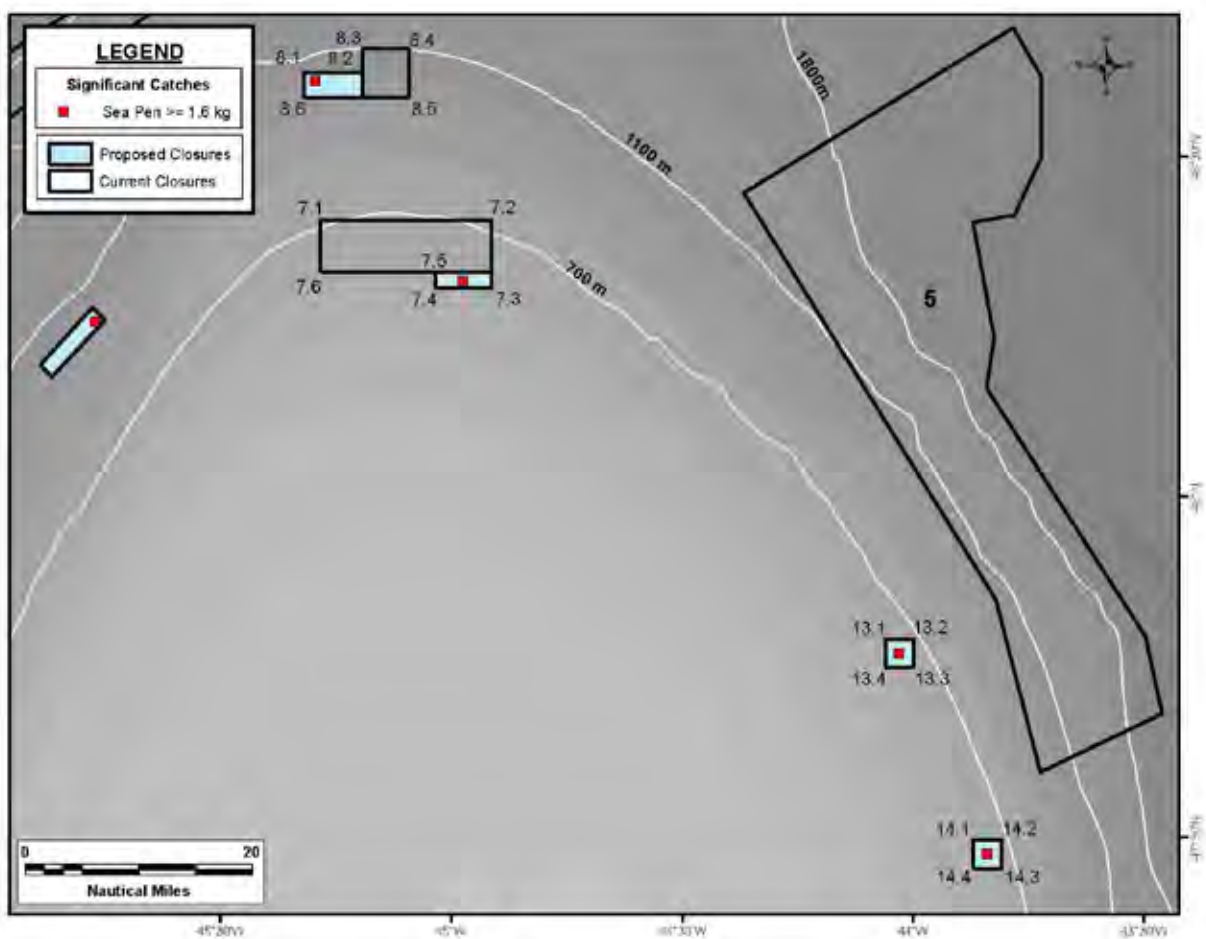


Fig. 2. Polygons Delineating the Extention of Areas 7 and 8 and the Creation of Closed Area 13 and 14.

1.3. The WG *recommends* to extend the boundaries of Area 8 to protect significant concentrations of sea pens; amend the co-ordinates of Closed Area 8 in Article 16.5 of the NCEM as follows (see Figure 2):

Point No.	Latitude	Longitude
8.1	48° 38' 07.95"N	45° 19' 31.92"W
8.2	48° 38' 07.95"N	45° 11' 44.36"W
8.3	48° 40' 9.84"N	45° 11' 44.88"W
8.4	48° 40' 9.84"N	45° 05' 35.52"W
8.5	48° 35' 56.4"N	45° 05' 35.52"W
8.6	48° 35' 56.4"N	45° 19' 31.92"W

**1.4 The WG recommends to extend the boundaries of Closed Area 10 to protect significant concentrations of sea pens; amend the coordinates of Closed Area 10 in Article 16.5 of the NCEM as follows (see Figure 3):**

Point No.	Latitude	Longitude
10.1	47° 49' 41.51" N	46° 22' 48.18" W
10.2	47° 47' 17.14" N	46° 17' 27.91" W
10.3	47° 58' 42.28" N	46° 6' 43.74" W
10.4	47° 59' 15.77" N	46° 7' 57.76" W
10.5	48° 7' 48.97" N	45° 59' 58.46" W
10.6	48° 9' 34.66" N	46° 4' 8.54" W

and adjust the map in Figure 3 of the NCEM accordingly.

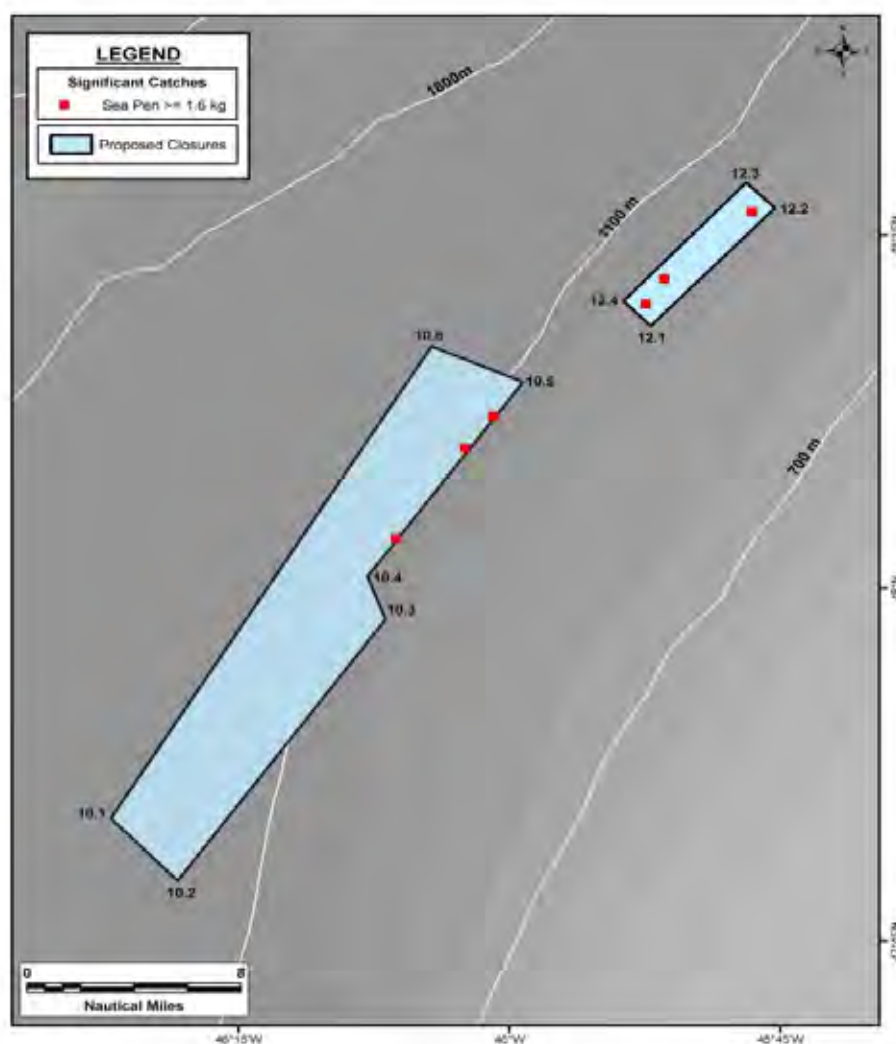


Fig. 3. Polygons Delineating the Extention of Area 10 and the Addition of New Closed Area 12.

## 2. Addition of New Closed Area

The WG *recommends* to add Closed Area 12 to protect significant concentrations of sea pens; with coordinates as follows (see Figure 3):

Point No.	Latitude	Longitude
12.1	48° 12' 6.60" N	45° 54' 12.94" W
12.2	48° 17' 11.82" N	45° 47' 25.36" W
12.3	48° 16' 7.06" N	45° 45' 48.19" W
12.4	48° 11' 3.32" N	45° 52' 40.63" W

## 3. Management Measures for Areas 13 and 14 (see Figure 2)

The WG *recommends* that FC further reflect on the management options presented in item 5 of the WG April 2013 Meeting Report (FC Doc 13/3) and decide which is best suited for Areas 13 and 14 in the protection of areas with significant concentrations of sea pens.

The coordinates of Areas 13 and 14, as reflected in Figure 2 are:

Point No.	Latitude	Longitude
13.1	47° 47' 54.33"N	44° 03' 06.46"W
13.2	47° 47' 54.33"N	43° 59' 23.40"W
13.3	47° 45' 24.44"N	43° 59' 23.40"W
13.4	47° 45' 24.44"N	44° 03' 06.46"W
14.1	47° 30' 04.80"N	43° 52' 00.35"W
14.2	47° 30' 04.80"N	43° 48' 18.54"W
14.3	47° 27' 34.89"N	43° 48' 18.54"W
14.4	47° 27' 34.89"N	43° 52' 00.35"W

## **Annex 14. Terms of Reference of the Joint Fisheries Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management**

(FC Working Paper 13/8 Rev now FC Doc. 13/19)

### **Structure:**

The Working Group on Ecosystem Approach Framework to Fisheries Management reports to both the Fisheries Commission and Scientific Council; considers the advice of Scientific Council; and provides recommendations to Fisheries Commission.

The Working Group shall be comprised of fishery managers and scientists from Contracting Parties supported by experts and advisors. The work form may be an open forum/dialogue at the discretion of the chairs of the working group and with the consent of Contracting Parties.

Recommendations to Fisheries Commission shall be developed through formal sessions of official delegations.

The Co-Chairs shall be selected from participating fishery managers and scientists with both a fishery manager and a scientist represented in the two positions.

Accredited observers may attend meetings of the working group. Participation will be subject to the *NAFO Rules of Procedure*.

If a Contracting Party so requests, particular agenda items of the meeting, or parts thereof, shall be restricted to delegates representing Contracting Parties and Scientific Council. A total of up to two persons per non-governmental organizations that have been given the right to participate as observers shall be permitted.

### **Objective:**

The main objective of the Working Group is to make recommendations to the Fisheries Commission and feedback to Scientific Council on the development and effective implementation of ecosystems approaches to fisheries management.

### **Specific Duties:**

In responding to requests for advice and recommendations from the Fisheries Commission, considering the associated advice of Scientific Council, the Working Group shall:

- Provide input/ guidance on the development and application of the Ecosystems Approach to Fisheries (EAF) Roadmap, including defining objectives and establishing priorities, by:
  - o Recommending appropriate ecosystem-based management areas,
  - o Considering ecosystem status, functioning and dynamics of NAFO marine ecosystems, including species interactions,
  - o Considering the effect of activities other than fishing that may impact the stocks and fisheries in the NAFO Area,
  - o Analyzing the way other RFMOs address the need to conserve biodiversity and advise on a possible strategy for biodiversity.
- Make recommendations on mitigation strategies and measures to avoid significant adverse impacts of bottom fishing activities on vulnerable marine ecosystems, including the evaluation of associated risks, by:
  - o Reviewing area closures and other measures outlined in the NAFO Conservation and Enforcement Measures (NCEMs) with specific timelines.
  - o Collaborating with Scientific Council on the assessment/ reassessment of NAFO bottom fisheries.
  - o Providing recommendations to Fisheries Commission in relation to requests to conduct exploratory bottom fishing and/ or evaluation of previously authorized exploratory fishing activities.

- o Providing recommendations for updating the NCEMs in relation to EAF including the text in Chapter II (Bottom Fisheries in the NAFO Regulatory Area) and any associated Annexes (e.g. the Exploratory Protocol - Annex I.E), as necessary.

**Meetings:**

Meetings may be held at the request of the Fisheries Commission or the Scientific Council, in consultation with Contracting Parties and the NAFO Secretariat. Timing should be decided on a case by case basis.

The working group shall communicate regularly through teleconferences and electronically, as required.

**Reporting**

The Working Group will issue a written report to the Fisheries Commission and the Scientific Council.

An oral update can be provided to both SC and FC during the annual meeting.

## **Annex 15. Proposed Changes to NAFO's Conservation and Enforcement Measures** (STACTIC Working Paper 13/4 Rev2 **now** FC Doc. 13/11)

### **Introduction**

At the September 2012 Annual Meeting, the Editorial Drafting Group (EDG) outlined an approach for continuing to revise the NAFO Conservation and Enforcement Measures (CEMs), along with a list of minor clarifications to the existing CEM for consideration by STACTIC as part of STACTIC WP 12/40. To provide additional opportunity for Contracting Parties to review proposed changes to the CEM, this paper was not adopted by STACTIC at the 2012 Annual Meeting and will be reconsidered at the May 2013 STACTIC Intersessional Meeting. The EDG has updated STACTIC WP 12/40 to reflect changes to the CEM resulting from proposals adopted at the 2012 Annual Meeting, and included further minor revisions to several articles.

A brief description of the proposed minor revisions to the existing CEMs is provided below. The proposed revisions to the CEMs are organized based on their current structure. Cross-references to the corresponding article and paragraph, based on the 2013 CEMs, and a brief description of any changes have been placed in the right column of the attached addendum for ease of reference. These proposed changes represent revisions necessary to clarify existing measures, correct inaccurate references and capitalization, and reformat the CEMs to reflect the updated style and format agreed upon during Phase I of the EDG's efforts to update the CEMs (STACTIC WP 11/21), as adopted at the 2011 Annual Meeting.

### **Proposed Changes to Existing CEMs:**

- Article 7.9 – Adding parenthesis for consistent format
- Article 9 – Insertion of table headings and renumbering of paragraphs
- Article 13(d) – 130 mm mesh applies to groundfish defined in Annex I.C
- Article 16.1 – Insert new Figure 2 for seamount, coral and sponge protection zones
- Article 25.1 – Clarify applicability of vessel notification (NOT) messages
- Article 27 - Clarification of when product must be labeled
- Article 28 – Clarify elements of fishing and production logbook and stowage plans
- Article 29 – Replaced “data” with “position data” throughout for clarity
- Article 30 – Clarify how observer data is reported and distributed
- Article 33 – Reorganize paragraph 2 and clarify how long Secretariat must maintain surveillance reports
- Article 39.2 – Clarify language regarding applicability of notices of infringements Annex II.A – Reorganize logbook elements and clarify gear used
- Correct several inaccurate references and capitalization errors
- Revise all references to “pursuant to” with “in accordance with” for consistency of language.

**Addendum 1: Proposed Revision to Existing CEMS**

PROPOSED NEW TEXT	OLD REFERENCE or EXPLANATION															
<b>Throughout the CEM</b>																
Revise all references to any derivation of “flag State” and “port State” to correct for the proper capitalization of the terms.																
Revise all references to “pursuant to” with “in accordance with” for consistency of language.																
<b>Article 7 – Cod Recovery Plans</b>																
Add left parenthesis to Articles 7.9 (a), (b), (c) and (d).	Made formatting of paragraphs consistent															
<b>Article 9 – Shrimp</b>																
1. For the purpose of this measure, Division 3M includes that portion of Division 3L enclosed by lines joining the points described below in Table 1 and depicted in Figure 1(1):	Revised to remove first sentence (moved to Article 5) and update Figure and Table references.															
Table 1: Boundary points delineating the portion of Division 3L that is included in Division 3M for the management of shrimp in accordance with Annex I.B.	New Table Heading following paragraph 1															
<table border="1"> <thead> <tr> <th>Point No.</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>47°20'0</td> <td>46°40'0</td> </tr> <tr> <td>2</td> <td>47°20'0</td> <td>46°30'0</td> </tr> <tr> <td>3</td> <td>46°00'0</td> <td>46°30'0</td> </tr> <tr> <td>4</td> <td>46°00'0</td> <td>46°40'0</td> </tr> </tbody> </table>	Point No.	Latitude	Longitude	1	47°20'0	46°40'0	2	47°20'0	46°30'0	3	46°00'0	46°30'0	4	46°00'0	46°40'0	
Point No.	Latitude	Longitude														
1	47°20'0	46°40'0														
2	47°20'0	46°30'0														
3	46°00'0	46°30'0														
4	46°00'0	46°40'0														
3. A vessel fishing for shrimp and other species on the same trip shall transmit a report to the Executive Secretary signalling the change of fishery. The number of fishing days shall be calculated accordingly.	Article 9.4 moved to Article 9.3 because original Article 9.3 was moved to Article 5.5															
4. Fishing days referred to in this Article are not transferable between Contracting Parties. Fishing days of one Contracting Party may be utilized by a vessel flying the flag of another Contracting Party only in accordance with Article 23.	Article 9.5 moved to Article 9.4 because original Article 9.3 was moved to Article 5.5															
5. No vessel shall fish for shrimp in Division 3M between 00:01 UTC on 1 June and 24:00 UTC on 31 December in the following area as described in Table 2 and depicted in Figure 1(2):	Article 9.6 moved to Article 9.5 because original Article 9.3 was moved to Article 5.5 and to insert table reference															
Table 2: Boundary points delineating the shrimp closure area referred to in Article 9.5.																



<table border="1"> <thead> <tr> <th>Point No.</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>1 (same as no.7)</td> <td>47°55'0 N</td> <td>45°00'0 W</td> </tr> <tr> <td>2</td> <td>47°30'0 N</td> <td>44°15'0 W</td> </tr> <tr> <td>3</td> <td>46°55'0 N</td> <td>44°15'0 W</td> </tr> <tr> <td>4</td> <td>46°35'0 N</td> <td>44°30'0 W</td> </tr> <tr> <td>5</td> <td>46°35'0 N</td> <td>45°40'0 W</td> </tr> <tr> <td>6</td> <td>47°30'0 N</td> <td>45°40'0 W</td> </tr> <tr> <td>7 (same as no. 1)</td> <td>47°55'0 N</td> <td>45°00'0 W</td> </tr> </tbody> </table>	Point No.	Latitude	Longitude	1 (same as no.7)	47°55'0 N	45°00'0 W	2	47°30'0 N	44°15'0 W	3	46°55'0 N	44°15'0 W	4	46°35'0 N	44°30'0 W	5	46°35'0 N	45°40'0 W	6	47°30'0 N	45°40'0 W	7 (same as no. 1)	47°55'0 N	45°00'0 W		Revised table format for consistency
Point No.	Latitude	Longitude																								
1 (same as no.7)	47°55'0 N	45°00'0 W																								
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3	46°55'0 N	44°15'0 W																								
4	46°35'0 N	44°30'0 W																								
5	46°35'0 N	45°40'0 W																								
6	47°30'0 N	45°40'0 W																								
7 (same as no. 1)	47°55'0 N	45°00'0 W																								
<p>6. No vessel shall fish for shrimp in Division 3L at a depth less than 200 meters in an area east of a line bound by the following coordinates described in Table 3 and depicted in Figure 1(3):</p>		Article 9.7 moved to Article 9.6 because original Article 9.3 was moved to Article 5.5 and to insert table reference																								
<p>Table 3: Boundary points delineating 200 m bathymetric curve referred to in Article 9.6.</p>		New table heading																								
<table border="1"> <thead> <tr> <th>Point No.</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>46°00'00" N</td> <td>47°49'00" W</td> </tr> <tr> <td>2</td> <td>46°25'00" N</td> <td>47°27'00" W</td> </tr> <tr> <td>3</td> <td>46°42'00" N</td> <td>47°25'00" W</td> </tr> <tr> <td>4</td> <td>46°48'00" N</td> <td>47°25'50" W</td> </tr> <tr> <td>5</td> <td>47°16'50" N</td> <td>47°43'50" W</td> </tr> </tbody> </table>	Point No.	Latitude	Longitude	1	46°00'00" N	47°49'00" W	2	46°25'00" N	47°27'00" W	3	46°42'00" N	47°25'00" W	4	46°48'00" N	47°25'50" W	5	47°16'50" N	47°43'50" W								
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<p>7. Each vessel that has fished for shrimp in Division 3L, or its representatives on its behalf, shall provide to the competent port authority at least 24 hours prior notice of its estimated time of arrival and the estimated quantities on board of shrimp by Division.</p>		Article 9.8 moved to Article 9.7 because original Article 9.3 was moved to Article 5.5 and to insert table reference																								
<p><b>Article 10 – Greenland halibut</b></p>																										
<p>9. Where within 24 hours of the notification transmitted in accordance with subparagraph 6(b), the Executive Secretary does not receive a notification from an inspection vessel, the Executive Secretary immediately advises the fishing vessel that it may begin fishing and notifies inspection vessels and the flag State FMC accordingly.</p>		Correction of flag State capitalization.																								
<p><b>Article 13 – Gear Requirements</b></p>																										
<p>(d) 130 mm for all other groundfish, as defined in Annex I.C.</p>		Clarifies definition of groundfish in paragraph 2(d) by referencing Annex I.C																								
<p><b>Article 16 – Seamount, Coral, and Sponge Protection Zones</b></p>																										
<p>1. [insert figure of seamount closures]</p>		Insert new Figure 2 to depict existing seamount closure areas, renumbering subsequent Figures and updating cross references.																								

<b>Article 25 – Vessel Requirements</b>	
<b><i>Authorization to conduct fishing activities and notification requirements</i></b>	
3. Each Contracting Party shall transmit to the Executive Secretary, electronically in the format prescribed in Annex II.C, a list of the vessels which it has authorized to conduct fishing activities in the Regulatory Area and any amendments thereto from time to time no later than 30 days following any change to the list	Replace the word “operate” with “conduct fishing activities” in 25.3
<b>Article 27 – Product Labelling Requirements</b>	
2. Labels shall be securely affixed, stamped or written on packaging at the time of stowage and be of a size that can be read by inspectors in the normal course of their duties.	Revised to clarify when labels shall be affixed
<b>Article 28 – Monitoring of Catch</b>	
<b><i>Recording of Catch and Stowage</i></b>	
1. For the purposes of monitoring catch, each fishing vessel shall utilize a fishing logbook, a production log book and a stowage plan as defined below, to record fishing activities in the Regulatory Area.	New paragraph. Cross references and subsequent paragraph numbering will be updated upon approval.
<b><i>Fishing logbook</i></b>	
2. Each fishing vessel shall maintain a fishing logbook consistent with Annex II.A that:	28.1(b)
(a) accurately records catch of each tow/set related to the smallest geographical area for which a quota has been allocated;	28.1(b) and (d)(i)
(b) indicates the disposition of the catch of each tow/set, including the amount (in kg, live weight) of each stock that is retained on board, discarded, offloaded, or transhipped during the current fishing trip; and	28.1(d)(ii) and (iii)
(c) is retained on board for at least 12 months.	28.1(d)(iv)
<b><i>Production logbook</i></b>	
3. Each fishing vessel shall maintain a production logbook that:	28.1(c)
(a) accurately records the daily cumulative production for each species and product type in kg for the preceding day from 0001 hrs (UTC) until 2400 hrs (UTC);	28.1(e)
(b) relates the production of each species and product type to the smallest geographical area for which a quota has been allocated;	28.1(d)(i)
(c) lists the conversion factors used to convert production weight of each product type into live weight when recorded in the fishing logbook;	New paragraph for clarity
(d) labels each entry in accordance with Article 27; and	28.1(c)
(e) is retained on board for at least 12 months.	28.1(d)(iv)
<b><i>Stowage of catch</i></b>	

4. Each vessel shall, with due regard for safety and navigational responsibilities of the master, stow all catch taken in the NAFO Regulatory Area separately from all catch taken outside the NAFO Regulatory Area, and ensure that such separation is clearly demarcated using plastic, plywood or netting;	28.1(g)
5. Each fishing vessel shall maintain a stowage plan that:	New to clarify elements of stowage plan.
(a) clearly shows the location and quantity, expressed as product weight in kg, of each species within each fish hold;	28.1(h)
(b) specifies the location in each hold of shrimp taken in Division 3L and in Division 3M that includes the quantity of shrimp in kg, by Division;	28.1(i)
(c) is updated daily for the preceding day from 001 to 2400 hrs (UTC); and	28.1(j)
(d) is retained on board until the vessel has been unloaded completely.	28.1(k)
6. Every fishing vessel shall transmit electronically to its FMC the following reports in accordance with the format and the content prescribed for each type of report in Annex II.D and Annex II.F:	Article 28.2 becomes Article 28.6, <b>with all subsequent paragraphs renumbered.</b>
(c) catch report (CAT): quantity of catch retained and quantity discarded by species for the day preceding the report, by Division, including nil catch returns, sent daily before 1200 hours UTC. Nil catch retained and nil discards of all species shall be reported using the 3 alpha code MZZ (marine species not specified) and quantity as "0" as the following examples demonstrate (//CA/MZZ 0// and //RJ/MZZ 0//);	Revised Article 28.2(c) becomes Article 28.6(c) and includes reference to discards and how to report nil catch
<b>Article 29 – Vessel Monitoring System (VMS)</b>	
<b>VMS position data and costs</b>	Addition of the word "position" prior to data throughout section for clarification
1. Every fishing vessel operating in the Regulatory Area shall be equipped with a satellite monitoring device capable of continuous automatic transmission of position to its land-based Fisheries Monitoring Centre (FMC), no less frequently than once and hour, the following VMS data:	29.1
2. (a) receives the position data referred to in paragraph 1 and records them using the following 3 letter codes:	29.2 (a)
(i) "ENT", first VMS position transmitted by each vessel upon entering the Regulatory Area	29.2(a)(i)
(ii) "POS", every subsequent VMS position transmitted by each vessel from within the Regulatory Area; and	29.2(a)(ii)
(iii) "EXT", first VMS position transmitted by each vessel upon exiting the Regulatory Area	29.2(a)(iii)
8. Every fishing vessel operating with a defective satellite monitoring device, shall transmit, at least once every 4 hours, the VMS position data to its flag State FMC by other available means of communication, in particular, satellite, email, radio, facsimile or telex.	29.8

<b>Transmission of VMS position data from the FMC to the Executive Secretary</b>	
9. (a) its FMC transmits VMS position data to the Executive Secretary as soon as possible, but no later than 24 hours after it receives them and may authorize fishing vessels entitled to fly its flag to transmit VMS position data by satellite, email, radio, facsimile or telex, direct to the Executive Secretary; and	29.9(a)
(b) the VMS position data transmitted to the Executive Secretary are in conformity with the data exchange format set out in Annex II.E and further described in Annex II.D.	29.9(b)
10. (b) makes available as soon as possible the VMS position data to all Contracting Parties with an inspection presence in the Regulatory Area;	29.10(b)
(c) treats all VMS position data in conformity with Annex II B;	29.10(c)
(d) following specific requests from the Fisheries Commission to the Scientific Council, makes VMS position data available in a summary form to the Scientific Council;	29.10(d)
(e) upon determining that a vessel has failed to transmit two consecutive VMS position data reports as specified in paragraph 1, so notifies the FMC of the flag State Contracting Party without delay;	29.10(e)
<b>Article 30 – Observer Program</b>	
(g) submits to the flag State Contracting Party and to the Executive Secretary, within 30 days following completion of a fishing trip, a report detailing the data recorded in accordance with this paragraph.	In Article 30.A.2(g), replaced “deployment” with “fishing trip” to ensure that an observer report is submitted for each trip
7, The Executive Secretary:	
(a) provides copies of the observer report referred to in Article 30.A.2(g) to Contracting Parties with an inspection presence in the Regulatory Area; and (b) upon request, provides copies of the observer report referred to in Article 30.A.2(g) that contains daily catch totals by species and division instead of by individual hauls and co-ordinates to Contracting Parties without an inspection presence.	Revised paragraph 7 to clarify how data is distributed to Contracting Parties with and without an inspection presence in the Regulatory Area
<b>Article 33 – Surveillance Procedures</b>	
IN PARAGRAPH 2, - Collate the chapeau and (a) to make a single sentence - move (b) to Article 40, as new inclusion in the current (d)	
3. The Executive Secretary maintains the Surveillance Reports until follow-up action is concluded by the flag State Contracting Party of the vessel concerned and sends final reports to Contracting Parties with an inspection presence in the Regulatory area.	33.3 + New text for clarity
<b>Article 39 – Follow-up to Infringements</b>	
2. Each Contracting Party shall ensure that in proceedings it has instituted, it treats all notices of infringement issued in accordance with Article 38.1(l) as if the infringement was reported by its own inspector.	39.2 + Revised text to clarify that CPs must treat observer/inspector obstruction notices as if their own entities reported the infringement.

<b>Article 40 – Contracting Party Reports on Inspection, Surveillance and Infringements</b>	
1. (d) the action it has taken during the previous year concerning every infringement notified to it by a Contracting party or with regards to each Surveillance Reports it has received, including a description of the specific terms of any penalties imposed;	40.1 (d) + 33.2 (b) The second sentence of 33.2 (b) is already in 40.3, so no need for further change in 40.3. The additional text is needed to fully reflect text from 33.2(b).
In paragraph 4, the word “concerning” should be replaced by “for”	
<b>Annex II.A – Recording of Catch (Fishing Logbook Entries)</b>	
<ol style="list-style-type: none"> <li>1. Vessel name</li> <li>2. Vessel nationality</li> <li>3. Vessel registration number</li> <li>4. Registration port</li> <li>5. Type of gear used (*1) (*2)</li> <li>6. Date of fishing activity (day/month/year: dd-mm-yyyy)</li> <li>7. Start time of each tow/set (UTC)</li> <li>8. Start position of each tow/set: <ol style="list-style-type: none"> <li>a. Latitude</li> <li>b. Longitude</li> <li>c. Division</li> <li>d. Water depth</li> </ol> </li> <li>9. End position of each tow/set: <ol style="list-style-type: none"> <li>a. Latitude</li> <li>b. Longitude</li> <li>c. Division</li> <li>d. Water depth</li> </ol> </li> <li>10. End time of each tow/set (UTC)</li> <li>11. Species names caught in each tow/set (Annex I.C)</li> <li>12. Disposition of each tow/set: (*3) (*4) <ol style="list-style-type: none"> <li>a. Total catch of each species (kilograms live weight)</li> <li>b. Discards of each species (kilograms live weight)</li> </ol> </li> <li>13. Were by-catch limits specified in Article 6.2 exceeded? (Y/N)</li> <li>14. Was a trial tow conducted in accordance with Article 6.3(c) conducted? (Y/N)</li> <li>15. Landings or Transshipments of catch from the Regulatory area <ol style="list-style-type: none"> <li>a. Quantity landed or transhiped of each species</li> <li>b. Place(s) of landing or transshipment</li> <li>c. Date(s) of landing or transshipment (day/month/year: dd-mm-yyyy)</li> </ol> </li> <li>16. Master’s signature</li> </ol> <p><b>Instructions</b></p> <p>(*1) When two or more types of gear are used in the same 24-hours period, records should be separate for the different types</p> <p>(*2) Gears and attachments shall be identified by codes in Annex II.J</p> <p>(*3) Quantities shall be in kg live weight</p> <p>(*4) Species shall be</p>	Removed separate fields for catch for human consumption and for reduction

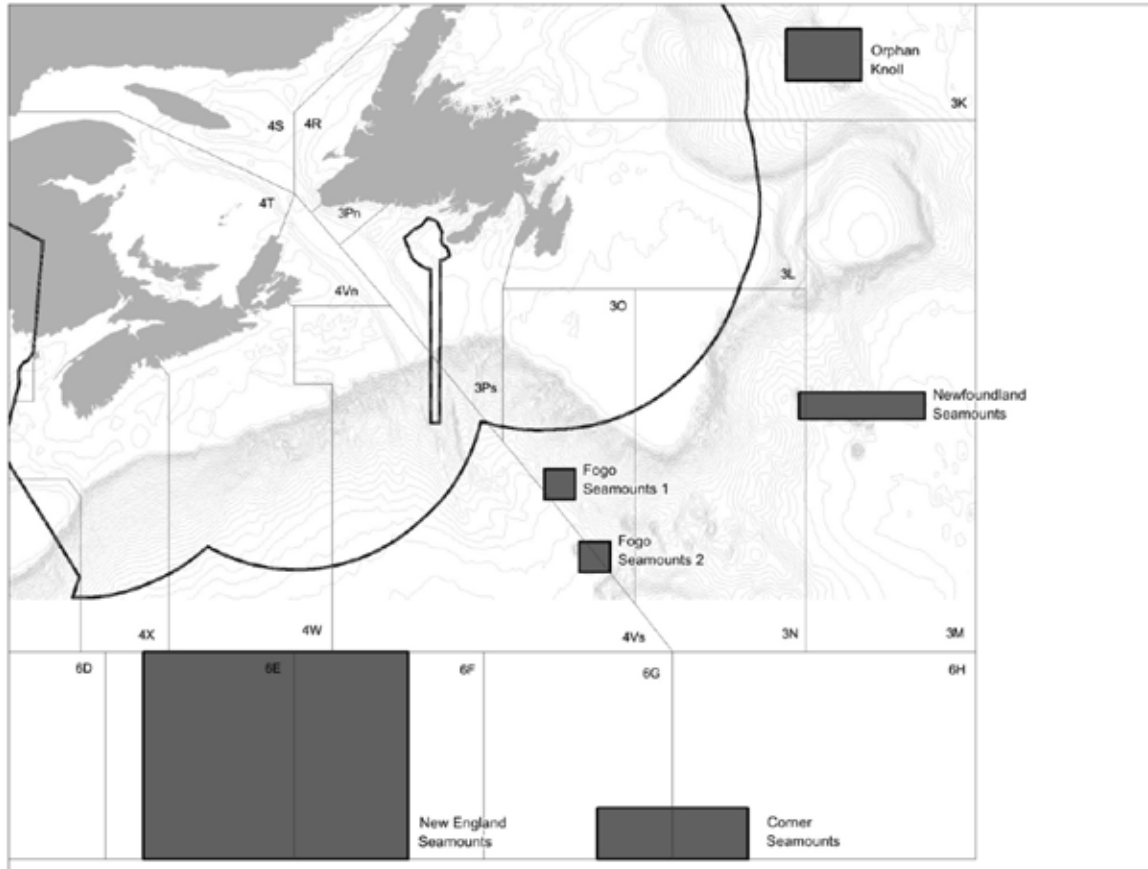


Fig. 4: Depiction of seamount closures outlined in Article 16.1

## **Annex 16. Standardization of Observer Program Data and Reporting Requirements in the NRA**

(STACTIC Working Paper 13/14 now FC Doc. 13/12)

### **Explanatory Memorandum**

As outlined in STACTIC WP 12/41, in the 2012 Progress report of the Expert Panel, it was recommended that standard protocols be developed and applied for the reporting of NAFO observer information by all flag States.

To ensure that data is collected and reported in a consistent and timely manner thereby, facilitating the compilation and analysis of the observer data, it is recommended that provisions be adopted in the NAFO Conservation and Enforcement Measures (NCEMs) that require the use of a standard observer collection template and that the NAFO Secretariat automatically disseminate the reports to those Contracting Parties with an inspection presence in the NAFO Regulatory Area (NRA).

Article 30, 2 (g) currently requires that observers submit to the flag State Contracting Party and to the Executive Secretary, within 30 days following completion of a deployment, a report, however the measures fails to identify a standard format for this report

A review of material currently available on the NAFO website uncovered an Electronic Observer Report template that comes in two separate spreadsheets – (1) on catch and effort data (NAFO Observer Catch Data Form), (2) on the length frequency data (NAFO Observer Length Frequency Form). These forms capture the information that the observers are required to collect and record.

This amendment to the measures would ensure that data is collected and reported in a consistent and timely manner thereby facilitating the compilation and analysis of the observer data.

In support of this objective, Canada is proposing the use of a standardized data collection format and process through the addition of a new Annex II. M (standardized observer report template). The proposal would facilitate the compilation and analysis of observer data. This in turn would enhance the quality of reporting, reduce costs and make the information more relevant for all Contracting Parties and key stakeholders.

### **Proposal**

#### **Article 30 – Observer Program,**

**(1) Replace the current *Duties of the flag State Contracting Party 2. (g)* with the following:**

(g) submits to the flag State Contracting Party and to the Executive Secretary, within 30 days following completion of a deployment, a report *as set out in Annex II.M.* detailing the data recorded pursuant to this paragraph.

**(2) Add: Annex II.M Observer Report (annex 1)**

**(3) Replace the current *Duties of the Executive Secretary 7.* with the following:**

7. The Executive Secretary will provide to any Contracting Party:

(a) with an inspection presence in the NRA, a copy of the report referred to in paragraph 2(g), including individual hauls and co-ordinates.

(b) without an inspection presence in the NRA, upon request, a copy of the report referred to in paragraph 2(g), providing daily catch totals by species and division.

**Annex II. M, Standardized Observer Report Template****Part 1. Fishing Trip and Gear Information****1A. Fishing Trip**

Vessel Call Sign	
Vessel Name	
Flag State	
Trip Number	
Fishing Master's Name	
Number of Crew	
Observer's Name	
Observation Date Started	
Observation Date Ended	
Date of Report	
Vessel Length (m)	
Vessel Type	
Vessel Gross Tonnage	
Engine Power (indicate HP or KW)	
Frozen Hold Capacity (m <sup>3</sup> )	
Fish Meal Hold Capacity (m <sup>3</sup> )	
Other Hold Capacity (m <sup>3</sup> )	
Directed Species	
NAFO Division/s visited	
Date of Entry into NRA	
Date of Exit from NRA	
Port of Landing	
Other Area/s visited	
Comments	



**1B. Trawl Gear Information**

Gear #	Gear Type	Gear Make	Trawl Gear Information												Attachments	Grate Spacing	Straps
			Mesh Size (mm)						Lengthening Piece								
			Wings		Body		Lengthening Piece		Codend								
High	Low	High	Low	High	Low	High	Low	High	Low	High	Low						

Comments:



**Part 3. Compliance Information**

Enter observation on:

- 1) Discrepancies between logbook entries and observer's estimates.
- 2) Functional of satellite tracking device.
- 3) Any other observation

**Part 4. Effort and Catch Summary**

**4A. Effort Summary**

<b>Effort Summary Table</b>									
NAFO Division	Gear #	Directed Species	Date		# of hauls	Depth (m)		# Hours fished	# Fishing Days
			Start	Finish		Minimum	Maximum		

**4B. Catch Summary**

<b>Trip Catch Summary (catch by Division and Species)</b>				
NAFO Division	Species	Catch (kg)		
		Retained	Discarded	Total

**Part 5. Length Frequency Form**

Length Frequency		Trip Number:	
Species Code:		Tow/Set/Haul #:	
Sample Type:		Measure Type:	
Meas. Convention		Total Measured:	
Sample Wt.:		Catch Weight:	
Gear Type:		Gear Number:	

sex:		sex:	
Tally	#	Tally	#
0		0	
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
0		0	
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
0		0	
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
0		0	
1		1	
2		2	
3		3	
4		4	

## **Annex 17. Proposed revisions to Article 3, 5 and 6 of the NCEM (Phase II)** (STACTIC Working Paper 13/5 Rev4 now FC Doc. 13/13)

### **Introduction**

At the September 2012 Annual Meeting, the Editorial Drafting Group (EDG) outlined an approach for continuing to revise the NAFO Conservation and Enforcement Measures (CEMs). Pursuant to this approach, the EDG reviewed Article 5 and 6 independent of the other Articles given the relative complexity and contentious nature of these provisions.

A brief description of the proposed substantive changes to the existing CEMs is provided below. The full suite of proposed revisions can be found in the attached annex, which contains the cross-references to the corresponding article and paragraph, based on the 2013 CEMs, and a brief description of the proposed change in the right column. The proposed changes represent revisions necessary to clarify existing measures, correct inaccurate references and reformat the CEMs to reflect the updated style and format agreed upon during Phase I of the EDG's efforts (STACTIC WP 11/21).

### **Proposed Substantive Changes to Catch Limitations and By-catch Requirements (Articles 5 and 6)**

Issues of particular note include:

- a. Ensuring that the duties of Contracting Parties and vessels are clearly articulated in Article 3
- b. Inclusion of linkage between effort limitations and stocks listed in Annex I.A and I.B;
- c. Inclusion/clarification of “chartered vessels” intent (in accordance with Article 26) for Contracting Parties;
- d. Clarify that all catch (retained and discarded) is applied against applicable quotas
- e. Establishing Parameters on how by-catch ratios are applied/calculated to species (division, trip, cumulative, etc.);
- f. More clearly distinguishing between Annex I.A and I.B quota from “Others” quota;
- g. Inclusion of the definition of “fishing day”;
- h. Clearly establishing the application of closures (directed fisheries);
- i. Require closure of directed fishery within 24 hours instead of 7 days;
- j. Establishing by-catch provisions to total catch of species (including discards) versus only what is retained onboard; and
- k. Reduce by-catch trial tow duration from 3 hours to 1 hour and require vessel to leave the division if by-catch is still excessive.

PROPOSED NEW TEXT	OLD REFERENCE
<b>Article 3 – Duties of the Contracting Parties and Vessels</b>	
1. Each Contracting Party shall ensure that every fishing vessel entitled to fly its flag operating in the Regulatory Area complies with the relevant CEM; and	Article 3 reformatted to address STACTIC Chair concern about applicability of measures to both Contracting Parties and vessels.
2. Each fishing vessel operating in the Regulatory Area shall perform the relevant duties set out in the CEM and comply with the relevant provisions of the CEM.	
<b>Article 5 – Catch and Effort Limitations</b>	Revised title to reflect reorganization
1. Each Contracting Party shall ensure that:	New sentences for clarity including chartered vessels
(a) all vessels, including vessels chartered in accordance with Article 26, are subject to the catch and effort limitations specified in this Article;	
(b) all catch and effort limitations shall apply to stocks identified in Annex I.A and I.B; and	
(c) unless otherwise stated, all quotas shall be expressed as live weight, in metric tonnes.	
2. For any one haul, 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.	Article 6.3 (a) revised and moved for clarity and better flow and consistency for Articles 5 and 6
<b>Quotas and Effort</b>	
3. For stocks identified in Annex I.A or I.B caught within the Regulatory area by vessels entitled to fly its flag, each Contracting Party shall:	
(a) limit the catch, by its vessels so that the quota allocated to that Contracting Party in accordance with Annex I.A is not exceeded;	Article 5.1 revised to separate allocated quota from “Others” for clarity.
(b) ensure that all species from stocks listed in Annex I.A, caught by its vessels, are counted against the quota allocated to that Contracting Party;	New paragraph to ensure that Contracting Parties count all applicable catch against allocated quotas
(c) be permitted to fish for stocks in which it has not been allocated a quota in accordance with Annex I.A, hereafter referred to as “Others” quota, if such quota exists and notification of closure has not been given by the Executive Secretary in accordance with paragraph 12 (c) of this Article;	Article 5.1 + 5.3 revised to separate “Others” from allocated quota for clarity
(d) notify the Executive Secretary, by electronic means, of the names of vessels that intend to fish the “Others” quota, at least 48 hours in advance of each entry, and after a minimum of 48 hours of absence from the Regulatory Area. This notification shall, if possible, be accompanied with an estimate of the projected catch; and	Article 5.3 revised for clarity
(e) limit its fishing activities for shrimps in Division 3M in accordance with the fishing effort in Annex I.B.	Article 9.1

4. When no agreement can be reached by the Fisheries Commission on a NAFO managed stock, through either consensus or vote, the Fisheries Commission shall maintain the existing relative percentage quota shares for that stock, as reflected in Annex I.A and I.B. This shall be deemed to be a proposal of the Fisheries Commission pursuant to Articles XI and XII of the Convention for the succeeding calendar year.	Article 5.6 shortened for clarity
<b>Closure of Fisheries for Stocks Listed in Annex I.A and I.B Subject to Quota or Fishing Effort</b>	Revised title for clarity
5. Each Contracting Party shall:	
(a) close its fishery for stocks listed in Annex I.A in the Regulatory Area on the date on which the available data indicates that the total quota allocated to that Contracting Party for the stocks concerned will be taken, including the estimated quantity to be taken prior to the closure of the fishery, discards and estimated unreported catch by all vessels entitled to fly the flag of that Contracting Party;	Article 5.2 (a) revised for clarity
(b) ensure its vessels immediately cease fishing activities that may result in catch, when notified by the Executive Secretary in accordance with paragraph 12(b) of this Article that the quota allocated to that Contracting Party has been fully taken. If the Contracting Party can demonstrate that it still has quota available for that stock in accordance with paragraph 6 of this Article, the vessels of that Contracting Party may resume fishing on that stock;	Article 5.7 revised for clarity
(c) close its shrimp fishery in Division 3M when the number of fishing days allocated to that Contracting Party is reached. The number of fishing days in respect of each vessel shall be determined using VMS positional data within Division 3M, with any part of a day being considered a full day;	Article 9.3 revised for clarity
(d) promptly notify the Executive Secretary of the date of closure under paragraphs 5(a), (b), and (c) of this Article;	Article 5.2 (a) with appropriate cross references inserted
(e) ensure that no vessels entitled to fly its flag, commence or continue a directed fishery in the Regulatory Area for a particular stock subject to an “Others” quota within 7 days of notification by the Executive Secretary that the quota is taken;	Articles 5.4 + 5.5
(f) close its fishery for 3M Redfish when notified by the Executive Secretary that the 3M Redfish TAC has been taken, and	Article 5.2(b) shortened for clarity
(g) ensure that, after a closure of its fishery pursuant to 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.	Article 5.2 (a) + (b)
<b>Re-opening of a Closed Fishery</b>	
6. A fishery that has been closed according to paragraph 5 of this Article may be re-opened within 15 days of notification by the Executive Secretary in accordance with paragraph 12 of this Article:  (a) if the Executive Secretary confirms that a Contracting Party has demonstrated that there is remaining quota available from its original allocation; or  (b) if a quota transfer from another Contracting Party, in accordance with paragraph 9 of this Article, results in additional quota for the particular stock subject to closure.	Article 5.7 and 5.11 combined
<b>Quota Adjustments</b>	
7. Catch in excess of a quota allocated to a Contracting Party may result in a deduction of allocations of that stock during a future quota period, if so decided by the Fisheries Commission. Such a deduction:	Articles 5.7, 5.8, and 5.10 combined
(a) will be considered independently from any quota adjustment that may be decided by the Fisheries Commission;	

(b) shall not increase the quota allocated on that stock to any other Contracting Party, unless the Fisheries Commission determines that the increase will not cause further harm to the stock; and	
(c) shall not affect the allocation of any other quota to that Contracting Party.	
8. Catch in excess of an “Others” quota may result in temporary or permanent adjustments to fishing opportunities of the relevant Contracting Party, if so decided by the Fisheries Commission, as appropriate measures to compensate for damage caused to the stock when a Contracting Party has:	Article 5.9 revised for clarity
(a) allowed vessels entitled to fly its flag to harvest stocks allocated to “Others” quota without reporting its intention to fish on that quota to the Executive Secretary in accordance with paragraph 3(d) of this Article;	
(b) failed to report catches taken under such a quota by vessels entitled to fly its flag; or	
(c) permitted vessels entitled to fly its flag to continue a directed fishery under such quota after this fishery had been closed following notification by the Executive Secretary, in accordance with paragraph 12 of this Article.	
<b>Transfer of Quotas</b>	
9. A Contracting Party may partly or fully transfer its allocated quota under Annex I.A to another Contracting Party, subject:	Articles 5.11 and 5.12 combined for clarity on the date the transfer is effective
(a) to the consent of the receiving Contracting Party; and	
(b) prior notification of the transfer to the Executive Secretary, which shall state the date of the transfer’s entry into force.	
10. Transfers are not permitted for stocks under the “Others” quota.	New article to clarify FC decision in 2010
11. Fishing days allocated under Annex I.B for shrimps in Division 3M are not transferable between Contracting Parties. However, chartering arrangements related to fishing days are permitted, subject to the provisions of Article 26.	Article 9.5
<b>Duties of the Executive Secretary</b>	
12. The Executive Secretary:	
(a) promptly informs all other Contracting Parties of the date of closure of an allocated quota upon notification by a Contracting Party;	Article 5.2 (a)
(b) informs a Contracting Party within one working day that there is data available indicating that its allocated quota of a particular stock has been taken;	Article 5.7
(c) notifies without delay by electronic means all Contracting Parties of the date on which the available data indicates that total reported catch, including discards, is estimated at 50% for redfish in Division 3M, and equal to 80% and then 100% for any particular stock subject to an “Others” quota, when such quota exists in accordance with Annex I.A;	Articles 5.2 (b) and 5.4 revised to <i>add a notification at 80% to apply the precautionary approach</i> and to clarify applicable catch
(d) reports without delay to the Fisheries Commission when the Contracting Party referred to under paragraph 12 (c) of this Article failed to either cease fishing on that stock or demonstrate that the quota has not been taken within 15 days in accordance with Article 5.5; and	Article 5.7
(e) informs all Contracting Parties of notifications of quota transfers received.	Article 5.12
<b>Article 6 – Retention on Board of Stocks Identified in Annex I.A as By-catch When No Directed Fishery Is Permitted</b>	Revised title for clarify



1. To the extent possible, each Contracting Party shall ensure that its vessels, including vessels chartered in accordance with Article 26, minimize by-catch of species from stock identified in Annex I.A while operating in the Regulatory Area.	New paragraph
2. A species listed in Annex I.A shall be classified as by-catch when it is taken in a Division where any of the following situations exist:	New paragraph for clarity
(a) no quota has been allocated to that Contracting Party for that stock in that Division, in accordance with Annex I.A;	Article 6.1(a)
(b) a ban on fishing for a particular stock is in force (moratoria), or	Article 6.1(b)
(c) the “Others” quota for a particular stock has been fully utilized, following notification by the Executive Secretary in accordance with Article 5.	
<b>Limits for Species Listed in Annex I.A Retained on Board as By-catch</b>	
3. Each Contracting Party shall ensure that its vessels, including vessels chartered in accordance with Article 26, shall limit the retention on board of species classified as by-catch to the maxima specified below:	Articles 6.1(a) + (b) combined
(a) for Cod in Division 3M and Redfish in 3LN: 1250 kg or 5%, whichever is the greater;	Article 6.1(a) Editorial coherence with b and c
(b) for Cod in Division 3NO: 1000 kg or 4 %, whichever is the greater;	Article 6.1(b)
(c) for all other stocks listed in Annex I.A where no specific quota has been allocated to the flag State Contracting Party: 2500 kg or 10%, whichever is the greater, and	Article 6.1(a)
(d) where a ban on fishing applies (moratoria), or when the “Others” quota opened to for that stock has been fully utilized: 1250 kg or 5%, whichever is the greater.	Article 6.1(b)
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.	Article 6.1(c) revised for clarity of the source of the percentage to mitigate potential by-catch risks
5. By derogation, the calculation of groundfish by-catch levels in paragraph 3 of this Article shall not include the catches of shrimp in the total catch on board.	Article 6.1(c)
<b>Exceeding By-catch Limits in Any One Haul</b>	
6. Each Contracting Party shall ensure that its vessels:	
(a) do not conduct directed fisheries for species referred to in paragraph 2 of this Article;	Article 6.2(a) + 6.3 (a) revised for formatting changes
(b) observe the following, where the weight of any species subject to the by-catch limits exceeds the greater of the limits specified in paragraph 3 of this Article in any one haul:	
(i) immediately move a minimum of 10 nautical miles from any position of the previous tow/set throughout the subsequent tow/set;	Article 6.2(a) revised for formatting changes
(ii) leave the Division and not return for at least 60 hours if the by-catch limits specified in paragraph 3 of this Article are again exceeded following the first tow/set after moving in accordance with paragraph 6(b)(i) of this Article;	Article 6.2(a) revised for clarity on consequent move to mitigate potential by-catch risks

(iii) undertake a trial tow for a maximum duration of 3 hours before starting a new fishery following an absence of at least 60 hours,. If the stocks subjected to by-catch limits form the largest percentage, by weight, of the total resultant catch in the haul, this should not be considered as a directed fishery for those stocks, and the vessel must immediately change position in accordance with provisions of paragraph 6(b)(i) and (ii); and	Article 6.3 (c)
(iv) identify any trial tow conducted in accordance with paragraph 6(b) and record in the fishing logbook the coordinates pertaining to the start and end locations of any trial tow conducted.	New paragraph to address haul-by-haul logbook requirements adopted in STACTIC 12/16(rev3)
7. In a directed fishery for shrimp, the move referred to in paragraph 6 shall apply when, for any one haul, the quantity of the total groundfish stock listed in Annex I.A exceeds 5% in Division 3M or 2.5% in Division 3L.	Article 6.2(b)
8. When a vessel is conducting a directed fishery for skate with a legal mesh size appropriate for that fishery, the first time that catches of stocks for which by-catch limits apply, as specified in paragraph 2, comprise the largest percentage by weight of the total catch in a haul, they shall be considered as incidental catch, but the vessel shall immediately move as specified in paragraph 6.	Articles 6.3(b)
9. The percentage of by-catch in any one haul is calculated as the percentage, by weight, for each stock listed in Annex I.A of the total catch from that haul.	Article 6.2(c)

## **Annex 18. Fishing Operations under a Charter Arrangement** (STACTIC Working Paper 13/23 Rev **now** FC Doc. 13/14)

### **Preamble**

The Article 26 of the NAFO CEM allows chartering arrangements between Contracting Parties. One associated conditions, specified in paragraph 2 (c), limits the charter to 6 months in any calendar year. It is intended that the purpose of this condition is to limit the time spent by the chartered vessel in conducting its fishing operations under the chartering arrangement to a maximum duration of 6 months in a calendar year.

It is proposed to redraft the text of paragraphs 2, 5 and 7 to 9 of Article 26 to clarify the difference between the contract that constitutes the chartering arrangement and the fishing operations that are conducted under that chartering arrangement.

### **Proposed amendment:**

In Article 26, to replace paragraphs 2, 5 and 7 to 9 by the following text:

2. A Contracting Party may authorize all or part of its allocation to be harvested using a chartered authorized vessel entitled to fly the flag of another Contracting Party, subject to the following conditions:
  - (a) the flag State Contracting Party has consented in writing to the chartering arrangement;
  - (b) the chartering arrangement is limited to one fishing vessel per flag State Contracting Party in any calendar year;
  - (c) the duration of the fishing operations under the chartering arrangement does not exceed six months cumulatively in any calendar year; and
  - (d) the authorized vessel is not a vessel that has previously been identified as having engaged in IUU fishing activities.
5. The flag State Contracting Party shall not authorize the chartered vessel, when conducting fishing operations under the chartering arrangement, to fish any of the flag State Contracting Party's allocations or under another chartering arrangement at the same time.
7. The chartering Contracting Party shall, before the date the chartering arrangement is effective, provide the following information in writing to the Executive Secretary:
  - (a) the name, registration, and flag State of the vessel;
  - (b) previous name(s) and flag State(s) of the vessel, if any;
  - (c) the name and address of the owner(s) and operators of the vessel;
  - (d) a copy of the chartering arrangement and any fishing authorization or licence it has issued to the vessel; and
  - (e) the allocation assigned to the vessel.
8. The flag State Contracting Party shall notify the Executive Secretary in writing prior to the start of the chartering arrangement of its consent to the chartering arrangement and provide to the chartered vessel a copy of the notice sent by the Executive Secretary pursuant to paragraph 14.
9. The chartering Contracting Party and the flag State Contracting Party shall both notify the Executive Secretary immediately upon the occurrence of the following events:
  - (a) **start of fishing operations under the chartering arrangement;**
  - (b) **suspension of fishing operations under the chartering arrangement;**
  - (c) **resumption of fishing operations under a chartering arrangement that has been suspended;**
  - (d) **end of fishing operations under the chartering arrangement.**

## **Annex 19. Observer Reporting**

(STACTIC Working Paper 13/25 Rev2 **now** FC Doc. 13/15)

### **Preamble:**

The Observer Scheme in Chapter V of the NAFO CEM states that the observer must submit a report within 30 days following completion of a deployment. However, the format of that report is not fixed, and the delay for submission does not ensure its availability for port inspection at landing.

STACTIC has agreed at its London 2013 inter-session to defer to the Fisheries Commission a standardized format for the observer report, as Annex II.M, and a revised way to disseminate that report to Contracting Parties. STACTIC also requested the EU to consider preliminary information to support the local port inspection at the arrival of the vessel in port. This proposal responds to this request.

The rationale is to consider that

1. the standardized format adopted by STACTIC at London 2013 can easily be fulfilled electronically by the observer before the arrival of the vessel in port
2. at the latest at arrival in port, the observer delivers the standardized report without delay to the flag Contracting Party and to the local inspection service, in case of inspection in port
3. the flag state contracting party forward the report to NAFO Secretariat for dissemination in accordance with the new paragraph A 7.

### **Proposed amendment:**

#### **Article 30 – Observer programme**

1. In conjunction with STACTIC WP 13/14 (adopted in London 2013), replace the text of paragraph A 2 (g) by the following one:
  - (g) as soon as possible after leaving the Regulatory area, and at the latest at arrival of the vessel in port, submits the report , as set out in Annex II.M, in electronic format, to the flag State Contracting Party and, if an inspection in port occurs, to the local port inspection authority. The flag State Contracting Party forwards the report to the Executive Secretary within 30 days following the arrival of the vessel in port.

## **Annex 20. Directed Species DS in Authorization Message for Transshipment**

(STACTIC Working Paper 13/29 now FC Doc. 13/16)

### **Background**

According to Article 25 – Vessel Requirements 1 a) Each Contracting Party shall notify to the Executive Secretary a list of its vessels flying its flag which it may authorize to conduct fishing activities in the NAFO Regulatory Area.

Further, Article 25.5 a) requires that each CP shall transmit the individual authorization for each vessel from the list of notified vessels it has authorized to conduct fishing activities in the NAFO RA, in the format prescribed in Annex II.C3 AUT message.

The data element Directed Species–DS in the AUT message identifies the stocks and area for which the particular vessel is allowed to fish.

STACTIC was requested by one Contracting Party to clarify how the DS field should be populated in the case of transshipment vessels e.g. all known species, one species or leave blank. Transshipment vessels can not necessarily verify what kind of species will be transhipped. Since this information is not necessarily useful for NAFO purposes, the Chair proposed to make the following amendments to the CEM.

### **Proposed Amendment**

**Replace existing Article 25.5 (a) second paragraph, first sentence with the following:**

**Each authorization shall in particular identify the start and end dates of validity and, the species for which directed fishery is allowed, unless exempted in Annex II.C.3.**

**Also in Annex II.C. 3**

**Add footnote XX to M (mandatory): For transshipment vessels the DS field is optional.**

**Annex 21. Annual Compliance Review 2013**  
**(Compliance Report for fishing year 2012)**  
(STACTIC Working Paper 13/17 Rev3 now FC Doc. 13/27)

## 1. Introduction

This compliance review is being undertaken in accordance with Rules 5.1 and 5.2 of the Fisheries Commission Rules of Procedure. The scope of the review is to determine how international fisheries complied with the annually updated NAFO Conservation and Enforcement Measures (NCEM) when fishing in the NAFO Regulatory Area (NRA), and assess the performance of NAFO Contracting Parties with regard to their reporting obligations.<sup>1</sup>

This review utilizes information for the years 2004 to 2012 from the following sources: vessel monitoring system (VMS) and hail messages delivered by the vessels (Vessel Transmitted Information – VTI), Port Inspection Reports, At-sea Inspection Reports and Reports on Dispositions of Apparent Infringements provided by the Contracting Parties, and Observer Reports sent to the Secretariat.

As discussed at the Intersessional Meeting of the Standing Committee on International Control (STACTIC) in May 2013, five new elements are included in this review, namely:

- Groundfish effort at various depth,
- Vessel activity in Vulnerable Marine Ecosystem (VME) closure areas,
- Shrimp vessels activity at depths less than 200 m,
- Vessel activity in areas where closure notice has been communicated (e.g. Redfish in Division 3M), and
- Reported catches of regulated and selected non-regulated species by Division.

## 2. Fishing effort and fishing trends in the NAFO Regulatory Area

NAFO identifies three main fisheries in its Regulatory Area: the groundfish (GRO - primarily in Div. 3KLMNO), shrimp (PRA - primarily in Div. 3LM) and pelagic redfish fisheries (REB - primarily in Div. 1F and 2J). Trawling operations account for more than 99% of the total fishing activity in the NRA.

In 2012, there were 57 fishing vessel spending a total of 5 510 days in the NAFO Regulatory Area (NRA) (Table 1). 161 trips were identified. Groundfish fishery accounted for 91.6% of the total fishing effort, shrimp for around 4.5%, and the pelagic redfish fishery for around 3.8%.

Although there was a decrease of about a third of the total number of days of the shrimp fishing effort in 2012 compared to the previous year, an overall 4% increase of the total fishing effort was observed (Table 1). The net increase could be attributed largely to the pelagic redfish fishery in 2012. Shrimp fishing effort in Division 3L has continued its decline since the 3M shrimp moratorium in 2010. The groundfish fishery effort increased at a modest 2.6%, and has remained at the 2006-2007 level (Fig. 1).

**Table 1.** 2011-2012 Comparison of Fishing Effort in the NAFO Regulatory Area.

Number of fishing vessels					Fishing effort (days present)				
Year	Groundfish (GRO)	Shrimp (PRA)	Pelagic Redfish (REB)	TOTAL	Year	Groundfish (GRO)	Shrimp (PRA)	Pelagic Redfish (REB)	TOTAL
2011	47	8	2	56	2011	4922	360	18	5300
2012	44	5	8	57	2012	5050	250	210	5510
% change	-6.4%	-37.5%	300.0%	1.8%	% change	2.6%	-30.6%	1066.7%	4.0%

<sup>1</sup> For the purpose of this compliance analysis, only fishing trips which ended in 2012 were considered. Fishing trip for a fishing vessel includes “the time from its entry into until its departure from the Regulatory Area and continues until all catch on board from the Regulatory Area is unloaded or transhipped” (Article 1.7 of the 2013 NCEM).

For the period 2004-2012, the overall fishing activities in the NRA show a declining trend, from 134 active vessels in 2004 to 57 in 2012, representing a 58% decrease. The decline is even more pronounced in terms of overall fishing days, with a 67% decrease for the same period, from 16 480 days in 2004 to 5 510 days in 2012. The average number of days each vessel operates in the NAFO also declined from 123 days in 2004 to 97 days in 2012.

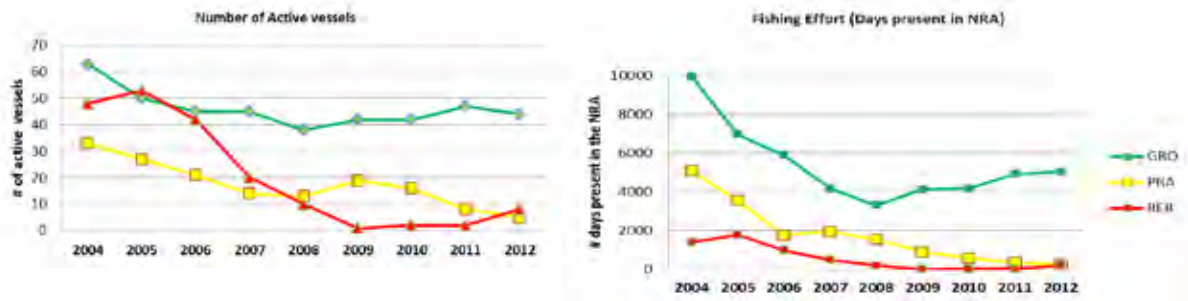


Fig. 1. The trend of fishing effort in the NAFO Regulatory Area in the period 2004-2011.

Figure 1 illustrates the changes described above for each of the major fisheries. The general decline since 2004 is observed. The pelagic redfish fishery was being close to disappearance in 2009. Groundfish fishing effort has been steadily increasing since 2008. NAFO fisheries remain dominated by the groundfish category. Figure 2 illustrates the current effort distribution compared to the historical average. By 2012, the fishing effort contribution of shrimp fisheries was reduced to 4% largely due to the shrimp fishing moratorium established in 2011.

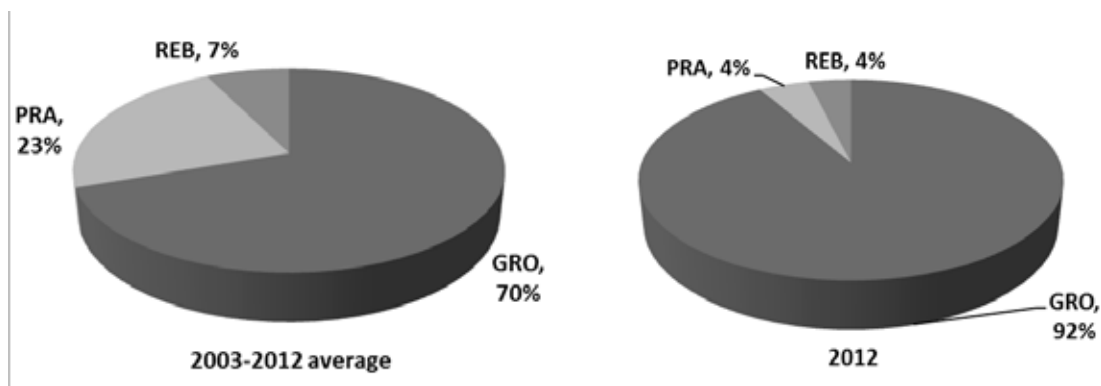


Fig. 2. Comparative fishing effort (days present) in the NAFO Regulatory Area

**Effort distribution by depth of groundfish vessels**

The requirement of providing the speed and course information in the Vessel Monitoring System (VMS) reports facilitated the estimation of fishing effort in terms of fishing hours. Speeds between 0.5 and 5 knots were considered fishing speeds. In Figure 3, the distribution of fishing effort in hours of groundfish vessel is presented. With fishing depth range of greater than 700 m for Greenland halibut, Figure 3 suggests half of all groundfish effort is devoted to Greenland halibut fishing.

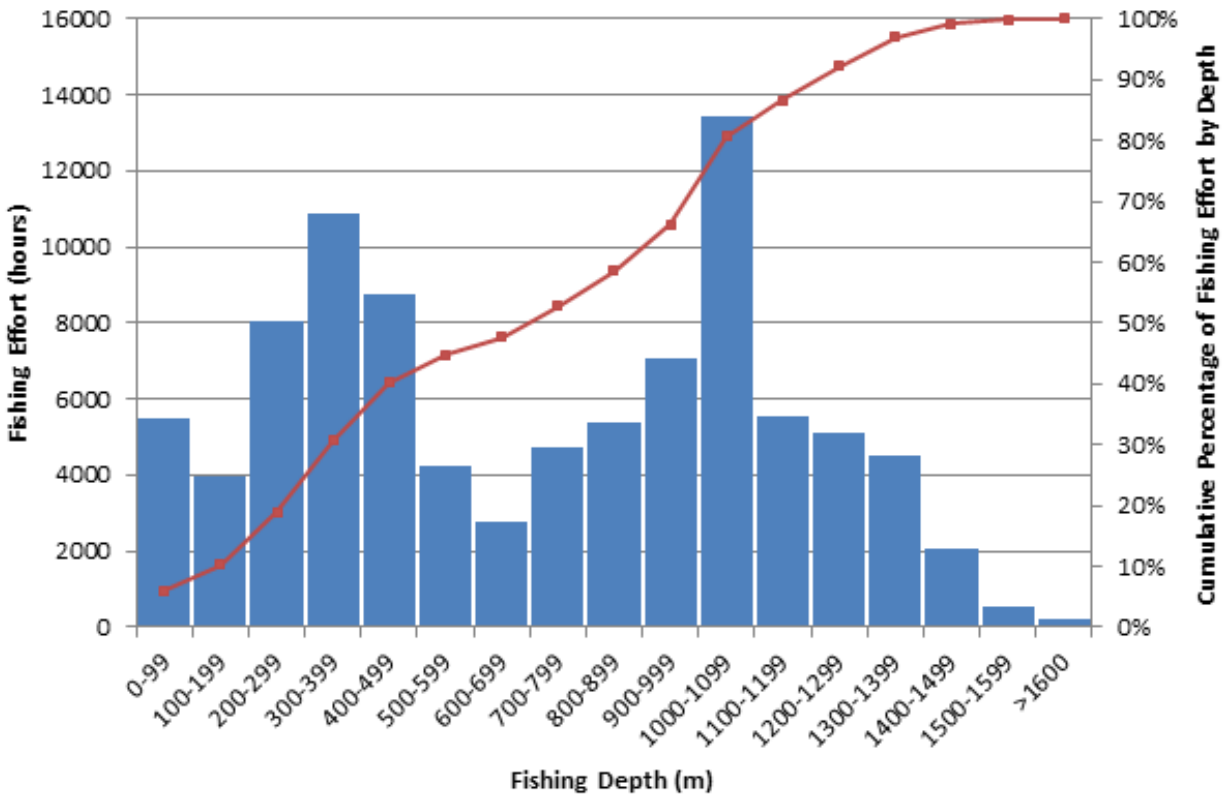


Fig. 3. Distribution of groundfish fishing effort by depth in the NRA in 2012 (Excludes 1F & 6G).

### 3. Compliance by Fishing Vessels

Through the at-sea and port inspections, NAFO monitors, controls and conduct surveillance of the fisheries in the NRA exposing infringements of the NAFO regulations and collecting evidence for the following prosecution within the legal system of each NAFO flag State Contracting Party.

#### Position reporting – Vessel Monitoring System (VMS)

Vessels in the NRA are required to transmit position reports at one hour intervals. In addition, the course and speed information must be included in the position reports. Examination of the position reports revealed that vessels were compliant to this requirement. The position reports were received by the Secretariat in practically real-time through the Fisheries Monitoring Centres (FMC) of individual flag States. When technical difficulties were encountered by the vessels in complying with the position reporting requirements, the position reports were transmitted electronically by email and promptly entered into the VMS database by the Secretariat. In cases of technical difficulties, VMS reports can be transmitted at least once every four hours. Generally, the technical issues were resolved at most within a few days through the coordination and communication between the Secretariat and the FMCs. The timeliness of submission of position reports was not an issue since VMS reports were being received by the Secretariat and CPs with inspection presence in real-time through satellite technology.

With an estimated total fishing effort of 5 510 vessel-days, the expected number of VMS reports is 132,240. A total of 130,209 VMS position reports within the vessel-days were received in 2012 (98.5%).

#### Activity and catch reporting– Vessel Transmitted Information (VTI): Catch-on-Entry, Catch-on-Exit, Daily Catches

Catch quantities on board upon entry to (COE) and exit from (COX) the NRA must be reported for each fishing trip. While fishing in the NRA, fishing vessels are required to transmit daily catch notifications (CAT) detailing catch quantities by species and division. Catch reports are transmitted through the same



technology and communication channel as the transmission of VMS (positions) reports. (See section *Vessel Transmitted Information (VTI) – Catch-on-Entry (COE), Catch-on Exit (COX), Daily catch reports (CAT)* below.)

Daily catch reports are not limited to regulated (under quota or moratorium) species. Non-regulated species are also reported (Table 2).

Table 2. Total reported catches (in tons) of regulated and selected non-regulated species (Source: CAT reports).

Division	1F	2H	2J	3L	3M	3N	3O	?
Species (FAO 3-alpha code)								
<b>Regulated</b>								
COD				125.2	9098.0	614.8	212.2	86.2
GHL				6219.8	1891.3	1162.5	28.3	29.2
HKW				11.4	11.8	12.4	81.8	0.1
PLA				99.7	125.2	895.4	160.6	1.7
PRA				2223.8	6.0			
REB	2905.6	69.6	3.0					11.9
RED				1769.2	7569.4	1747.5	6597.8	234.0
SKA				128.3	178.4	4432.8	100.7	2.0
SQI						0.3	3.1	
WIT				99.9	117.3	210.1	119.5	1.0
YEL				0.4	2.6	1815.3	52.7	0.2
<b>Unregulated</b>								
CAT				132.1	37.9	60.8	13.8	0.5
RHG				674.8	498.1	116.7	5.5	35.0
RNG				329.8	255.9	169.0	1.2	

**Vessel activity after 3M redfish 100%-TAC notification**

The fish stock 3M redfish is the only regulated stock which Total Allowable Catch (TAC) is considerably less than the sum of the individual quotas. Contracting Parties depend on the update of the total uptake for them to be able to prevent exceeding the TAC. Therefore the Secretariat closely monitors the TAC uptake of this stock.

On 13 August 2012, the Secretariat notified that the accumulated catch of this stock has reached 98% of the 6500-t TAC. Figure 4 shows the total daily catches and the percentage cumulative catch derived from CAT reports. The fishing vessels continued to conduct directed fishery of this stock for few days after the notification. Before the end of the month, retention ceased by which time the accumulated catch exceeded 10% of the TAC.

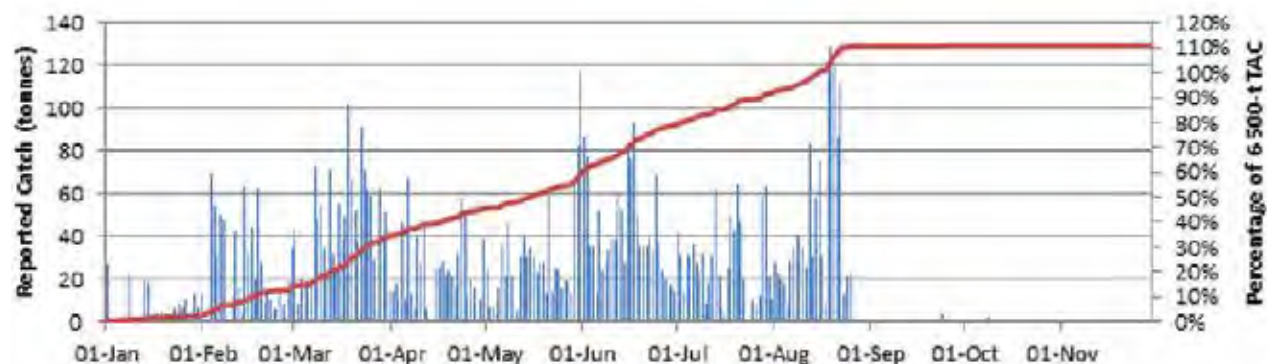


Fig. 4. Daily 3M redfish catches of all vessels in 2012.

**Shrimp vessels**

Shrimp in Division 3M has been under moratorium since 2010. The GIS analysis of the VMS and VTI reports revealed that the moratorium is being respected. All fishing were confined in Division 3L. According to Article 9.7 of the NCEM, no vessel shall fish at the depth less than 200 meters. Figure 5 confirms that shrimp vessels complied with this regulation. Fishing was conducted at depths 200-400m.

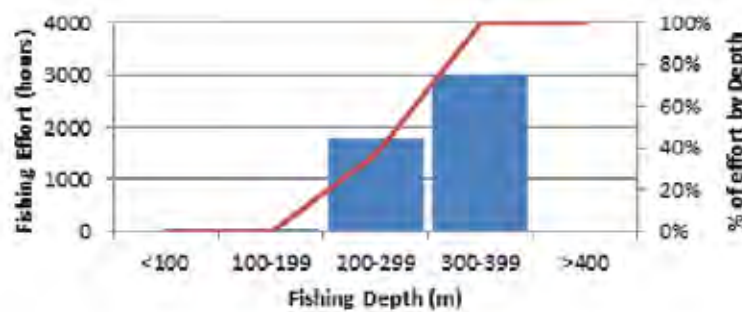


Fig. 5. Distribution of shrimp fishing effort by depth in the NRA in 2012

**Closed areas and Exploratory Fisheries**

Since 2007, in total 18 areas in NAFO have been closed to bottom fishing including 11 significant coral and sponge areas, one coral protection zone and six seamounts. The conservation and enforcement measures concerning the protection of the VMEs are stipulated in Chapter II of the NCEM.

An examination of the VMS position reports revealed that all the closed areas were respected. Fishing activities were generally confined within the footprint, except for one vessel which fished in Division 6G (in the environs of the closed Corner Seamounts) in five days in July 2012 (Fig. 6). The exploratory fishing was done in accordance with Article 18, Chapter II of the NCEM. According to the trip report, 14 hauls were made and the total fishing effort was 49.3 hours using a bottom trawl and a pelagic trawl. This exploratory fishing trip is still in the process of evaluation by the Scientific Council in accordance with Article 21.3 of the 2013 NCEM.

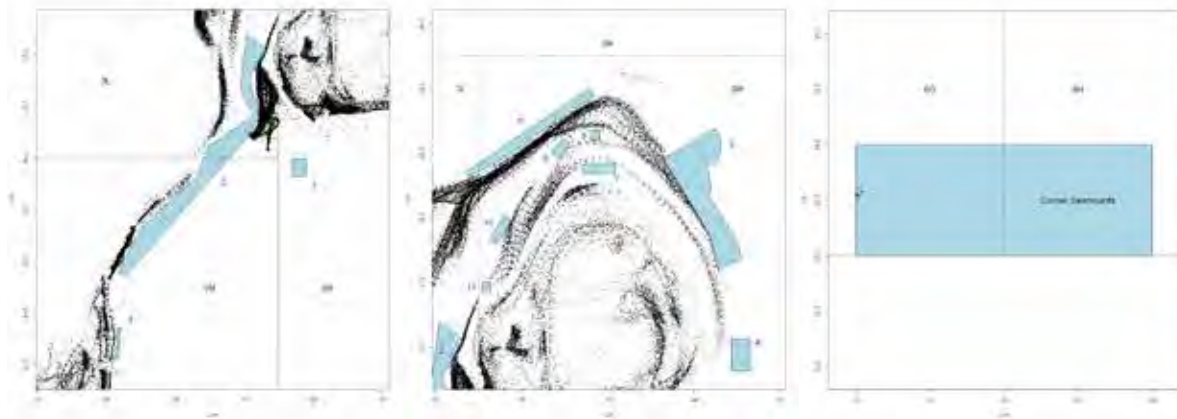


Fig. 6. VMS position plots of all vessels (at speed 0.5- 5.0 knots) in the NAFO Regulatory Area in 2012 in relation to closed areas.

### Catch reporting on sharks

Fishing for the purpose of collecting shark fins is prohibited under Article 12 of the 2013 NCEM. Sharks species taken in NAFO fisheries are not associated with shark finning practices, and there has never been an incident of shark finning observed in the NRA.

It has been noted that there has been a lack of species-specific reporting of shark catches in the NRA. In this regard, it became a requirement in 2012 to report, the extent possible, all shark catches at the species level (Article 25.3 NCEM).

All 2012 CAT reports were examined. Except for the shortfin mako, all sharks catches were not reported to the species levels. 99.45% of all shark catches were reported dogfishes (Table 3). It is not known how many species of shark were lumped into DGX and SHX.

Table 3. Amount of shark catches (in tons) as reported in CATs.

FAO 3-Alpha Code	English name	Reports catches in 2012 (from CATs)	Percentage
DGX	DOGFISHES (NS)	184.5	99.45%
SHX	LARGE SHARKS (NS)	0.9	0.49%
SMA	SHORTFIN MAKO SHARK	0.1	0.06%

### At-sea inspections

The NAFO Joint Inspection and Surveillance Scheme is implemented to ensure management and enforcement measures are complied with by fishing vessels fishing in the NRA. Inspectors are appointed by Contracting Parties and assigned to fishery patrol vessels tasked to carry out NAFO inspection duties at sea (Chapter VI of NCEM).

The total number of at-sea inspections dropped from 200 in 2011 to 193 in 2012. With the increase of total fishing effort (from 5300 days in 2011 to 5510 days in 2012), inspection rate (number of inspections/fishing effort) decreased from 3.8% in 2011 to 3.3% in 2012. For first time since 2008, at-sea inspectors were able to conduct at-sea inspections on pelagic redfish vessels. Although there is no target for at-sea inspection rates, the overall inspection rate has decreased to 3.3%.

Ten apparent infringements (AI) were detected by the at-sea inspectors and the AI citations were issued to nine vessels (see below for details).

Figure 7 on inspection rates indicates that in 2012 at-sea inspections were carried out in proportion to the fishing effort for each of the fishery type, suggesting equal treatment and equitable distribution of inspections.

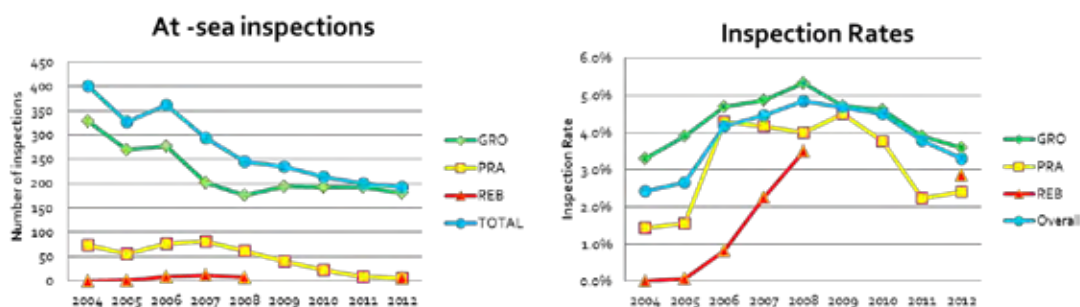


Fig. 7. Number of At-Sea Inspections and Inspection rates (number of at-sea inspection/vessel-days) in the NAFO Regulatory Area by fishery type.

### Port inspections

Prior to 2009, port State Contracting Parties were required to conduct port inspections on **all** vessels landing or transshipping fish species from the NRA, i.e. 100% coverage. Since the adoption of the Port State Control measures in 2009, the 100% coverage has been maintained for vessels landing NAFO species under recovery plans, in particular Greenland halibut. When landing catch species not under recovery plans, port inspections are not required if the vessel flag State Contracting Party and the port State Contracting Party are the same; if the flag State and the port State are different, the latter is required to conduct port inspections only 15 % of the time.

Traditionally, port inspections also serve to confirm AIs that were detected by at-sea inspections. In some occasions port inspectors issue citations of AIs to vessels, which were not detected by the at-sea inspectors. In 2012, 100 port inspection reports were received by the Secretariat, 89 of which were associated with groundfish (e.g. Greenland halibut and Atlantic cod) landings. Some AIs were issued by port State authorities in 2012 (see below for details).

### Citation rates

The annual citation rate (the ratio of the number of inspection reports with AI citations and the total number of inspection reports) for at-sea inspections ranges between 2.0 in 2008 and 6.1 in 2005. In 2012, the citation rate for at-sea inspections was 4.7%. The citation rate for port inspections ranges between 15.2 in 2007 and zero in 2010 and 2011. With two port inspection reports issuing apparent infringements (AI), the citation rate for port inspections was at 2% in 2012 (Figure 8).

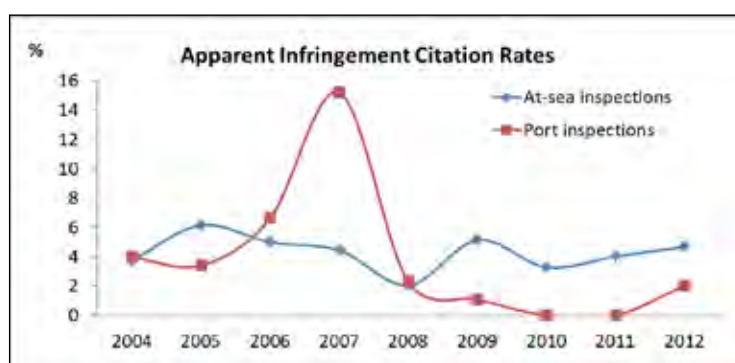


Fig. 8. Percentage of inspections that resulted in a citation at sea and in port

### Apparent infringements

Each citation issued by at-sea or port inspectors can list one or more apparent infringements (AI). Article 38 of the 2013 NCEM listed fifteen kinds AI's considered serious. In 2012, sixteen AI's were detected, ten of which by at-sea inspectors. For the first time since 2009, port authorities detected and cited AIs on vessels landing their products. The nature of the AIs ranges from expired capacity plans (considered non-serious) to evidence tampering (considered serious). Eleven distinct vessels were involved. Table 4 shows the details of the AIs issued to fishing vessels in 2012. The most frequent cases of AI concerns product labelling and capacity plans. Of note is the citation of a port authority to a vessel with multiple serious AIs, which prompted the concerned CP to initiate an IUU case against the vessel.

Figure 9 shows the evolution of the total number of AIs that have been issued at-sea and in port for each year since 2004. Figure 10 shows the composite list of AIs and the frequency of cases since 2004.

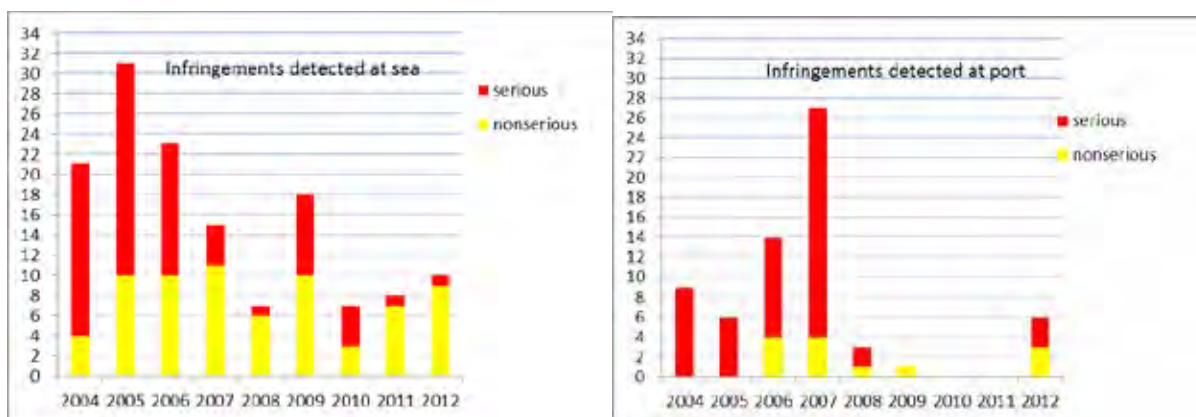


Fig. 9. Serious and non-serious AIs detected by NAFO at-sea and port inspectors for 2004-2012.

Table 4. Details of Apparent Infringements (AI) detected in 2012 by at-sea inspectors and port authorities.

AI#	Vessel Code	Inspection Date	Division or Port Location	Directed Species (according to COE)	Apparent Infringement	Serious AI? As considered by inspectors	Article (2012 NCEM)	Descriptive (from AI Statement Report or Follow-up report)	Disposition/Followup/update as of 30 July 2013, in compliance with Art. 37 of the 2012 NCEM	STATUS as of 30 July 2013, as reported by flag States or CPs
1	11	14-Nov-11	3N	RED	Quotas - Retaining fish (3M cod) after closure of the fishery.	No	Art.3.2. Art. 5.2 in 2012 CEM)	Retaining fish (3M cod) after closure of the fishery.	Investigation revealed that cod was a bycatch of redfish, and the vessel moved away.	closed
2	11	14-Nov-11	3N	RED	VMS Requirements - Daily CAX transmissions	No	Art. 62.1	Failing to provide daily CAX when there is no observer on board.	Investigation revealed that the technical problem was resolved. All CAX was eventually transmitted.	closed
3	9	27-Dec-11	3L	RED GHL SKA PRA	Quotas - Retaining fish (3M cod) after closure of the fishery.	No	Art.3.2. Art. 5.2 in 2012 CEM)	Retaining fish (3M cod) after closure of the fishery.	Master received a written warning.	closed
4	5	03-Feb-12	3L	GHL RED PRA	Product labelling	No	Art. 24	Failing to clearly mark product as having been caught in the Regulatory Area; failing to clearly mark Greenland halibut harvested in accordance with the stock areas - 3LMNO.	Case initiated 12.12.2012. Waiting proposal of resolution.	pending
5	2	25-Feb-12	3O	RED COD GHL	Vessel Requirement - Capacity Plans	No	Art. 22	Vessel's capacity plan certification had not been renewed.	Under investigation	pending
6	7	09-Apr-12	3M	COD	Vessel Requirement - Capacity Plans	No	Art. 22	Not having a valid capacity plan	Owner given a rebrief regarding his responsibilities.	closed
7	3	25-Jun-12	3N	GHL RED HKW RNG SKA	Mis-recording of catches - inaccurate recording	Yes	Art. 25.1b	The inspector's estimate of the processed catch of RED onboard was determined to be 47.759 t, as compared to the master's logged production figures of 59.972 t. a difference of 12.214 t or 20.36%	After full investigation at Port of Vigo (with presence of CAN and CE), the AI was not verified. No process has been issued.	Closed
8	10	30-Jul-12	1F	REB	Vessel Requirement - Capacity Plans	No	Art. 22	Vessel capacity plan was last certified on Feb 2005.	The master was fined 10 000 rubles by Russian fisheries authorities for this infringement.	closed
9	8	28-Sep-12	3L	PRA	Product labelling	No	Art. 24	Not fully fulfilled the requirements of Article 24 -- para 1 and 2 of NCEM.	Master received a written strong warning.	closed
10	1	21-Nov-12	3O	SKA GHL RED COD HKW	Product labelling	No	Art. 24	Not having product labels securely affixed.	Under Investigation	pending
11	6	10-Aug-12	Port of Vigo	RED	Mis-recording of catches	Yes	Art. 35.1.i; Reg 1224/2009 Art. 14.3	Infringements were found relating to the following CEM Articles: 35.1.1, 35.1.1, 35.1.n, 25.1.h and 10.5.e.	IUU case being initiated in accordance to EU legislation	pending
12	6	10-Aug-12	Port of Vigo	RED	Inspection Protocol	Yes	Art. 35.1.i; LEY 3/2001 Art 100 c)	Infringements were found relating to the following CEM Articles: 35.1.1, 35.1.1, 35.1.n, 25.1.h and 10.5.e.	IUU case being initiated in accordance to EU legislation	pending
13	6	10-Aug-12	Port of Vigo	RED	Stowage plans	No	Art. 25.1.h; Reg 1386/2007 Art 19.2.b	Infringements were found relating to the following CEM Articles: 35.1.1, 35.1.1, 35.1.n, 25.1.h and 10.5.e.	IUU case being initiated in accordance to EU legislation	pending
14	6	10-Aug-12	Port of Vigo	RED	Evidence tampering	Yes	Art. 35.1.n.	Infringements were found relating to the following CEM Articles: 35.1.1, 35.1.1, 35.1.n, 25.1.h and 10.5.e.	IUU case being initiated in accordance to EU legislation	pending
15	6	10-Aug-12	Port of Vigo	RED	Greenland halibut measures	No	Art. 10.5.e.	Infringements were found relating to the following CEM Articles: 35.1.1, 35.1.1, 35.1.n, 25.1.h and 10.5.e.	IUU case being initiated in accordance to EU legislation	pending
16	4	04-Dec-12	Port Marin Pontevera	GHL RED HKW RNG SKA	Product labelling	No	Art. 24.2; LEY 3/2001 Art. 11.2	YEL labels	Case initiated. Waiting proposal of resolution.	pending



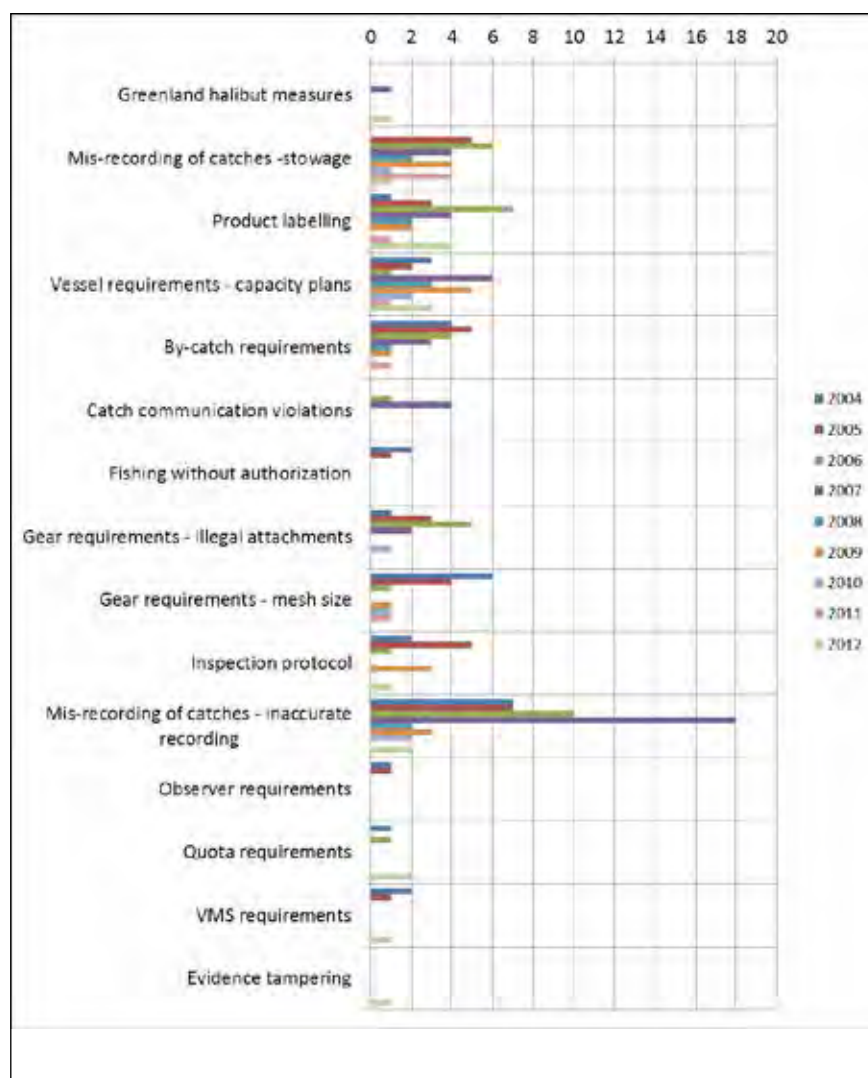


Fig. 10. Frequency of AI cases detected by NAFO at-sea and port inspectors in 2004 -2012.

#### 4. Reporting obligations by NAFO Contracting Parties and Observers

The NCEM obliges vessels and Contracting Parties to provide reports on their activity within a determined time frame. The completeness and regular delivery of those reports in time are of key importance to evaluating overall compliance. In evaluating the completeness, reports were examined to determine which fishing trips were covered by the reports. Each fishing trip must have VTI and Observers reports; vessels landing Greenland halibut must have port inspection reports. The percentage coverage is computed as a ratio of fishing days accounted for by the reports and total fishing days effort in the NRA. Less than 100% coverage suggests that there were missing reports that should have been received by the Secretariat.

Vessel Transmitted Information (VTI) – Catch-on-Entry (COE), Catch-on Exit (COX), Daily catch reports (CAT)

The FMCs of flag States are responsible in transmitting the VTI reports to the Secretariat (see also section *Activity and catch reporting* above). The COE and COX are transmitted signifying the start and end of a fishing trip. A 100% coverage would mean that all expected COEs are paired up with all expected COXs. A trip with a missing COE or COX would not account for the number of days of a fishing trip in the NRA. There were 161 identified fishing trips. 160 COEs and 158 COXs were received accounting for 5304 out of the total 5510 days, or 96.3% coverage (see Fig 11).

5749 CATs were received, more than the total effort of 5510 vessel days. This indicates that vessels which fished in two or more Divisions in a day transmitted multiple reports, consistent with the requirement that fishing vessels shall report daily their catches by species and by Divisions. The CAT reports have proven to be useful in monitoring quota uptakes of the Contracting Parties.

Port inspection reports

When vessels land their catches, the port inspectors report on the quantity of catches as well as the fishing trip details. However, the port inspection is not mandatory for all landings from NAFO fisheries: compulsory port inspections are required for any vessel landing species subject to a NAFO recovery plan, and for 15 % of landings by vessels of another Contracting Party, on an annual basis, in accordance with the Port State Measures adopted in 2009.

To evaluate the compliance of port State authorities in conducting inspections, only trips with Greenland halibut onboard at the end of the trip were considered. The identification of these trips was done by examining COX reports. Of the 161 fishing trips identified, COXs of 101 fishing trips indicated Greenland halibut on board. Of the 101 fishing trips (4556 days effort), 79 have corresponding port inspection reports (3450 days effort) --- a 76% coverage (see Fig. 11).

Observer reports

Under the traditional scheme, vessels are required to have an independent compliance observer on board at all times in every fishing trip (Article 30.A of the 2013 NCEM). Since 2007, Contracting Parties have the option of the electronic reporting scheme. Under this “electronic” scheme, CPs may allow their vessels to have observers onboard only 25% of the time the vessels are on a fishing trip (Article 30.B of the 2013 NCEM). CPs must give prior notification to the Secretariat which vessels participate in the electronic scheme.

Observers in the “traditional” scheme” are committed to deliver within 30 days after their assignment period their observer report, which contains information on date of fishing trip as well as catch and effort. Observers under the “electronic scheme” are required to report daily the catches and discards (OBR) while the fishing master transmits the daily catch reports (CAT) every trip. The CAT and OBR reports are transmitted through the same technology and communication channels as the VMS.

As in the port inspection reports, percentage coverage was computed as the ratio of the fishing days accounted for by the observers and the total fishing days in the NRA. In 2012, the percentage coverage was 86%, i.e. only 4 762 out of 5 510 days were covered by observer reports and CAX/OBR reports (see Fig. 11).

Observer reports may be crosschecked with port inspection reports, for relevant fishing trips, for a comparative analysis of catches. According to Article 27.A, the observers shall record, among others, the catch and effort data for each haul. The Secretariat has noted that not all observers’ reports contain the required information on catch and effort on a haul by haul basis.

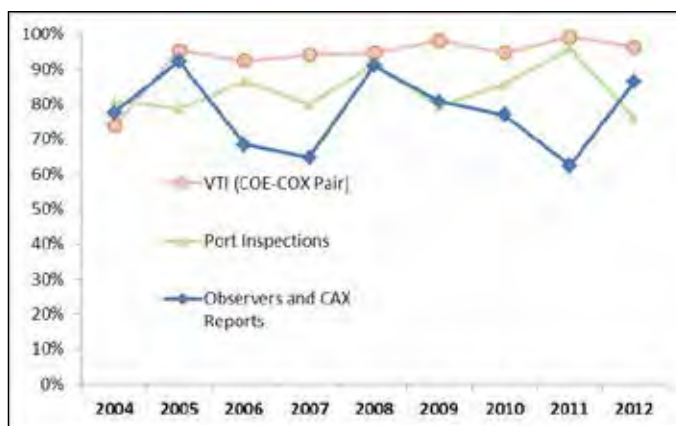


Fig. 11. Percentage coverage of fishing effort by VTI (COE-COX Pairs), Port Inspection and Observer Reports as a measure of compliance to report submission requirements.

### Timeliness of submission of reports

The timeliness of reports submitted to the NAFO Secretariat is an important issue: VMS messages are required to be provided every hour; hail messages at each entry and exit from the NRA as well catch reports on a daily basis (VTI); observers and at-sea inspection reports are expected to be submitted within 30 days and port inspection reports (PSC3 forms) should be sent to the Executive Secretary “without delay.” For the purpose of timeliness analysis, PSC 3 forms, as well as at-sea inspection reports received more than 30 days after the date of inspection were considered late. VMS and VTI messages were not included in the timeliness analysis as they are received practically in real time through satellite technology.

Figure 12 shows the timeliness of submission of at sea inspection, observer and port inspection reports. Less than half of the number of observer reports was received on time (17%). Timeliness in the submission of at-sea and port inspection reports was 86% and 52%, respectively.

At-sea and port inspection reports containing citations of infringements were always transmitted to the Secretariat without delay.

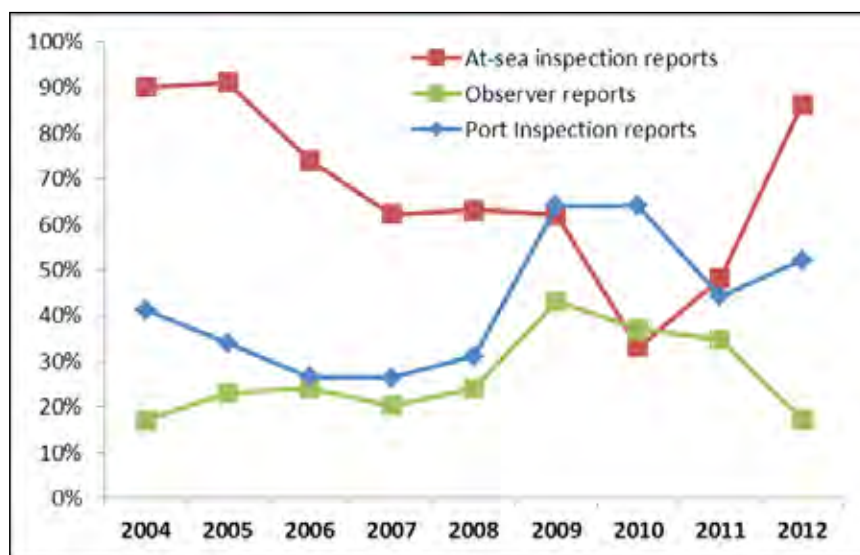


Fig. 12. Timeliness of submission of reports.

### 5. Follow-up to infringements

Contracting Parties are obligated to follow-up with further investigations and legal prosecution when NAFO inspectors issue a citation against a Contracting Party vessel (Article 39 of the 2013 NCEM). In 2012, sixteen (16) AIs were detected and issued in eleven (11) separate at-sea and port inspections. Of the 11, six were already resolved and two are still pending. Details of the AIs and the follow-up actions are presented in Table 4.

According to Article 40 of the 2013 NCEM, the status of each AI case must be reported to the Secretariat annually until the case is resolved, since the legal procedure can take longer than one year due to of the legal procedures in force in each Contracting Party. There has been an improvement in the last three years (2010 -2012) in the CP's compliance to Article 40 as follow-up actions to all AI were reported to the Secretariat. During this current compliance review period, one pending case first reported in 2009 and four pending cases first reported in 2010 and one pending case first reported in 2011 are now considered closed as fines and sanctions to the offending vessel have been applied. Table 5 presents the summary of the status of AI cases in the last five years and their resolution.



Table 5. Legal resolution of citations against vessels fishing in the NAFO Regulatory Area by year in which the citations were issued (as of August 2013). A citation is an inspection report (from at-sea or port inspectors) that lists one or more infringements. Inspections carried out for confirming a previous citation are not included.

Year	Number of Reports with AI Citation/s	Resolved cases		Pending cases	No follow-up information from CPs
		Number	%		
2008	8	5	63%	3	0
2009	13	7	54%	3	3
2010	7	7	100%	0	0
2011	8	7	88%	1	0
2012	11	6	55%	5	0
Total	47	32	68%	12	3

## 6. Observed Trends and Conclusions

- General Trends
  - o Although fishing effort has steadily declined since 2004, it has stabilized at 5000 days in the NRA. Fishing effort slightly increased in 2012 to 5500 days. In parallel, the number of fishing vessels have leveled out at 50 vessels per annum.
  - o The shrimp fishery in 3L continues to gradually decline from 360 days in 2011 to 250 days in 2012. The number of vessels active in the shrimp fishery has declined from 8 vessels in 2011 to 5 vessels in 2012.
  - o Although effort in the shrimp fishery continues to decline, overall fishing effort in the NRA has been diverted to the groundfish fishery.
  - o There has been a re-emergence of the Pelagic Redfish fishery (REB). A total of 8 vessels participated in 2012 (versus 2 vessels in 2011).
- Additional data elements compiled provided the following information for compliance review:
  - o Based on VMS reports for 2012, closed areas are being respected.
  - o Based on VTI reports for 2012, 3M redfish exceeded the 6500 t TAC in 2012.
  - o Based on VMS positional reports and VTI, the 3M Shrimp fishery moratorium is being respected.
  - o Based on CAT reports, total reported catches of regulated and unregulated species by division provides a detailed summary of catch in the NRA.
  - o Analysis of the groundfish effort by water depth has indicated that 50% of the fishing effort is in water depths greater than 700m. This is consistent with a directed Greenland halibut fishery.
  - o Based on water depth, shrimp fishing effort complies with NCEM requirements to not fish at depths less than 200 meters
- Inspections and Apparent Infringements
  - o The number of at sea inspections has reduced from 401 in 2004 to 193 in 2012. The inspection rate has increased from 2.4% in 2004 to 3.3% in 2012 (dropping slightly from 3.8% in 2011).
  - o Port inspection coverage of landings remains high due to the high number of landings of species subjected to a recovery plan (100% inspection required), particularly groundfish.
  - o Apparent infringements detected at sea increased slightly in 2012. This was mainly non serious and administrative in nature.
  - o In 2012, there was increase of Apparent Infringements detected in port. The last apparent infringement in port was detected in 2009.

## 7. Annexes: Tables used to generate some tables and figures in the Report

Table 1. Submission of Fishing Reports\*

Year	Days at the Regulatory Area (Effort)	Number of Days accounted by COE-COX pairs	Percentage of Effort accounted by COE-COX pairs	Number of Days accounted by Port Inspection	Percentage of Effort accounted by Port Inspection and TRA reports	Number of Days accounted by Observer and CAX reports	Percentage of Effort accounted by Observer and OBR reports
2004	16480	12156	74%	13327	81%	12779	78%
2005	12290	11706	95%	9679	79%	11326	92%
2006	8663	7991	92%	7488	86%	5921	68%
2007	6598	6210	94%	5269	80%	4276	65%
2008	5054	4785	95%	4613	91%	4596	91%
2009	5016	4920	98%	3981	79%	4047	81%
2010	4768	4510	95%	4084	86%	3665	77%
2011	5300	5254	99%	4442	96%	3310	62%
2012	5510	5304	96%	3450	76%	4762	86%

\*COE = Catch on entry, COX = Catch on exit, TRA = transshipment, CAX = Daily catch report

Table 2. Timely submission of Port Inspection Reports

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Number of Port Inspection Reports received	228	177	151	125	133	94	101	95	99
Total Number of Port Inspection Reports received late	134	117	111	92	92	34	36	53	45
Percentage % of late Port Inspection Reports	59%	66%	74%	74%	69%	36%	36%	56%	45%

NB. Copy of Port Inspection reports (PSC 3) must be forwarded to the Secretariat by the port States without delay (Art. 43 of 2013 NCEM).

Table 3. Timely submission of At-Sea Inspection Reports

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Number of at-sea Inspections	401	326	361	296	263	324	215	206	195
Number of at-sea Inspections received late	40	30	95	112	96	124	144	107	27
Percentage % of late at-sea Inspection Reports	10%	9%	26%	38%	37%	38%	67%	52%	14%

NB At-sea inspection reports must be forwarded to the flag State Contracting Party, if possible within 30 days of the inspection (Article 36.3a of the 2013 NCEM).

Table 4. Timely submission of Observer Reports

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012
Total Number of Observers Reports	211	170	114	84	126	86	76	72	104
Number of Observers Reports received late	176	131	87	67	96	49	48	47	86
Percentage % of late Observers Reports	83%	77%	76%	80%	76%	57%	63%	65%	83%

NB. Copy of Observer reports must be forwarded to the Secretariat by the observers within 30 days after their assignment (Article 30 a.2.g of the 2013 NCEM)

Table 5-2004, part 1. Effort, at-sea inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	63	33	48	134**
Days Present in NRA	9966	5100	1414	16480
Number of at-sea inspections	328	73	0	401
Number of at-sea inspection report containing citation of one or more AIs	13	2	0	15
Number of vessels cited with AIs at sea	10	2	0	12
AIs issued by category - from at-sea inspections***				
Greenland halibut measures	0	0	0	0
Mis-recording of catches -stowage	0	0	0	0
Product labeling	0	1	0	1
Vessel requirements - capacity plans	3	0	0	3
<b>By-catch requirements</b>	3	0	0	3
<b>Catch communication violations</b>	0	0	0	0
<b>Fishing without authorization</b>	0	1	0	1
<b>Gear requirements - illegal attachments</b>	1	0	0	1
<b>Gear requirements - mesh size</b>	5	0	0	5
<b>Inspection protocol</b>	2	0	0	2
<b>Mis-recording of catches - inaccurate recording</b>	1	0	0	1
<b>Observer requirements</b>	0	1	0	1
<b>Quota requirements</b>	1	0	0	1
<b>VMS requirements</b>	0	2	0	2
<b>TOTAL</b>	16	5	0	21

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2J

\*\* Some vessels switched directed species within the year.

\*\*\* AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

Table 5-2004, part 2. Effort, port inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	63	33	48	134**
Days Present in NRA	9966	5100	1414	16480
Number of port inspections	85	138	5	228
Number of port inspection report containing citation of one or more AIs	9	0	0	9
Number of vessels cited with AIs by port authorities	9	0	0	9
AIs issued by category - from port inspections***				
Greenland halibut measures	0	0	0	0
Mis-recording of catches -stowage	0	0	0	0
Product labeling	0	0	0	0
Vessel requirements - capacity plans	0	0	0	0
<b>By-catch requirements</b>	1	0	0	1
<b>Catch communication violations</b>	0	0	0	0
<b>Fishing without authorization</b>	1	0	0	1
<b>Gear requirements - illegal attachments</b>	0	0	0	0
<b>Gear requirements - mesh size</b>	1	0	0	1
<b>Inspection protocol</b>	0	0	0	0
<b>Mis-recording of catches - inaccurate recording</b>	6	0	0	6
<b>Observer requirements</b>	0	0	0	0
<b>Quota requirements</b>	0	0	0	0
<b>VMS requirements</b>	0	0	0	0
<b>TOTAL</b>	9	0	0	9

Table 5-2005, part 1. Effort, at-sea inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	50	27	53	116**
Days Present in NRA	6948	3558	1784	12290
Number of at-sea inspections	270	55	1	326
Number of at-sea inspection report containing citation of one or more AIs	16	4	0	20
Number of vessels cited with AIs at sea	14	3	0	17
AIs issued by category - from at-sea inspections***				
Greenland halibut measures	0	0	0	0
Mis-recording of catches -stowage	5	0	0	5
Product labeling	2	1	0	3
Vessel requirements - capacity plans	2	0	0	2
<b>By-catch requirements</b>	2	0	0	2
<b>Catch communication violations</b>	0	0	0	0
<b>Fishing without authorization</b>	0	1	0	1
<b>Gear requirements - illegal attachments</b>	2	1	0	3
<b>Gear requirements - mesh size</b>	3	0	0	3
<b>Inspection protocol</b>	3	1	0	4
<b>Mis-recording of catches - inaccurate recording</b>	5	1	0	6
<b>Observer requirements</b>	0	1	0	1
<b>Quota requirements</b>	0	0	0	0
<b>VMS requirements</b>	0	1	0	1
<b>TOTAL</b>	24	7	0	31

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2]

\*\* Some vessels switched directed species within the year.

\*\*\* AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

Table 5-2005, part 2. Effort, port inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	50	27	53	116**
Days Present in NRA	6948	3558	1784	12290
Number of port inspections	80	87	10	177
Number of port inspection report containing citation of one or more AIs	6	0	0	6
Number of vessels cited with AIs by port authorities	6	0	0	6
AIs issued by category - from port inspections***				
Greenland halibut measures	0	0	0	0
Mis-recording of catches -stowage	0	0	0	0
Product labeling	0	0	0	0
Vessel requirements - capacity plans	0	0	0	0
<b>By-catch requirements</b>	3	0	0	3
<b>Catch communication violations</b>	0	0	0	0
<b>Fishing without authorization</b>	0	0	0	0
<b>Gear requirements - illegal attachments</b>	0	0	0	0
<b>Gear requirements - mesh size</b>	1	0	0	1
<b>Inspection protocol</b>	1	0	0	1
<b>Mis-recording of catches - inaccurate recording</b>	1	0	0	1
<b>Observer requirements</b>	0	0	0	0
<b>Quota requirements</b>	0	0	0	0
<b>VMS requirements</b>	0	0	0	0
<b>TOTAL</b>	6	0	0	6

Table 5-2006, part 1. Effort, at-sea inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	45	21	42	92**
Days Present in NRA	5908	1776	979	8663
Number of at-sea inspections	277	76	8	361
Number of at-sea inspection report containing citation of one or more AIs	11	5	2	18
Number of vessels cited with AIs at sea	10	4	2	16
AIs issued by category - from at-sea inspections***				
Greenland halibut measures	0	0	0	0
Mis-recording of catches -stowage	5	1	0	6
Product labeling	1	2	0	3
Vessel requirements - capacity plans	1	0	0	1
<b>By-catch requirements</b>	2	0	0	2
<b>Catch communication violations</b>	0	0	0	0
<b>Fishing without authorization</b>	0	0	0	0
<b>Gear requirements - illegal attachments</b>	2	2	1	5
<b>Gear requirements - mesh size</b>	0	0	1	1
<b>Inspection protocol</b>	0	1	0	1
<b>Mis-recording of catches - inaccurate recording</b>	4	0	0	4
<b>Observer requirements</b>	0	0	0	0
<b>Quota requirements</b>	0	0	0	0
<b>VMS requirements</b>	0	0	0	0
<b>TOTAL</b>	15	6	2	23

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2]

\*\* Some vessels switched directed species within the year.

\*\*\* AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

Table 5-2006, part 2. Effort, port inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	45	21	42	92**
Days Present in NRA	5908	1776	979	8663
Number of port inspections	76	56	19	151
Number of port inspection report containing citation of one or more AIs	10	0	0	10
Number of vessels cited with AIs by port authorities	10	0	0	10
AIs issued by category - from port inspections***				
Greenland halibut measures	0	0	0	0
Mis-recording of catches -stowage	0	0	0	0
Product labeling	4	0	0	4
Vessel requirements - capacity plans	0	0	0	0
<b>By-catch requirements</b>	2	0	0	2
<b>Catch communication violations</b>	1	0	0	1
<b>Fishing without authorization</b>	0	0	0	0
<b>Gear requirements - illegal attachments</b>	0	0	0	0
<b>Gear requirements - mesh size</b>	0	0	0	0
<b>Inspection protocol</b>	0	0	0	0
<b>Mis-recording of catches - inaccurate recording</b>	6	0	0	6
<b>Observer requirements</b>	0	0	0	0
<b>Quota requirements</b>	1	0	0	1
<b>VMS requirements</b>	0	0	0	0
<b>TOTAL</b>	14	0	0	14

Table 5-2007, part 1. Effort, at-sea inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	45	14	20	76**
Days Present in NRA	4158	1948	488	6594
Number of at-sea inspections	202	81	11	294
Number of at-sea inspection report containing citation of one or more AIs	4	5	4	13
Number of vessels cited with AIs at sea	4	5	4	13
AIs issued by category - from at-sea inspections***				
Greenland halibut measures	0	0	0	0
Mis-recording of catches -stowage	3	1	0	4
Product labeling	0	1	0	1
Vessel requirements - capacity plans	0	2	4	6
<b>By-catch requirements</b>	0	0	0	0
<b>Catch communication violations</b>	0	0	0	0
<b>Fishing without authorization</b>	0	0	0	0
<b>Gear requirements - illegal attachments</b>	0	1	1	2
<b>Gear requirements - mesh size</b>	0	0	0	0
<b>Inspection protocol</b>	0	0	0	0
<b>Mis-recording of catches - inaccurate recording</b>	2	0	0	2
<b>Observer requirements</b>	0	0	0	0
<b>Quota requirements</b>	0	0	0	0
<b>VMS requirements</b>	0	0	0	0
<b>TOTAL</b>	5	5	5	15

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2J

\*\* Some vessels switched directed species within the year.

\*\*\* AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

Table 5-2007, part 2. Effort, port inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	45	14	20	76**
Days Present in NRA	4158	1948	488	6594
Number of port inspections	67	51	7	125
Number of port inspection report containing citation of one or more AIs	19	0	0	19
Number of vessels cited with AIs by port authorities	16	0	0	16
AIs issued by category - from port inspections***				
Greenland halibut measures	1	0	0	1
Mis-recording of catches -stowage	0	0	0	0
Product labeling	3	0	0	3
Vessel requirements - capacity plans	0	0	0	0
<b>By-catch requirements</b>	3	0	0	3
<b>Catch communication violations</b>	4	0	0	4
<b>Fishing without authorization</b>	0	0	0	0
<b>Gear requirements - illegal attachments</b>	0	0	0	0
<b>Gear requirements - mesh size</b>	0	0	0	0
<b>Inspection protocol</b>	0	0	0	0
<b>Mis-recording of catches - inaccurate recording</b>	16	0	0	16
<b>Observer requirements</b>	0	0	0	0
<b>Quota requirements</b>	0	0	0	0
<b>VMS requirements</b>	0	0	0	0
<b>TOTAL</b>	27	0	0	27

Table 5-2008, part 1. Effort, at-sea inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	38	13	10	60**
Days Present in NRA	3302	1551	201	5054
Number of at-sea inspections	176	62	7	245
Number of at-sea inspection report containing citation of one or more AIs	2	3	0	5
Number of vessels cited with AIs at sea	2	3	0	5
AIs issued by category - from at-sea inspections***				
Greenland halibut measures				0
Mis-recording of catches -stowage	1	1		2
Product labeling	1			1
Vessel requirements - capacity plans		3		3
<b>By-catch requirements</b>	1			1
<b>Catch communication violations</b>				0
<b>Fishing without authorization</b>				0
<b>Gear requirements - illegal attachments</b>				0
<b>Gear requirements - mesh size</b>				0
<b>Inspection protocol</b>				0
<b>Mis-recording of catches - inaccurate recording</b>				0
<b>Observer requirements</b>				0
<b>Quota requirements</b>				0
<b>VMS requirements</b>				0
<b>TOTAL</b>	3	4	0	7

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2]

\*\* Some vessels switched directed species within the year.

\*\*\* AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

Table 5-2008, part 2. Effort, port inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	38	13	10	60**
Days Present in NRA	3302	1551	201	5054
Number of port inspections	70	60	2	132
Number of port inspection report containing citation of one or more AIs	3	0	0	3
Number of vessels cited with AIs by port authorities	2			
AIs issued by category - from port inspections***				
Greenland halibut measures				0
Mis-recording of catches -stowage				0
Product labeling	1			1
Vessel requirements - capacity plans				0
<b>By-catch requirements</b>				0
<b>Catch communication violations</b>				0
<b>Fishing without authorization</b>				0
<b>Gear requirements - illegal attachments</b>				0
<b>Gear requirements - mesh size</b>				0
<b>Inspection protocol</b>				0
<b>Mis-recording of catches - inaccurate recording</b>	2			2
<b>Observer requirements</b>				0
<b>Quota requirements</b>				0
<b>VMS requirements</b>				0
<b>TOTAL</b>	3	0	0	3

Table 5-2009, part 1. Effort, at-sea inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	41	20	1	51**
Days Present in NRA	4122	889	5	5016
Number of at-sea inspections	194	40	0	234
Number of at-sea inspection report containing citation of one or more AIs	8	4	0	12
Number of vessels cited with AIs at sea	6	4	0	10
AIs issued by category - from at-sea inspections***				
Greenland halibut measures				0
Mis-recording of catches -stowage	4			4
Product labeling	1			1
Vessel requirements - capacity plans	3	2		5
<b>By-catch requirements</b>	1			1
<b>Catch communication violations</b>				0
<b>Fishing without authorization</b>				0
<b>Gear requirements - illegal attachments</b>				0
<b>Gear requirements - mesh size</b>	1			1
<b>Inspection protocol</b>	2	1		3
<b>Mis-recording of catches - inaccurate recording</b>	2	1		3
<b>Observer requirements</b>				0
<b>Quota requirements</b>				0
<b>VMS requirements</b>				0
<b>TOTAL</b>	14	4	0	18

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2]

\*\* Some vessels switched directed species within the year.

\*\*\* AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

Table 5-2009, part 2. Effort, port inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	41	20	1	51**
Days Present in NRA	4122	889	5	5016
Number of port inspections	73	21	0	94
Number of port inspection report containing citation of one or more AIs	1	0	0	1
Number of vessels cited with AIs by port authorities	1			
AIs issued by category - from port inspections***				
Greenland halibut measures				0
Mis-recording of catches -stowage				0
Product labeling	1			1
Vessel requirements - capacity plans				0
<b>By-catch requirements</b>				0
<b>Catch communication violations</b>				0
<b>Fishing without authorization</b>				0
<b>Gear requirements - illegal attachments</b>				0
<b>Gear requirements - mesh size</b>				0
<b>Inspection protocol</b>				0
<b>Mis-recording of catches - inaccurate recording</b>				0
<b>Observer requirements</b>				0
<b>Quota requirements</b>				0
<b>VMS requirements</b>				0
<b>TOTAL</b>	1	0	0	1



Table 5-2010, part 1. Effort, at-sea inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	42	16	2	53**
Days Present in NRA	4170	584	14	4768
Number of at-sea inspections	192	22	0	214
Number of at-sea inspection report containing citation of AIs	4	3	0	7
Number of vessels cited with AIs at sea	4	2	0	6
AIs issued by category - from at-sea inspections***				
Greenland halibut measures				
Mis-recording of catches -stowage		1		
Product labelling				
Vessel requirements - capacity plans	1	1		
<b>By-catch requirements</b>				
<b>Catch communication violations</b>				
<b>Fishing without authorization</b>				
<b>Gear requirements - illegal attachments</b>	1			
<b>Gear requirements - mesh size</b>	1			
<b>Inspection protocol</b>				
<b>Mis-recording of catches - inaccurate recording</b>	1	1		
<b>Observer requirements</b>				
<b>Quota requirements</b>				
<b>VMS requirements</b>				
<b>TOTAL</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>7</b>

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2]

\*\* Some vessels switched directed species within the year.

\*\*\* AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

Table 5-2010, part 2. Effort, port inspections and AIs by fisheries type.

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	42	16	2	53**
Days Present in NRA	4170	584	14	4786
Number of port inspections	86	14	0	100
Number of port inspection report containing citation of AIs				0
Number of vessels cited with AIs by port authorities				0
AIs issued by category - from port inspections***				
Greenland halibut measures				
Mis-recording of catches -stowage				
Product labelling				
Vessel requirements - capacity plans				
<b>By-catch requirements</b>				
<b>Catch communication violations</b>				
<b>Fishing without authorization</b>				
<b>Gear requirements - illegal attachments</b>				
<b>Gear requirements - mesh size</b>				
<b>Inspection protocol</b>				
<b>Mis-recording of catches - inaccurate recording</b>				
<b>Observer requirements</b>				
<b>Quota requirements</b>				
<b>VMS requirements</b>				
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Table 5-2011, part 1. Effort, at-sea inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	47	8	2	56**
Days Present in NRA	4922	360	18	5300
Number of at-sea inspections	192	8	0	200
Number of at-sea inspection report containing citation of AIs	7	1	0	8
Number of vessels cited with AIs at sea	6	1	0	7
AIs issued by category - from at-sea inspections***				
Greenland halibut measures				
Mis-recording of catches -stowage	4			
Product labelling	1			
Vessel requirements - capacity plans		1		
<b>By-catch requirements</b>	1			
<b>Catch communication violations</b>				
<b>Fishing without authorization</b>				
<b>Gear requirements - illegal attachments</b>				
<b>Gear requirements - mesh size</b>	1****			
<b>Inspection protocol</b>				
<b>Mis-recording of catches - inaccurate recording</b>				
<b>Observer requirements</b>				
<b>Quota requirements</b>				
<b>VMS requirements</b>				
<b>TOTAL</b>	7	1		8

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2J

\*\* Some vessels switched directed species within the year.

\*\*\* AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

\*\*\*\* Was not considered "serious" by at-sea inspectors in this case.

Table 5-2011, part 2. Effort, port inspections and AIs by fisheries type.

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	47	8	2	56**
Days Present in NRA	4922	360	18	5300
Number of port inspections	90	5	0	95
Number of port inspection report containing citation of AIs				0
Number of vessels cited with AIs by port authorities				0
AIs issued by category - from port inspections***				
Greenland halibut measures				
Mis-recording of catches -stowage				
Product labelling				
Vessel requirements - capacity plans				
<b>By-catch requirements</b>				
<b>Catch communication violations</b>				
<b>Fishing without authorization</b>				
<b>Gear requirements - illegal attachments</b>				
<b>Gear requirements - mesh size</b>				
<b>Inspection protocol</b>				
<b>Mis-recording of catches - inaccurate recording</b>				
<b>Observer requirements</b>				
<b>Quota requirements</b>				
<b>VMS requirements</b>				
<b>TOTAL</b>	0	0	0	0

Table 5-2012, part 1. Effort, at-sea inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	44	5	8	57
Days Present in NRA	5050	250	210	5510
Number of at-sea inspections	181	6	6	193
Number of at-sea inspection report containing citation of AIs	7	1	1	9
Number of vessels cited with AIs at sea	7	1	1	9
AIs issued by category - from at-sea inspections**				
Greenland halibut measures				
Mis-recording of catches -stowage				
Product labelling	2	1		
Vessel requirements - capacity plans	2		1	
<b>By-catch requirements</b>				
<b>Catch communication violations</b>				
<b>Fishing without authorization</b>				
<b>Gear requirements - illegal attachments</b>				
<b>Gear requirements - mesh size</b>				
<b>Inspection protocol</b>				
<b>Mis-recording of catches - inaccurate recording</b>	1			
<b>Observer requirements</b>				
<b>Quota requirements</b>	2			
<b>VMS requirements</b>	1			
<b>TOTAL</b>	8	1	1	10

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2]

\*\*AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

Table 5-2012, part 2. Effort, port inspections and AIs by fisheries type.

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	44	5	8	57
Days Present in NRA	5050	250	210	5510
Number of port inspections	89	8	3	100
Number of port inspection report containing citation of AIs	2	0	0	2
Number of vessels cited with AIs by port authorities	2	0	0	2
AIs issued by category - from port inspections***				
Greenland halibut measures	1			
Mis-recording of catches -stowage	1			
Product labelling	1			
Vessel requirements - capacity plans				
<b>By-catch requirements</b>				
<b>Catch communication violations</b>				
<b>Evidence tampering</b>	1			
<b>Fishing without authorization</b>				
<b>Gear requirements - illegal attachments</b>				
<b>Gear requirements - mesh size</b>				
<b>Inspection protocol</b>	1			
<b>Mis-recording of catches - inaccurate recording</b>	1			
<b>Observer requirements</b>				
<b>Quota requirements</b>				
<b>VMS requirements</b>				
<b>TOTAL</b>	6	0	0	0

Table 6. Resolution of Apparent Infringement (AI) cases (as of August 2012)

<b>Resolution of Apparent Infringement Cases</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Number of reports with citations issued*	8	13	7	8	11
Number of resolved cases	5	7	7	7	6
Percentage of resolved cases (as of July 2011)	63%	54%	100%	88%	55%
Number of cases pending	3	3	0	1	5
Number of cases with no follow-up information	0	3	0	0	0

\* Number of inspection reports with serious and non-serious AI citations. A report may contain one or more AIs. Reports serving to confirm identical cases are not counted.

## **Annex 22. Terms of Reference and Rules of Procedure for the proposed joint NEAFC/NAFO Advisory Group on Data Management**

(FC Working Paper 13/3 now FC Doc. 13/17 Revised)

At the 34<sup>th</sup> Annual Meeting STACTIC and FC accepted the invitation of NEAFC to establish an *ad hoc joint NEAFC/NAFO Working Group on the possibility of making Advisory Group on Data Communications (AGDC) a joint body of NEAFC and NAFO.*

Following the decision of the acceptance, the Secretariats of NEAFC and NAFO organized and coordinated the meeting of the ad hoc WG. The meeting was held in London, UK on 29-31 January 2013 participated by Contracting Parties representatives from NEAFC and NAFO.

The ad hoc joint working group agreed on following recommendations which are being forwarded to the Fisheries Commission:

1. NEAFC and NAFO jointly establish a “Joint Advisory Group on Data Management”, JAGDM, as a joint body of NEAFC and NAFO with the attached Terms of Reference (Annex 1) and Rules of Procedures (Annex 2).
2. AGDM be a successor body to the current AGDC.
3. The establishment of JAGDM will become effective on the next January after both NEAFC and NAFO have formally agreed to its establishment.

It is noted the meeting report (FC Working Paper 13/3) has been presented at the STACTIC Intersessional Meeting in May 2013 and that the report and its recommendations will also be presented to NEAFC at its next Annual Meeting for consideration.

### **Annex 1. Terms of Reference for the Joint Advisory Group on Data Management**

1. For the purposes of this Advisory Group, “data management” refers to the design of relevant frameworks and any technical issue related to the generating, storing, transmitting and use of fisheries related data, including data processing, protocols, standards and data security and confidentiality.
2. The functions of the Advisory Group shall be to:
  - a) Consider and evaluate developments in, and issues related to, data management in relation to NEAFC, NAFO and to the extent practical other Regional Fisheries Management Organisations (RFMOs);
  - b) Engage in the development of data management;
  - c) Contribute to the harmonization and standardization of protocols, formats and standards used in NEAFC, NAFO and to the extent practical other RFMOs;
  - d) Ensure the standardization of the electronic reporting formats used by NEAFC and NAFO and act as their repository;
  - e) Contribute to harmonization and standardization in the development of fisheries related electronic recording and reporting systems (ERS);
  - f) Work towards globally harmonized and compatible data management for monitoring, control and surveillance and scientific research relevant to fisheries;
  - g) Respond to requests from NEAFC, NAFO, their Contracting Parties and to the extent practical other RFMOs, seeking advice on data management;
  - h) Present advice in the field of data management to NEAFC, NAFO, their Contracting Parties and, as applicable, other RFMOs.
3. The Advisory Group shall invite NEAFC and NAFO Contracting Parties to nominate persons with relevant expertise to be participants in the Advisory Group.
4. The Advisory Group may, as appropriate, invite other RFMOs, and/or other relevant intergovernmental organizations to nominate persons with relevant expertise to be participants in the Advisory Group
5. The Advisory Group shall contribute to a close cooperation regarding data management among the Secretariats of NEAFC and NAFO, and, as appropriate, their cooperation with the Secretariats of other RFMOs.
6. The Advisory Group shall elect a Chair and a Vice-Chair from among its participants.
7. The NEAFC and NAFO Secretariats shall jointly provide services to the Advisory Group to facilitate the exercise of its functions. The resources needed to provide these services shall be included in the regular respective budgets of NEAFC and NAFO.
8. The Advisory Group may amend its Rules of Procedure.

## **Annex 2. Rules of Procedure for the Joint Advisory Group on Data Management**

1. NEAFC and NAFO Contracting Parties shall appoint contact persons for the Secretariats regarding the work of the Advisory Group.
2. NEAFC and NAFO Contracting Parties may appoint to the Advisory Group persons with relevant expertise, and shall inform the NEAFC or NAFO Secretary of the names of their appointed participants. The NEAFC and NAFO Secretariats shall jointly manage an updated list of participants in the Advisory Group.
3. Parties to other RFMOs as well as the Secretariats of the RFMOs concerned, and/or other relevant intergovernmental organizations, may, as appropriate, be invited to appoint persons with relevant expertise as participants in the Advisory Group.
4. All decisions of the Advisory Group shall be made on the basis of consensus.
5. The Chair and Vice-Chair shall be elected from among the participants for a term of two years and shall be eligible for re-election. In the event of the office of Chair falling vacant the Vice-Chair shall perform the duties of Chair until a new Chair is elected.
6. Communications to and from the Advisory Group shall go through the NEAFC and NAFO Secretariats.
7. The Chair shall have the following responsibilities:
  - a) to convene a meeting of the Advisory Group at least once a year;
  - b) to convene additional meetings, as decided by the Advisory Group;
  - c) to decide on whether additional meetings shall be held when a Contracting Party or Secretariat of NEAFC or NAFO so requests;
  - d) to decide, in consultation with the Advisory Group contact persons, what invitations shall be issued pursuant to Article 3 of these Rules of Procedure;
  - e) to consult with the Advisory Group contact persons in formulating a draft agenda in a timely manner before meetings;
  - f) to ensure that reports of meetings are circulated to participants and to Contracting Parties of NEAFC and NAFO;
  - g) to ensure, upon request, that the work of the Advisory Group is presented at relevant meetings of NEAFC and NAFO;
  - h) to ensure that conclusions of the Advisory Group are communicated to other parties, as deemed appropriate by the Chair;
  - i) to facilitate intersessional discussions in the Advisory Group;
  - j) in cases where it is necessary to provide advice between meetings, to confer with participants of the Advisory Group to formulate a response.
8. The Advisory Group shall provide a response to requests for advice in a timely manner. If the Advisory Group fails to achieve a consensus on any issue, this shall be reflected in the report of the meeting and the response to the relevant request.
9. Meetings of the Advisory Group shall be hosted alternately by the NEAFC Secretariat and the NAFO Secretariat, unless otherwise decided by the Advisory Group.

## **Annex 23. Conservation Measure on the Management of Redfish in Division 3M**

(FC Working Paper 13/18 Rev4 **now** FC Doc. 13/9)

### **Explanatory note:**

The redfish in division NAFO 3M (RED 3M) fishery is a semi-olympic fishery with<sup>1</sup>:

- a TAC (6 500 tonnes for 2013) allocated on a first come first serve basis<sup>2</sup>,
- individual quotas allocated to some Contracting Parties (for a total of 20 000 tonnes in 2013<sup>3</sup>), the main shares being allocated to Russia, the EU and Cuba (by decreasing order).

The NAFO CEM provides also that:

- The follow-up of the quota up-take is done by the Executive Secretary, who notifies all Contracting Parties (CP) of the dates of which respectively 50 % and 100 % of the TAC have been taken.
- Not more than 50 % of the TAC may be fished before 01 July of each year.
- Each Contracting Party shall ensure that no more RED 3M is retained on board vessels after notification by the Executive Secretary that 100% of the TAC is taken.

While this system has proven overall satisfactory in the past, it has also led in the past to a number of issues which should be addressed:

- Rules on by-catches are not straightforward.
- Fishing vessels are forced to discard RED 3M after the TAC is reached.
- Delays have been observed when closing this fishery when 100 % of the TAC was taken, leading to some TAC overshoots.

The present proposal aim at addressing two aspects of the management of this fishery which need to be improved:

### **1. The issues of the by-catch after 50 % of the TAC is taken**

The provisions of the NCEM should be made more explicit regarding the fact that by-catches of RED 3M can be kept on board during the suspension period. By analogy with what is done for the “Others” quotas, it is proposed that it is limited to 1250 kg or 5% of the total catches whichever is the greater. These by-catches shall be counted against the quotas of the Contracting Parties and the TAC.

### **2. The issues of how to manage the closure of this fishery when 100 % of the TAC is taken<sup>4</sup>**

The proposal is to amend the NCEM (Article 5.2) so that the Executive Secretary shall notify Contracting Parties 5 calendar days in advance of the date on which, for RED 3M, the catch taken by vessels of the Contracting Parties is expected to reach 50% and then 100% of the TAC.

### **It is recommended:**

- To modify **Article 5.2 paragraph (b)** of the NAFO Conservation and Enforcement Measures as follows:

“The Executive Secretary shall notify 5 calendar days in advance all Contracting Parties of the date on which, for 3M Redfish, the accumulated reported catch taken by vessels of the Contracting Parties is estimated to reach 50% and then 100% of the TAC.

Between the date the accumulated reported catch is estimated to reach 50% of the TAC and 1 July and then after the date the accumulated reported catch is estimated to reach 100% of the TAC, no 3M redfish directed fishing shall take place.

1 NAFO CEM - Annex I.A

2 Though the quota of DFG, France (for Saint-Pierre & Miquelon), Korea and USA are “protected”. They are allowed to catch their full quota (total = 276 tonnes)

3 Including a quota designated for “Others” (total = 124 tonnes), which benefits Iceland, Norway and Ukraine.

4 STACTIC may be consulted on this issue, prior to the discussion in the Fisheries Commission.



Each Contracting Party shall ensure that after the estimated date when 100 % of the 3M redfish TAC is taken, no more 3M Redfish, caught after that date, is retained onboard its vessels.

The by-catch of 3M redfish taken between the estimated date when 50 % of the 3M redfish TAC is taken and 1 July shall be counted against the quotas of the Contracting Parties or the “others” quota as appropriate and the TAC.”

- To modify **Article 6.1 paragraph (b)** of the NAFO Conservation and Enforcement Measures as follows:

“ (b) In cases where a ban on fishing is in force, an “Others” quota has been fully utilized, or 3M redfish directed fishery is suspended when 50 % of the 3M redfish TAC is taken in accordance with article 5.2, the by-catch of the species concerned may not exceed 1250 kg or 5%, whichever is the greater. However, for cod in Division 3NO vessels of a Contracting Party shall limit their by-catch to a maximum of 1000 kg or 4%, whichever is greater.”

## **Annex 24. Provision of Catch Reporting Data to the NAFO Scientific Council and SC/FC Working Groups**

(FC Working Paper 13/16 Rev **now** FC Doc. 13/8)

Recalling that an objective of the NAFO convention is to *ensure that complete and accurate data concerning fishing activities within the Regulatory area are collected and shared among Contracting Parties in a timely manner* (NAFO/GC Doc. 08/3);

Noting that the Performance Review panel recommended that NAFO should develop and consolidate NAFO fishery data access and in particular share fishing vessel data to be used by the Scientific Council;

Noting that Management decisions should be based on best available science;

Recognizing that accurate reporting of catches is critical for scientific assessments and advice;

Recalling that the Scientific Council may have access to VMS data without the vessels identification, by their own request to the Executive Secretary (Article 29.10 (d));

Considering that the Scientific Council should continue to explore VMS data in order to carry out their mandated responsibilities;

Recognizing that sharing information with the Scientific Council is important to develop confidence and to address the catch discrepancy problem observed in some stocks; and,

Conscious of the need to maintain confidentiality of fishing activity data (i.e. commercial sensitivity of catches and detailed fishing location).

**It is recommended that the following paragraph is added to Article 28.5:**

**(e) makes the catch reporting data specified in Article 28.2 (c) available to the Scientific Council and Scientific Council/Fisheries Commission Working Groups upon their request, without the vessel's and Flag State identification, in line with the data confidentiality rules as specified in Annex II.B and for data transmitted to the NAFO secretariat after the 1 January 2013. In case the request includes VMS data under Article 29.10 (d) a vessel codification should permit the cross analysis of both catch and VMS data by vessel and this way allow the Scientific Council and Scientific Council/Fisheries Commission Working Groups to carry out their mandated responsibilities. Data made available shall be used only for the purpose of research within the functions of the Scientific Council or Scientific Council/Fisheries Commission Working Groups and publication of scientific results should be in an aggregated format without any detailed information regarding individual vessels or Flag States.**

## **Annex 25. Ad hoc Working Group to Reflect on Rules Governing By-catches, Discards and Selectivity in the NAFO Regulatory Area**

(FC Working Paper 13/31 now FC Doc. 13/25)

### **Explanatory note:**

A number of concerns have been expressed by NAFO Contracting Parties regarding by-catches, discards and selectivity in the NAFO Regulatory Area.

Some concerns were expressed regarding article 5.2 of the NCEM related to by-catches of redfish in division NAFO 3M following the closure of the directed fishery after 100% of the total TAC is reached. According to this article, fishing vessels are obliged to discard all redfish by-catches after the closure of the fishery. It is all the more an issue as it is unknown when the fishery will be closed.

Some concerns were also expressed regarding the obligation to discard by-catches of cod 3M in the redfish 3M fishery, after the entirety of the cod 3M quota has been fished.

More generally, some NAFO provisions are obliging fishing vessels to discard fish that have a commercial value and would be put on the market otherwise.

Rather than solving these issues on a case-by-case basis, it is proposed to have a more general discussion on rules governing by-catches, discards and selectivity in the NAFO Regulatory Area. This discussion would take place in the framework of an ad-hoc working group.

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**It is recommended that the Fisheries Commission tasks an ad-hoc working group to reflect on rules governing by-catches, discards and selectivity in the NAFO Regulatory Area and to consider amendments to the current rules as appropriate. Ways to reduce by-catches such as improved selectivity would be considered.**

**This working group would meet back-to-back with another working group, at a date to be determined so that its recommendations can be considered at the 2014 NAFO Annual Meeting.**

**This working group would take into account the work already done by NAFO on these issues, especially in STACTIC.**

**Delegations would be composed of managers possibly advised by scientists, compliance experts and industry advisers, and chaired by the Chair of the Fisheries Commission.**



*STACTIC left to right: Cindy Kerr, Petur Jacobsen, Randy Jenkins, Bjorgolfur Ingason, Meinhard Gaardlykke, Hanne Ostgard, Unknown, Takahisa Tanabe, Vadim Agalakov, Epp Meremaa, Indrek Soe, Gene Martin, Chad Ward, unknown, Hiroshi Matsuura, Anna Thormar, Genadijus Babcionis, Junichiro Okamoto, Carlos Chamizo Catalan, Tomonori Sakino, Robert Lambert, Brent Napier, Giuliano Pagliarani, Ellen Motoi, Britta Henrichsen, Doug Christel*



*Cindy Kerr (NAFO Secretariat) and Gene Martin (STACTIC Chair)*

## Part II

### Report of the Standing Committee on International Control (STACTIC) 35<sup>th</sup> Annual Meeting, September 23–27, 2013 Halifax, Canada

#### 1. Opening by the Chair, Gene Martin (USA)

The Chair opened the meeting at 2:30pm on Monday, September 23, 2013 at Westin Nova Scotian Hotel, Halifax, Canada. The Chair welcomed the representatives of the following Contracting Parties (CPs): Canada, Denmark (in respect of the Faroe Islands and Greenland), the European Union (EU), France (in respect of Saint. Pierre et Miquelon), Iceland, Norway, the Russian Federation, Japan, and the United States.

#### 2. Appointment of Rapporteur

Ellen Motoi (United States) was appointed Rapporteur.

#### 3. Adoption of Agenda

The following amendments were made to the agenda:

- The Chair recommended subdividing agenda item 4 as follows:
  - o 4a. Follow up on Peer Review Expert Panel (PREP) recommendations
  - o 4b. Examining the reliability of STATLANT data
- The European Union (EU) introduced the following proposals:
  - o STACTIC WP 13/23 Fishing operations under a chartering arrangement for inclusion under agenda item 14.
  - o STACTIC WP 13/24 By-catch in directed fishery for skate for inclusion under agenda item 10e;
- Canada introduced the following proposals:
  - o STACTIC WP 13/26 Standardized conversion factors in the NAFO Regulatory Area: Pilot Project for inclusion under agenda item 12.
  - o STACTIC WP 13/27 Product labelling by date of processing for inclusion under agenda item 10d.
- The US, on behalf of the Editorial Drafting Group, recommended moving agenda item 9 (Editorial Drafting Group of the NAFO CEM) to agenda item 5.

The agenda was adopted, as amended (Annex 1).

#### 4 a. Follow-up on Peer Review Expert Panel (PREP) recommendations

The Chair stated that the PREP recommendations with the exception of Port State Control Measures have been adequately dealt with by current measures in the CEM as summarized in the Report of the intersessional meeting in London.

STACTIC had previously agreed that NAFO would await the completion of NEAFC's Port State Measures review, anticipated by November 2013, prior to conducting its own exercise.

The EU suggested that if NEAFC does not initiate any port state measures, NAFO might want to consider its own port state measures. Canada supported this recommendation. The Chair encouraged CPs to start considering port state control measures, proposals, and ideas regardless of NEAFC actions.

**It was agreed that CPs would revisit port state control measures at the next intersessional meeting regardless of whether or not NEAFC approves their draft.**

#### **4 b. Examining the reliability of STATLANT 21 data**

The Secretariat provided a presentation on comparing STATLANT 21 and STACTIC data as outlined in STACTIC WP 13/30 (Annex 2). The presentation was in connection with the CPs instructions to STACTIC to reflect on ways to use STACTIC data in examining the reliability of STATLANT 21 data (GFS/13-124). The NAFO Secretariat compared the two data sets to demonstrate the difficulty of determining the reliability of STATLANT 21 data. The presentation made preliminary suggestions on how the discrepancies between the data sets could be lessened.

The US agreed that the Secretariat's presentation conveyed the issues and limitations of comparing STATLANT 21 and STACTIC data. The US, DFG, EU, and Canada pointed out other challenges in comparing the data sets. Canada noted while currently limited application that some options may be pursued to enhance comparability such as the separation of domestic catch data from the STATLANT 21 data. EU expressed concern that the presentation may suggest that STATLANT 21 data and STACTIC data are comparable. The EU also welcomed the conclusion of the presentation that monthly reports and the daily reports are more likely to reflect accurate data concerning catch. DFG pointed out the STATLANT 21 figures cover the convention area and STACTIC figures cover the NRA and some of the columns do not reflect complete data for that category (e.g., OBR, port landings, and logbooks).

**It was agreed that the comparison of STATLANT21 and STACTIC data sources currently has limited application of comparing the accuracy of catch reports. It was also agreed that daily and monthly provisional catch reports are very useful and effective for estimating catch. However, STACTIC would continue to look for ways to improve accuracy of catch reports. STACTIC requests further guidance from the Fisheries Commission on what additional steps it should take in this regard.**

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

The EDG gave a presentation regarding work completed during 2013 and its expectations of work that will be completed during 2014. The EDG reminded STACTIC that it had adopted editorial changes to the CEM as part of STACTIC WP 13/4 Rev 2 at its May 2013 intersessional meeting, but that further revisions were needed to STACTIC WP 13/5 Rev based on comments from Contracting Parties.

DFG had concerns that substantive changes should be in the realm of STACTIC and not EDG. Further, France-SPM also noted that including discards into the overall management of annual quotas would be interpreted as a new rule. The US highlighted that the proposed changes to the CEM are intended to reorganize and reformat portions of the CEM to maintain consistency with the format adopted by STACTIC in 2011. In addition, the EDG noted that quotas are inclusive of catch retained onboard and discards based on language already in the CEM and that text revised by STACTIC WP 13/5 Rev just makes that explicit.

Finally, the Chair noted that it was unclear if the proposed changes to the CEM would ensure that vessels would be responsible for complying with the CEM unless CEM language applies specifically to vessels and masters. Russia offered further minor editorial changes. The EDG incorporated suggestions/comments of other CPs in STACTIC WP 13/5 Rev 3.

The US reminded STACTIC members that all CPs are invited to participate in the EDG, and that the EDG welcomes any comments, concerns, or recommendations for further revision or clarification of the CEM. For the next intersessional meeting, the EDG anticipates submitting a WP to further refine Articles 48-56 (non-Contracting Party Scheme), Articles 15-24 (bottom fisheries and vulnerable marine ecosystem closure areas), and possibly several annexes, as outlined in its presentation. The Chair reiterated that the EDG should continue to review STACTIC's work and determine if additional revisions, clarifications, or proposals are needed.

**It was agreed to present STACTIC WP 13/5 Rev 3 to the FC for adoption.**

#### **6. Compliance review 2012 including review of reports of Apparent Infringements**

Under this agenda item, the NAFO Secretariat presented the draft annual compliance review 2013, for the fishing year 2012 contained within STACTIC WP 13/17. The Chair recalled that at the May 2013 intersessional meeting, it was agreed that five additional data elements outlined in STACTIC WP 13/12 would be included in the draft compliance report to provide a more enhanced analysis of fishing trends/patterns.

CPs reviewed the draft compliance review, recommending that all figures include accurate labels for each axis. The Secretariat clarified that vessel monitoring positional (VMS) positions within closed areas were those in which the calculated speeds were less than 5 knots. DFG indicated that speeds less than 5 knots are not



necessarily an indication that a vessel was fishing, noting that slow speeds could be impacted by bad weather. This was clarified in the caption for Figure 6. The US expressed concern that because Figure 6 depicts the location of the one vessel conducting exploratory fishing activity near the Corner Seamounts, the report may violate the confidentiality protection outlined in Annex II.B of the NCEM. The Secretariat indicated that the identity of the vessel conducting exploratory fishing activity was not released to the public. Canada noted that the adoption of the new data elements was valuable in improving the compliance review process. The EU requested that the phrase “according to EU legislation” be added to the disposition/follow-up column in rows 11-15 of Table 4 for clarity.

A working group of representatives from Canada, the EU, and the US developed conclusions and recommendations for sections 6 and 7 of this report. STACTIC discussed whether to list specific recommendations outlining particular initiatives that should be pursued by CPs. France-SPM and the US supported the inclusion of specific recommendations, with the US noting that this would increase transparency. However, other CPs, supported listing only general recommendations, if any at all. The EU was concerned that the public could misinterpret specific recommendations. Canada offered to include some specific issues for further action into the conclusion bullets, and provided updated text to this effect. The US supported this approach, but did not have sufficient time to develop revised conclusions. A revised compliance review incorporating suggested edits and deletion of the Recommendations sections, STACTIC WP 13/17 Rev 2, was presented for approval by STACTIC.

**It was agreed to forward STACTIC WP 13/17 Rev 3 to the Fisheries Commission for adoption.**

## 7. Review and evaluation of Practices and Procedures

The Chair opened the agenda item noting that this is a standing item in the STACTIC agenda and the intention is to provide CPs with the opportunity to share domestic practices and procedures.

The EU noted that it had added information about its new electronic determination of mesh size gauges to the “Practices and Procedures” section of the NAFO Member’s Pages.

Canada requested that the Secretariat provide an updated list of practices and procedures on the NAFO web page.

**The Secretariat agreed to provide a list of information available on the NAFO website during the next STACTIC intersessional meeting. CPs were encouraged to continue to submit relevant documents to the Secretariat to augment the NAFO Members’ Pages.**

## 8. Review of current IUU list pursuant to NAFO CEM Article 54.3

The Chair reminded representatives of their responsibility, in accordance with Article 54.3, to review the IUU list and provide evidence related to any vessels that may meet the delisting criteria in order to facilitate updating.

The NAFO Secretariat presented STACTIC WP 13/18, noting that there are no changes from the list presented at the STACTIC intersessional meeting in May 2013, except for a name change in one of the currently listed vessels. The Secretariat also noted it had added enhancements of the list, including pictures and last known location of the IUU vessels.

The NAFO Secretariat also presented STACTIC WP 13/19 which includes IUU lists of vessels from the South East Atlantic Fisheries Organization (SEAFO) and the Inter-American Tropical Tuna Commission (IATTC). As a suggestion for consideration by STACTIC, the US commented that the other RFMO IUU lists contained elements that may improve the NAFO IUU list, including predominant gear type used and operator.

The Chair noted that the CEM includes a process to integrate NEAFC IUU vessels, but does not integrate IUU vessels listed by other RFMOs. DFG inquired about actions to be taken in the case that a IUU vessel from another RFMO is identified in the NAFO regulatory area. The Chair responded that such vessels were still subject to the Non-Contracting Party scheme in Chapter VIII of the CEM.

Canada noted that INTERPOL established a fishery crime working group and that INTERPOL has issued a purple notice for a vessel engaged in IUU fishing. Canada wondered if the NAFO IUU list should consider the inclusion of vessels identified by INTERPOL in the future.

**It was agreed that the IUU list was reviewed and that the current list be maintained. STACTIC submits this determination to the General Council per Article 54.3.**

## 9. Inspectors Website

The Secretariat presented STACTIC WP 13/22 to provide an update to Phase II and Phase III of the NAFO Inspectors Web Area.

Canada tested the website and did not experience any problems with the functionality of the site when accessed from land. Canada suggested that each CP have a limited number of persons with administrative rights and that most inspectors have read only rights.

DFG suggested that the NAFO website should be set up similar to using current NEAFC's as it is user friendly. The US requested that the Secretariat provide a mechanism for the web site to provide completed PSC-3 forms to the flag State under step 4. The EU recommended the continuous improvement of integrating data from multiple sources, which will ultimately improve the work of inspectors.

**There is consensus that Phase II is ready to proceed in real time. The Secretariat agreed to include suggestions offered by CPs into future versions of the web site. The developments of Phase III will be presented to STACTIC for review at the next intersessional meeting.**

## 10. Possible revisions of the NAFO CEM

### a) Sharing of information on catches of NEAFC stocks in the NRA

At the May 2013 intersessional meeting, Iceland presented STACTIC WP 13/1, which was deferred for further consideration at this meeting. Following the meeting, Iceland submitted letters to NEAFC and NAFO requesting the Secretariats to develop a data sharing agreement. NAFO replied that it was not in a position to do this and that it is a matter for STACTIC to review. Iceland is not aware of any response from NEAFC.

Iceland decided not to pursue its data sharing proposal at this meeting.

**Iceland will consider this issue further, and may submit a proposal for NEAFC and NAFO data sharing at the next intersessional meeting.**

### b) By-catch limits for NAFO Redfish 3M and Cod 3M

Russia presented STACTIC WP 13/28 to address prohibition on retention of by-catch when Cod 3M and Red 3M fisheries have been closed.

Several CPs and the Chair questioned whether STACTIC has the authority to change by-catch restrictions and advised that this type of policy/management proposal should first be considered and adopted by the Fisheries Commission.

**Because of these concerns, there was no consensus on this proposal. The Chair noted that Russia may offer this proposal to the Fisheries Commission.**

### c) Authorization message – AUT-Annex II.C3

STACTIC discussed how the directed species (DS) field in the authorization (AUT) report should be populated in the case of transshipment vessels. Transshipment vessels can not necessarily verify what kind of species will be transhipped. As a result, CPs would have to declare multiple species within the AUT report to ensure that all species potentially transported by transshipment vessels would be covered.

In the absence of a specific written proposal to address this problem, the Chair presented STACTIC WP 13/29 to exempt transshipment vessels from the requirement to complete the DS field in the AUT message.

**It was agreed to forward STACTIC WP 13/29 to the Fisheries Commission for adoption.**

The Secretariat presented STACTIC WP 13/20 recommending a technical change to the data transmission format relating to the Directed Species data element. CPs agreed to make this change.

**It was agreed by CPs that this is a technical change which can be made by the Secretariat without consideration by the Fisheries Commission.**



#### d) Product Labelling by Date of Processing (Article 27)

STACTIC WP 13/27, Product Labelling by Date of Processing (Article 27), was presented by Canada. This paper proposed to modify existing Article 27.1 to include date of processing for all species, with the exception of shrimp (for shrimps, the date of capture would be acceptable). The goal was to improve the integrity of vessel reporting and enhance compliance monitoring for at-sea inspectors. Canada believes this modification is another helpful tool for inspectors to use to verify catch on board. Furthermore, these labelling procedures may act as a deterrent for masters to misreport. Russia, Iceland, and DFG supported this proposal.

Although the US has concerns about the added cost and burden this proposal would present for vessels, the US supported STACTIC WP 13/27. The US asked Canada if they believed a label that is 3x4 inch in size would be consistent with Article 27.2 which requires labels be of a size that can be read clearly by inspectors during the normal course of their duties. Canada agreed to evaluate the US request.

DFG remarked that it is necessary to make a decision on this issue, noting the labelling rules should remain consistent and not change frequently. The US agreed, referencing that the label had already changed last year and highlighting the costs to industry for adjusting to new requirements.

The EU raised significant concerns with Canada's proposal, and could not support it at this time. EU stated that the proposal presents conflicts with already established domestic EU labelling regulations.

The EU indicated that Canada has produced no new evidence since this proposal was originally raised and the EU did not see the need to re-introduce the paper. Canada advised that they are prepared to bring visual and data examples of potential compliance issues for presentation at the next intersessional meeting to highlight the need for more thorough labelling of products.

**There was no consensus on STACTIC WP 13/27 REV, it was deferred for further consideration at the next intersessional.**

#### e) By-catch requirements for Skate

The EU presented STACTIC WP 13/24 to propose an amendment to Article 6.3(b), by-catch requirements (specifically regarding skate). This measure considers excessive by-catch in the first tow of a vessel targeting skate to be incidental catch and not a directed fishery. The EU suggested that the concept of "first time" is difficult to control and inspect and further clarification is needed. The US noted that it was likely created to avoid classifying such excessive by-catch events as a serious infringement in accordance with Article 38.1(c). EU agreed to look into the background for this provision.

**The proposal of STACTIC WP 13/24 was withdrawn by EU.**

### 11. Standardization of observer program data and reporting requirements

STACTIC WP 13/25 was presented by the EU to ensure that observer reports are submitted as soon as possible, at or before the time of landing to the flag state CP, the Executive Secretary and the port inspection authority. Based on recommendations by other CPs, the EU revised its paper and submitted WP 13/25 Rev to clarify that the report needs to be submitted to the port inspection authority only if there is a port inspection.

Citing Article 30.2, Canada was concerned about observer reports being submitted directly to the Executive Secretary before the flag State could review the report (the flag state CP is responsible for the integrity of data provided to the Secretariat). The removal of this important administrative quality control measure could be detrimental to the integrity of the observer program. The opportunity for the flag State to review the observer report is also necessary to minimize administrative errors and ensure that all fields were completed by the observer. While the US recognized that Article 30.2 holds the flag State Contracting Party responsible for ensuring that observer reports are submitted to the Executive Secretary, the US noted that submitting the reports to the port inspectors and the Executive Secretary at the same time could preserve data integrity and minimize the potential that different versions of the observer report would be used by either entity. Furthermore, the US noted that failure to complete all fields of the observer report outlined in the new Annex II.M of the NCEM, as adopted at the May 2013 intersessional meeting in STACTIC WP 13/14, is a compliance issue in itself, stating the flag State Contracting Party can enforce compliance with that issue even if the reports are submitted directly to the Executive Secretary.

The Chair made a proposal in an attempt to rectify this disagreement by re-wording the text in Article 30.2(g) to require that the observer reports must be submitted to the flag State Contracting Party, and if an inspection in port occurs, to the local port inspection authority upon arrival in port, but retain the provision requiring the flag State Contracting Party to forward the report to the Executive Secretary within 30 days following the arrival of the vessel in port.

**It was agreed that STACTIC WP 13/25 Rev 2 would be forwarded to Fisheries Commission for adoption.**

## 12. Standard conversion factors in the NRA

At the May 2013 intersessional meeting, STACTIC considered and adopted in concept a comprehensive proposal by Canada (STACTIC WP 13/3) to develop a program to collect data that would lead to standard conversion factors in the NRA. Upon suggestion by STACTIC, Canada agreed to narrow the scope of the sampling and present a modified proposal as a pilot project. Canada presented STACTIC WP 13/26 and provided the framework for developing standardized conversion factors for Greenland halibut in the NAFO Regulatory Area, for each fish product produced onboard. If this pilot project is a success for Greenland Halibut, it could be applied in a broader context (i.e. other species).

Japan commented that it had no vessels operating in the NRA, and that it would be difficult to contribute due to its current financial restrictions. It further remarked that, as standardized conversion factors would not have taken into account Japanese vessels, implementation could be problematic for Japan. The US and Iceland supported the pilot program, in concept, and committed to participating to the extent possible. The US noted that the proposal would provide data necessary to help rectify some of the mismatch between various data sets, and could be further used as a template for a comprehensive NAFO observer program. The Chair agreed, stating that STACTIC WP 13/26 appears to be within the priorities of FC concerns regarding data reliability and, therefore, should move forward. However, the Chair raised several concerns such as funding and specific implementation plans, recommending that further work is needed to resolve such issues. The Chair noted that the only way the proposal could work is if some or all CPs committed to provide money and other resources to the methodology. The Chair asked whether any CPs could make such a commitment. No CPs, except Canada, offered to make such a commitment.

Based on its reservations about the soundness of the methodology, EU proposed that the methodology proposed by Canada should first be submitted to the Scientific Council for evaluation and recommendations concerning its validity.

DFG requested that it is necessary for all CPs to agree on a standardized conversion factor, so the quota outtake is the same for each CP on the same stock.

**It was agreed to ask the Fisheries Commission to submit STACTIC WP13/3 to the Scientific Council for evaluation and recommendations of the methodology presented for establishing standardized conversion factors with a request to complete such evaluation before the next annual meeting.**

## 13. Possible items to be forwarded to the Advisory Group on Data Communication (AGDC)

The NAFO Secretariat presented STACTIC WP 13/21 to provide an update from the 25-26 June 2013 AGDC meeting. The Secretariat discussed the AGDC's consideration of measures to establish new security and confidentiality procedures for NEAFC. Once adopted many of the proposed procedures may want to be considered among STACTIC members.

The Chair noted that STACTIC had supported the establishment of the Joint Advisory Group on Data Management (JAGDM), as reflected in the May 2013 intersessional report.

## 14. Other Matters

### Fishing operations under a chartering arrangement

The EU presented STACTIC WP 13/23 to discuss fishing operations under a chartering arrangement. The EU proposed several changes to Article 26 to clarify that the 6 month limitation applies to the duration of cumulative fishing operations, not the contract itself. The paper was revised to reflect comments by CPS.

**It was agreed to forward STACTIC WP 13/23 Rev to the Fisheries Commission for adoption.**

DFG provided video images of longline fishing activity for cod in the 3M area.

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

The next STACTIC meeting will be hosted by Denmark (in respect of the Faroe Islands and Greenland) in Copenhagen, May 5-7, 2014.

### **16. Adoption of Report**

The report was adopted by Contracting Parties on Thursday, September 26, 2013.

### **17. Adjournment**

The Chair adjourned the meeting at 1136 a.m. on Thursday, 26 September 2013.

## **Annex 1. Agenda**

1. Opening by the Chair, Gene Martin (USA)
2. Appointment of Rapporteur
3. Adoption of Agenda
4.
  - a) Follow up on Peer Review Expert Panel (PREP) recommendations
  - b) Examining the reliability of STATLANT 21 data
5. Editorial Drafting Group (EDG) of the NAFO CEM
6. Compliance review 2012 including review of reports of Apparent Infringements
7. Review and evaluation of Practices and Procedures
8. Review of current IUU list pursuant to NAFO CEM Article 54.3
9. Inspectors Website
10. Possible revisions of the NAFO CEM
  - a) Sharing of information on catches of NEAFC stocks in the NRA
  - b) By-catch limits for NAFO Redfish 3M and Cod 3M
  - c) Authorization message – AUT-Annex II.C3
  - d) Product labelling by date of processing (Article 27)
  - e) By-catch requirements for Skate
11. Standardization of observer program data and reporting requirements
12. Standard conversion factors in NRA
13. Possible items to be forwarded to the Advisory Group on Data Communication (AGDC)
14. Other Matters
  - Fishing operations under a chartering arrangement
15. Time and Place of next meeting
16. Adoption of Report
17. Adjournment

## Annex 2. Powerpoint presentation on Methods to compare catch estimates: STATLANT 21 versus STACTIC data (STACTIC Working Paper 13/30)

**Methods to compare catch estimates :  
STATLANT 21 vs STACTIC Data**  
(STACTIC Working Paper # 13/30)

**Issue: PRP Recomm # 24 - Resolve STATLANT 21A and SC-STACFIS catch estimates discrepancies.** (NAFO 2011 Report, (2011), (2012), (2013), Annex 2)

**NAFO Response:** *inter alia*, CPs instructed STACTIC to reflect on ways to use STACTIC data in examining the reliability of STATLANT 21. (2013, (2014))

**STACTIC Initial Response:** STACTIC would create tables to compare STATLANT vs STACTIC data. (2013, (2014))

**STACTIC catch data:**

- Port Inspection Reports (PSC 3) (Ann. 45, Annex 2/3)
- Logbooks (from PSC 3) (Ann. 2/3)
- Observer Reports (Ann. 2/3, 4/2)
- Daily CATCH Reports (CATs) (Ann. 2/3, 4/2)
- Monthly Provisional Catch Reports (Ann. 4/2)

**STATLANT 21 column**

Comparison of STACTIC catch data has been a routine exercise in the Compliance Review — Table 3 of the Compliance Compilation.

STATLANT 21 column is inserted in Table 3.

**2012 Totals, as submitted**

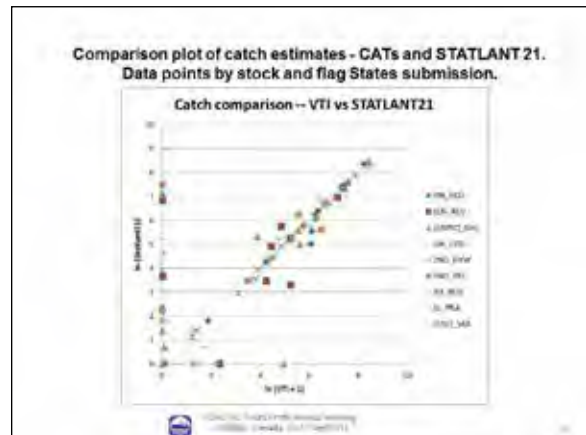
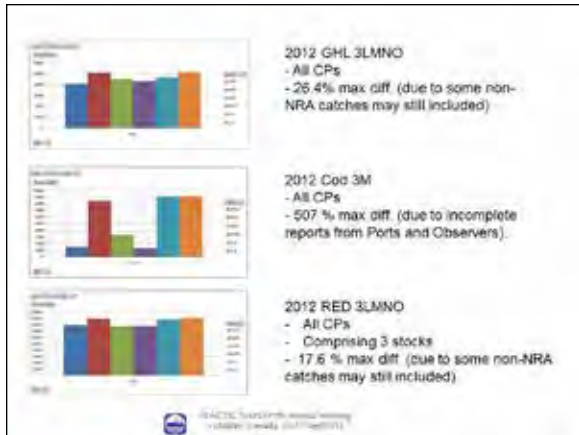
- STATLANT - includes Convention area in USA and Canada submission
- MPC - includes some catches in Convention area in Canada submission

**2012 Totals, adjusted**

- Coastal states STATLANT removed, except those in 3LMNO and 1F2J.
- MPC - Canadian EEZ catch removed, but may still include Convention area catches.

Discrepancies possibly due to one or more of the following:

- STATLANT: Convention Area
- MPC: Convention Area, grouped by CPs
- Port: NRA, ~15% coverage, partial landings, product landings (CPs may be inaccurate), divisions sometimes combined (e.g. Red in 3LMNO), charter catches unaccounted, transshipments
- Logbook: NRA, dependent on port inspection reports
- Observer: NRA, 2 schemes "traditional" and "electronic" lack of standard protocol in catch reporting.
- Daily Catch Report (CAT): NRA.



**Conclusions:**

- **Ways to use STACTIC data in examining the reliability of STATLANT 21:** comparison of reported catches by Species/Stock by Division. Tables and graphs - filtering mechanism to examine individual flag States submissions.
- **Usefulness of STACTIC data**
  - CAT reports are the very useful and effective because of the level of detail, 100% coverage and compliance of vessels in reporting CATs
  - In current form, port and logbook data are useful in comparing catch estimations of stocks under recovery plan, e.g. GHLMNO. 100% coverage of port inspections, not 15%, is required when vessels land stocks under recovery plan (see 4.10)
- Usefulness can be enhanced by...

**Making STACTIC data more useful in assessing STATLANT 21 reliability**

- STATLANT 21 and MPC: Coastal states submissions distinguish catches in EEZ and NRA.
- Monthly provisional catch reports: Report by flag States, not by CPs.
- Port Inspections: Landings by stock or species and by division e.g. Cod or Redfish in Div. 3LMNO would not be acceptable; GHLMNO would be acceptable.
- Logbook (as reported in Port Inspections): same as in Port Inspection Reports; make available directly to Secretariat.
- Observer reports: At least report catch by species by division. Compliance to recording of haul-by-haul.
- CAT reports: continuing compliance in daily transmission of catch reports by each fishing vessel, by species and by Division.



**SECTION III**

(187–206)

**Report of the Fisheries Commission and Scientific Council Ad hoc Working Group  
on Catch Reporting****3–4 February 2014  
Halifax, Nova Scotia, Canada****Contents**

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## **Report of the Fisheries Commission and Scientific Council Ad hoc Working Group on Catch Reporting**

(FC-SC Doc. 14/01)

**3–4 February 2014  
Halifax, Nova Scotia, Canada**

### **1. Opening**

The Scientific Council (SC) Chair Don Stansbury (Canada), opened the meeting at 1000 hrs on Monday, 3 February 2014 at Prince George Hotel in Halifax, Nova Scotia, Canada. The Fisheries Commission (FC) Chair, co-Chair of this ad hoc working group (WG), could not attend. It was determined that for this inaugural meeting an election of a substitute co-Chair would not be necessary.

Representatives from Canada, Denmark (in respect of the Faroe Islands and Greenland), European Union, Japan, Norway, and USA were in attendance. The presence of the newly appointed Executive Secretary of NAFO, Fred Kingston was acknowledged (Annex 1).

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

Neil Campbell and Ricardo Federizon of the NAFO Secretariat were appointed co-Rapporteurs.

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

The agenda as previously circulated was adopted. Under item 10 - Other matters, discussion on the roles and responsibilities of national scientific observers compared to the current NAFO observer programs was proposed (Annex 2).

### **4. Review of Terms of Reference**

The terms of reference (ToR) of this ad hoc WG as stipulated in FC Doc. 13/24 were reviewed. There was no need to revise the ToR. Concerning ToR 4 it was clarified by the representatives of the Scientific Council (SC) and the presiding Chair that this WG shall report to SC during the June meeting and not necessarily only during September Annual Meeting.

### **5. Review and follow-up to the Peer Review Expert Panel 2013 Recommendations**

A review of the Peer Review Expert Panel 2013 Recommendations, which are documented in GC Doc 13/04 Rev, was conducted. In FC-SC CR WP 14/6 Rev which is presented in Annex 3, the NAFO bodies responsible to follow-up, the actions to date and further actions to consider are presented. The reference to SC documents in Annex 3 indicates that specific recommendations addressed to SC have already been addressed. Further responses and details are expected from SC following from its meeting in June 2014.

Some CPs felt that more in-depth discussions on the substance of Annex 3 were required. However, this did not occur due to time constraints. The working paper presented in Annex 3 therefore should be considered preliminary and will be finalized by the WG at a later time.

### **6. Evaluation of 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

The Secretariat described the different catch databases housed at the Secretariat: Monthly Provisional Nominal Catches, at-sea inspection reports, port inspection reports, observer reports, vessel transmitted information (VTI), and STATLANT 21.

The WG evaluated the data sources and discussed their individual limitations and potentials for utility to validate catch data and/or generate catch estimates. It was noted that these data sources are currently collected for fishing compliance purposes and with the exemption of daily catch reports (CAT) as part of VTI, are not available for scientific purposes. Under Article 28.9 of the NCEM, the SC could request such data from the Executive Secretary. Future discussion on possible utilization of the various data sources requires consideration of issues such as accessibility and confidentiality.

Notable in the discussions was how these data can be used in the cross validation of the catch estimates. It was highlighted that for scientific purposes, fishing related data for the whole geographical distribution of the straddling stocks managed by NAFO is desirable. It was subsequently noted that in some cases NAFO data can be complemented by coastal States which can provide information related to fishing in their EEZ. Issues of tow-by-tow logbook data and data from NAFO observers as well as scientific observers were also extensively discussed. Regarding tow by tow logbook data, fishing masters are required to record the entries but are not required to forward them to the Secretariat. There was general agreement among participants on the potential usefulness of tow-by-tow data for catch estimation, however, some CPs have indicated that there are some practical reasons why these logbooks are not forwarded (e.g. paper submissions are in practice very difficult and for CPs having an Electronic Recording System in place the electronic standards are not defined/compatible with the system at the NAFO Secretariat). It was recognized that future discussions of tow-by-tow data would need to consider practical approaches to make the data available recognizing that it needs to be anonymized and does not necessarily need to be transmitted in real-time to the Secretariat. Regarding the observers data, it was acknowledged that the current NAFO observer program was established primarily for compliance purposes, although there is no formal distinction between “scientific” and “compliance” observers recognized in the NAFO Conservation and Enforcement Measures (NCEM). The level of details in the historical observer’s reports is not consistent. Even if there were complete compliance in submitting the reports, the observer data might be of limited utility to the SC.

In 2013, an observer template was adopted by the Fisheries Commission and it was made as a requirement beginning 2014 for the observers to use in reporting. It is hoped that this will considerably improve the quality of the observer reports in terms of utility of the SC. The new observer template includes the collection of length frequencies. However, SC representatives noted that without concurrent age samples, length frequencies collected are of limited utility for stock assessments. Some also reported issues with the use of this new template by compliance observers. On some vessels, scientific observers and compliance observers are now doing the same task. It was noted that the evaluation of the observer template is in the purview of the Standing Committee on International Control (STACTIC) and not this WG. It was also noted that Article 30 of the NCEM currently allows SC to request additional scientific work, e.g. length frequency data collection, be conducted by observers deployed in the NAFO Regulatory Area. All CPs which deploy scientific observers were encouraged to analyze and provide their information as a source of data.

A summary of discussions on the catch databases are also contained in the working paper FCSC CR WP 14/1 Rev presented in Annex 4. Some CPs felt that more in-depth discussions were still required. The working paper therefore should be considered preliminary and will be finalized by the WG at a later time.

The Secretariat made two presentations concerning approach in usage of the STACTIC data in complementing STATLANT 21: 1) methods to compare catch estimates --- STATLANT 21 vs STACTIC, and 2) analysis of Vessel Monitoring System (VMS) and VTI (daily CATch reports) data (Annex 5). In the former, it is recognized that in their respective current form, VTI data is the most useful because of the high level of compliance of the fishing vessels in submitting the daily catch reports and the level of detail which they provide – daily catch by species and by Division (CATs). The latter presentation is a more detailed approach in making quantitative analysis using the VTI-CAT reports. The WG recognized the utility of the STACTIC data and the usefulness of the proposed approach. The SC was encouraged to pursue this further in the stock assessment work, in particular, as a pilot for catch estimation of 3M Cod.

## 7. Prioritization of stocks for initial consideration

In consideration of the importance of the stock to the fishing industry, of the development or update of Conservation Plan and Rebuilding Strategy (CPRS) of certain stocks, and the need for scientific data for stock assessment, the following stocks were identified as priorities: 3M cod, 2 + 3KLMNO Greenland halibut, and 3LNO American plaice (see item 9).

## 8. Consideration of terms of reference (governance, participation) if it is advised that this ad hoc WG continues

This WG would operate at least for another year under the same goals and objective as stipulated in FC Doc. 13/24. A recommendation to this effect will be forwarded to FC and SC for consideration (see item 9).

## 9. Recommendations to forward to the Fisheries Commission and Scientific Council

*It is recommended*

1. that this WG continues, with the same goals and objectives, for another year. At the 2015 Annual Meeting FC and SC give consideration to prolonging this joint working group
2. that this WG should meet, either by correspondence or at another meeting preceding the 2014 Annual Meeting, to continue moving towards a transparent and robust method for producing estimates of catch
3. that if agreed by FC and SC the work would continue on priority stocks for the June 2015 SC meeting, and again report at the 2015 Annual Meeting.
4. that a process for catch estimation be constructed by continuing dialogue within this working group, using a suite of available data considered in Annex 4, and any other data, such as scientific observer reports. The process should be fully documented and transparent, including documentation of data selection and validation and tools for data synthesis.
5. that in a timely manner, SC, with assistance from the Secretariat, conducts a pilot exercise to explore and document the use of all available data, focusing on VMS & VTI for all flag states operating in this fishery, for catch estimation of Div. 3M Cod.

Results of this exercise may guide the work of this group in the future, especially on other priority stocks, e.g. 2 + 3KLMNO Greenland halibut and Div. 3LNO American plaice.

6. to encourage Contracting Parties to reflect upon the discussions of this working group and be prepared to offer revisions to the existing CEM to improve catch reporting at future FC meetings.

The WG *recommends* FC give further consideration to:

1. the need for development of best practice/guidelines for data collection and clarification of roles/responsibilities for observers
2. make NAFO Observer catch and biological sampling information, in anonymized form, available to Scientific Council and working groups of FC and SC to support catch validation and development of catch estimates for stock assessment.
3. the provision of NAFO logbook data (NCEM Annex II.A) to the Secretariat by electronic means, and to making it available to Scientific Council and working groups of FC and SC for the purpose of supporting catch validation and development of catch estimates for stock assessment.
4. the available data for straddling stocks which may contribute to the assessment of catch estimates.
5. exchange of catch on entry and exit information with NEAFC to improve reliability, noting the specific role of Joint NEAFC-NAFO Advisory Group on Data Management in this matter.

## **10. Other Matters**

The discussion on the overlap of duties between NAFO and Scientific Observer Programmes is reflected in item 6 and in Annex 4.

## **11. Adoption of the Report**

This report was adopted through correspondence after the meeting.

## **12. Adjournment**

The meeting was adjourned at 1830 hrs, Tuesday 4 February. The presiding Chair thanked the Secretariat for the support and the meeting participants for their cooperation and input. The participants likewise expressed their thanks and appreciation to the presiding Chair for his leadership.

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## **Annex 2. Agenda**

1. Opening
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Review of Terms of Reference
5. Review and follow-up to the Peer Review Expert Panel 2013 Recommendations
6. Evaluation of 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
7. Prioritization of stocks for initial consideration
8. Consideration of term of reference (governance, participation) if it is advised that this ad hoc WG continues
9. Recommendations to forward to the Fisheries Commission and Scientific Council
10. Other Matters
11. Adoption of the Report
12. Adjournment



### Annex 3. PREP 2013 Recommendations (FC-SC CR WP 14/6 Rev)

At the 35<sup>th</sup> NAFO Annual Meeting, the Peer Review Expert Panel (PREP) presented its 2013 Final Report (identified by PREP as “2013 Progress Report”) and NAFO recommendations at the General Council (GC Doc 13-4 Revised). The table below identifies the NAFO bodies responsible to follow-up the recommendations, the actions taken so far, and further actions for consideration.

PREP recommendations	NAFO body to follow-up	Actions to date	State of play or further actions to consider	WG follow-up
1a) The Panel recommends that NAFO work collectively across constituent bodies to ensure that STATLANT 21A data are received by the Secretariat within the timeframes currently established, and	GC, SC, CPs	There is a continuing effort by the Secretariat to ensure that accurate STATLANT data are received accurately and in a timely manner. CPs are duly reminded of their reporting obligations. SC routinely evaluates, inter alia, the timeliness of submissions. It is not only of the interest of SC, but also of GC as STATLANT data is used in the calculation of the CPs contribution to the NAFO organization.	Although there has been improvement in reporting timeliness, some CPs still have institutional barriers in meeting the May 1 deadline.	
1b) The Panel recommends that NAFO work collectively across constituent bodies to ensure that the reporting of effort in hours fished as part of the STATLANT 21B submissions is done as per current requirements	SC, FC, CPs	(see above)	(see above)	
2) The Panel recommends continued exploration of the VMS database and innovative approaches to allowing broader availability while meeting all the necessary confidentiality requirements	FC, SC, Secretariat	VMS data (position reports) have been made available to SC as guaranteed in NCEM Article 29.10.d. In 2013 Annual Meeting, FC adopted a proposal for making VTI data (Vessel-transmitted information, like the daily catch reports (CATs), transmitted by vessels using the same communication channel and technology in transmitting position reports) more readily accessible to SC and FC/SC joint WGs (FC Doc. 13/8). This provision is now embodied in 2014 NCEM Article 28.9.e.	Campbell and Federizon (2013) describe a method of estimating fishing effort in the NAFO RA using VMS (SCR Doc 13/001). In STACTIC WP 13/30 and FC-SC CR WP 14/2, STACTIC demonstrated a way of utilizing VTI data in comparing catches with STATLANT data. FC and SC and this WG may further consider these methodologies in evaluating the reliability of STATLANT 21.	

<p>3) The Panel again recommends it should be clarified whether Scientific Council adjusts its estimates in subsequent years based on updated STATLANT 21 information. If this is not currently done then procedures should be changed so as to ensure it is done in the future.</p>	<p>SC</p>	<p>[see: Report of the SC Ad hoc WG on Catch Estimation 19 March 2013, SCS Doc. 13/02]</p>		<p>The WG noted that the SC has adjusted some STATLANT data in the past, based on updated data, but that it is not done routinely for most stocks. For most cases, the adjustments would not have been large, and would not have resulted in STATLANT data replacing an SC estimate from a different source. Possible future action: If significant changes (updates) in STATLANT data occur, SC should consider updating its relevant catch estimate(s) accordingly.</p>
<p>4) The Panel again recommends that flag states with scientific observer information that have not, to date, derived alternate estimates of catch should do so such that Scientific Council can compare those estimates with the STATLANT 21 information. The methodology(ies) used should be fully documented. The Panel notes that Scientific Council has already given consideration to methodological issues during its March 2013 WebEx meeting (NAFO 2013b)</p>	<p>CPs, SC</p>	<p>[see: Morgan et al. 2013. Estimates of catch from the Canadian otter trawl fishery for yellowtail flounder based on observer data. NAFO SCR 13/023. Ser. No. N6176]</p>		<p>SC reviewed methodologies for catch estimation from observer data in June 2013. This included existing analyses of scientific observer data, as well as some new methodologies (e.g. SCR 13/023, Morgan et al). Possible future action: In consideration that observers data is now being reported in a standard format to the Secretariat starting in 2014, SC continues this work. CPs with scientific observer data are encouraged to provide these data where possible for use in catch estimation/validation.</p>

<p>5) The Panel recommends that Scientific Council prepare a document detailing, to the extent possible, the reasons they lack faith in the STATLANT catch information. Such a document could then form the basis for meaningful dialogue between Scientific Council and Fisheries Commission. The Panel notes that Scientific Council has already given consideration to this during its March 2013 WebEx meeting (NAFO 2013b).</p>	<p>SC</p>	<p>The documents listed in FCSC CR WP 14/3 may be mentioned here. [see: Excerpts from the June SC Report. p. 67-69.]</p>	<p>Such a document could be prepared for review by SC in June 2014, however much of the relevant information was reviewed by SC in June 2013 (e.g. SCR 13/51, by Brodie).</p>	<p>This was largely covered in SC in SCR 13/051, which provided a history of the catch estimation in NAFO. The difference between CPUE estimates from scientific observer data vs STATLANT 21 data was the key problem in many fisheries. Possible future action – SC could prepare additional documentation on this issue in June 2014.</p>
<p>6) The Panel recommends that Scientific Council prepare a document that describes, at least in general terms, the rationale followed in selecting what is considered the best estimate of catch when different estimates are available.</p>	<p>SC</p>	<p>In general, if discrepancies between unofficial estimates and S21 data are relatively small, or if the amount of scientific observer data was very low, SC has used S21 data. SC continued to use the scientific observer-based estimates until 2011, after which time they have not been available to SC. Occasionally, an estimate from scientific observers has been rejected in favour of an estimate by NAFO observers, or by S21 data, usually for reasons of lower levels of scientific observer coverage within a fleet or fishery.</p>	<p>Such a document could be prepared for review by SC in June 2014.</p>	<p>In general, if discrepancies between unofficial estimates and S21 data were relatively small, or if the amount of scientific observer data was very low, SC has used S21 data. When scientific observer estimates were made available in the early 2000s, they often agreed with the surveillance-based estimates. SC continued to use the scientific observer-based estimates until 2011, after which time they have not been available to SC. Possible future action – SC could prepare additional documentation on this issue in June 2014.</p>

<p>7) The Panel recommends 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. In addition to discrepancies between scientific observer and NAFO observer tow-by-tow estimates, it is also important to consider the possibility that fishing behavior and vessel reporting is influenced by the presence or absence of an observer (i.e., a possible observer effect when there is less than 100% coverage of vessel tows either due to the absence of an observer or their unavailability during certain times of the day).</p>	<p>CPs, FC, SC</p>	<p>FC: NAFO Observers Scheme is described in Chapter V of the NCEM. The scheme was established for compliance purposes. Observers are required for each haul, to record, among others, the catch and effort data. The recording of observer data did not follow a protocol until standard forms were developed and were required for use by observers in 2014 (Annex II.M, 2014 NCEM). In 2013, it has become a requirement for each vessel to accurately record the catch of each tow/set and complete fishing logbooks entries (Art. 28.2.a). However, it is not required for the CPs to forward the fishing logbooks to the Secretariat or to make available the logbook data to SC.  Tow by tow data from NAFO observers should be available from 2014 onwards.</p>	<p>FC: To date, appropriate observer data are inadequate for tow-by-tow analysis since the requirement to use standard observer forms is just recently in place. Tow-by-tow analysis of fishing logbooks can not be performed because the Secretariat does not have access to the fishing logbooks. FC/STACTIC may consider requiring fishing vessels to forward the fishing logbook data to the Secretariat and SC to be able to perform the analysis. Analysis of detailed NAFO observer data could be undertaken at the secretariat and compared against CAT reports and other data sources.</p>	
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**Annex 4. List of Catch databases housed at the NAFO Secretariat**  
(FC-SC CR WP 14/1 Rev)

<b>Database</b>	<b>Description</b>	<b>WG discussions and considerations for catch data validation</b>
<p>Monthly Provisional Nominal Catches (NCEM Articles 28.8 and 28.9.d)</p>	<p>Submitted by CPs (not flag States) within 30 days of the end of the reporting month. The Secretariat collates the submissions and transmits the information to CPs within 10 days after the end of each month. MPNC reports are used to monitor the quota and TAC uptakes of CPs. MPNC reports contain the year-to-date catches of regulated and also of un-regulated stocks. (since 2004)</p>	<p>Concerns were raised regarding the submission of this data and its ongoing utility, in light of the limited uses to which it is now put. It was also highlighted that catches need to be submitted at a flag state- rather than contracting party- level of aggregation if they are to be any use for stock assessment.</p>
<p>At-Sea Inspection Reports (NCEM Article 36)</p>	<p>Inspection Reports are prepared by at-sea inspectors who board fishing boats. Inspectors are required to indicate in their reports the summary of catches derived from fishing logbook entries for the current fishing trip. Catch information from at-sea inspection reports are incomplete as they provide only a “snapshot” during the time of inspection. The main substance of an inspection report is the “apparent infringements” of the NCEM provisions detected by inspectors. The copies of inspection reports are forwarded to the Secretariat and are treated as confidential. The data is compiled in a database is used for compliance purposes. (since 2004)</p>	<p>At sea inspections were considered to be a snapshot of catch data at a particular point in a trip, and provide limited information on observed hauls. The relatively short time allowed for inspections, and the absence of segregation of catch by division in the hold of vessels limits the scope of inspection data to inform the catch validation process.</p>
<p>Port Inspection Reports (NCEM Articles 43-46)</p>	<p>This report (called PSC 3) is transmitted to the Secretariat by the port States. The report contains the quantities landed by species and catches retained onboard if any. They also contain the logbook catches during the fishing trip. Landed catches and logbook catches are not consistently reported by stock or Division, e.g. some entries indicate Redfish in Division 3LMNO.</p> <p>Since 2011, 100% port inspection coverage is not required, except when vessels are landing fish stocks under CPRS, e.g. Greenland halibut. Port Inspection Reports are treated with confidence. They are used for compliance purposes. (Confidential to Secretariat)</p>	<p>The view was expressed that the consistency of reporting is variable, particularly due to catch being offloaded by species, rather than, for example, by stock or assessment unit. For compliance purposes this may be fine but again, limits the usefulness of the data for performing catch validation for stock assessment purposes. While the coverage of Greenland halibut is 100%, for other species it is less.</p>

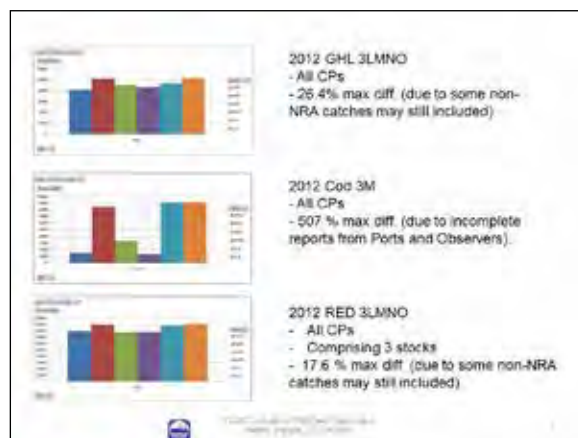
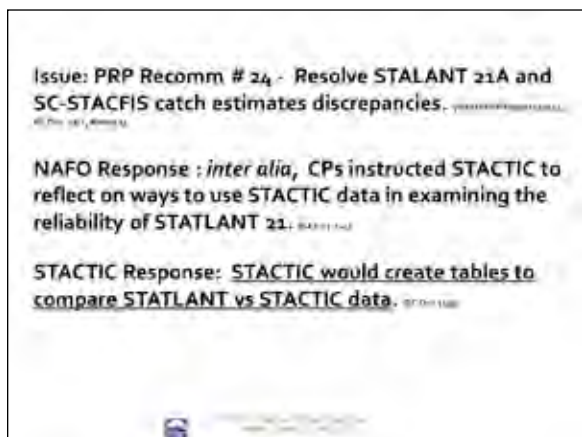
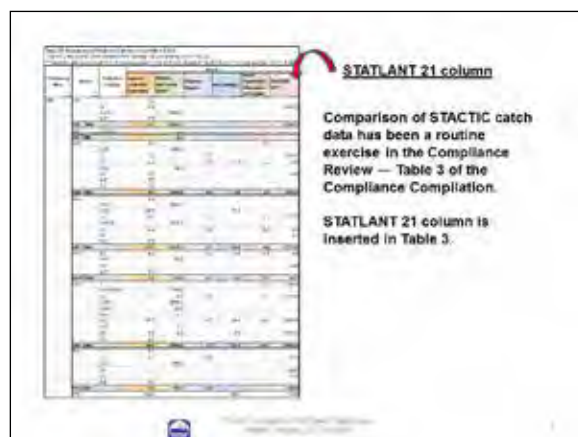
<p>Observer Reports (NCEM Articles 30.A)</p>	<p>The observer onboard a vessel shall submit a report to the Executive Secretary. This report is required for every trip except for vessels participating under the electronic scheme as described in Article 30.B).</p> <p>These reports are received in a non-standardized format. All contain total catches by subareas. Some include daily catch reports by species and subarea, and others include haul-by-haul information. Degree of compliance to Article 30.A.2, specifically on paragraphs b and c has been very low, probably because no standard form for observer reports existed.</p> <p>In 2014, it has become a requirement for observers to report using the standardized form as prescribe in Annex II.M of the NCEM.</p>	<p>It was felt that sharing training manuals and beginning to draw up best practices around estimating tows would be beneficial. The respective tasks of Scientific and Compliance observers was raised and it was noted that there are some philosophical differences in what each scheme is designed for. Scientific observers are only fielded by a small subset of Contracting Parties, and data confidentiality issues prevents robust external review. The current NAFO Observer form, developed in 2007 and used by a number of contracting parties, is felt to be helpful, and although there has been no compulsion to report data to the Secretariat along these lines, from 2014 this form is mandatory and it may be helpful for the Secretariat to do some in-year analysis.</p>
<p>Vessel Transmitted Information (VTI) (NCEM 28.6)</p>	<p>Since 2011, it has been a requirement for fishing vessels to transmit daily catch report (CAT) by species and by Division. CAT reports are transmitted using the same technology and communication channel as the VMS. Except in the first few months of 2011 (when fishing vessels were still in the learning curve in fulfilling the daily CAT requirement), there is a generally very good compliance among the vessels in transmitting the CAT report. Currently, the Secretariat considers CAT reports more reliable in monitoring quota uptakes than the Month Provisional Catch Reports. (since 2011)</p>	<p>Discussion was focused on the development and reporting of haul-by-haul data and the implementation of e-logbooks. A number of Contracting Parties already have such systems. Data is available at a flag-state level, in near real-time. It was highlighted that this data comes from a compliance perspective and it should be borne in mind that this would only be fully available for fisheries in the NRA.</p> <p>There was a general consensus that haul-by-haul logbook data would be extremely useful if submitted to the Secretariat. It was noted that while the roll-out of a standardized e-logbook scheme might be difficult and costly, it could be possible to repurpose the CAT report format to create a rudimentary system for reporting haul-by-haul data. In moving towards a recommendation from this group, it may be more helpful to say “in an electronic format” and then move towards a standard system.</p> <p>It was also noted that in some situations there can be a discrepancy allowed between catch reported in the logbook and the actual quantity landed, i.e. discards. While access to haul-by-haul data may not improve the precision of at sea estimates, it would provide another source of data that could be compared against VMS to at the very least verify depth fished, target species, and so on.</p> <p>While NAFO Observer reports should already be in a haul-by-haul format, the degree of independence of these figures from the logbook data was discussed. It was suggested that the current observer form be modified to allow recording of whether a catch was observed in full or taken from a logbook.</p>

<p>STATLANT 21</p>	<p>STATLANT 21 is <b>official</b> nominal catch and effort statistics in FAO Statistical Area 21. They are submitted to the NAFO Secretariat, the repository of STATLANT 21, by flag States fishing in Area 21, which is geographically identical to the NAFO Convention Area. (from 1960 to current)</p> <p>STATLANT 21A, considered provisional, contains summary on total catches by species by NAFO Divisions. Submissions of 21A are expected to be received no later than May 1<sup>st</sup> for the reporting year.</p> <p>STATLANT 21B, considered final, contains more detailed catch and effort information grouped according to gear used, vessel size (tonnage), target species, and NAFO Division. Submissions of STATLANT 21B are expected to be received no later than August 31<sup>st</sup> for the reporting year.</p>	<p>STATLANT 21 is the longest standing data source available to NAFO, is comprehensive and includes all stocks. However, some removal data is not captured by STATLANT 21, e.g. data on discards is excluded from STATLANT 21 submissions. The issues around completeness, timeliness and institutional barriers to reporting are well known to all parties.</p>
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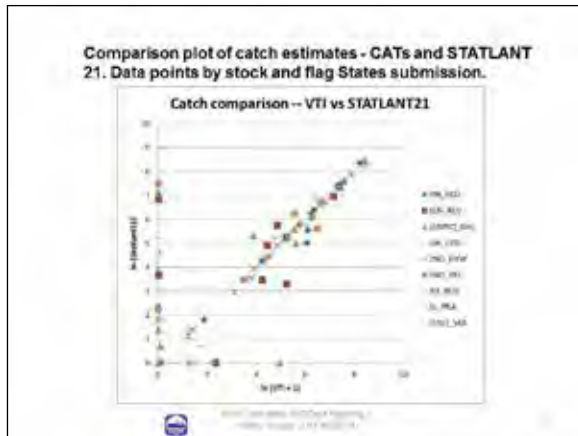


## Annex 5. Approaches in comparing a STACTIC catch data and STATLANT 21 data and in analyzing VMS and VTI data (FC/SC CR WP 14/2 and FC-SC CR WP 14/9)

### 1. Comparing STACTIC catch data and STATLANT 21







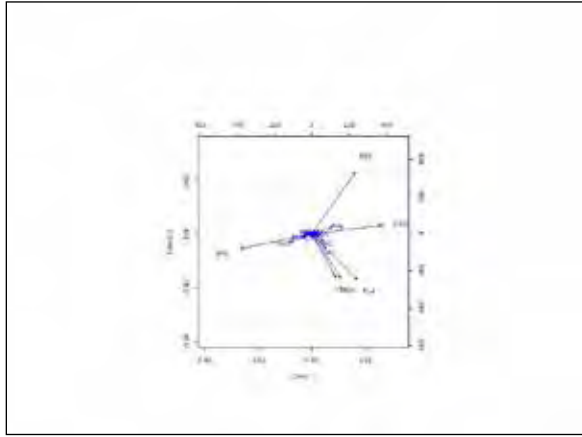
## Analysis of VMS and CAT Data

NAFO Secretariat

- Conclusions:**
- **Ways to use STACTIC data in examining the reliability of STATLANT 21:** comparison of reported catches by Species/Stock by Division. Tables and graphs – filtering mechanism to examine individual flag States submissions.
  - **Usefulness of STACTIC data:**
    - CAT reports are the very useful and effective because of the level of detail and compliance of vessels in reporting CATs.
    - In current form, port and logbook data are useful in comparing catch estimations of stocks under recovery plan. e.g. GHL 3LMNO. 100% coverage of port inspections, not 15%, is required when vessels land stocks under recovery plan.
  - Usefulness can be enhanced

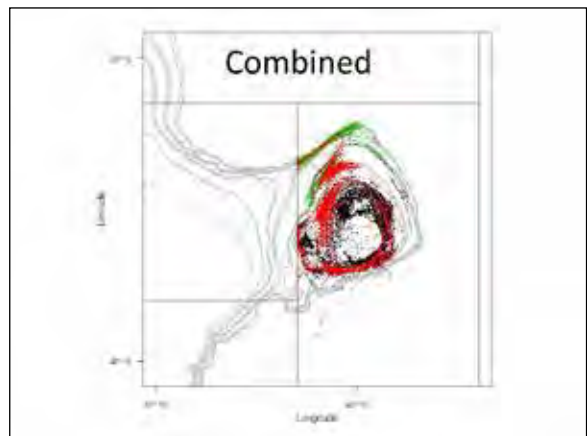
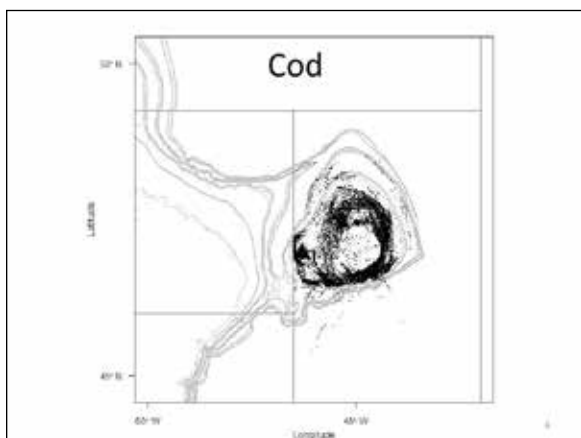
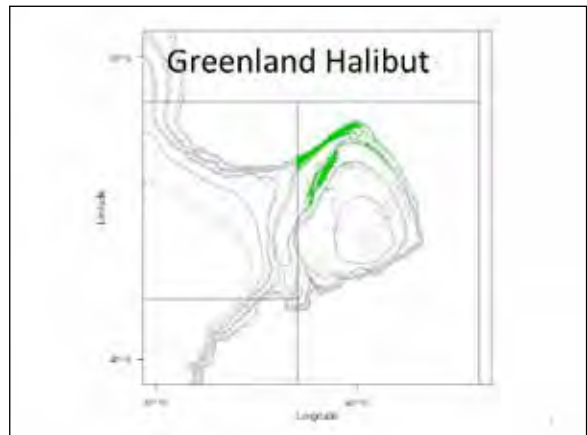
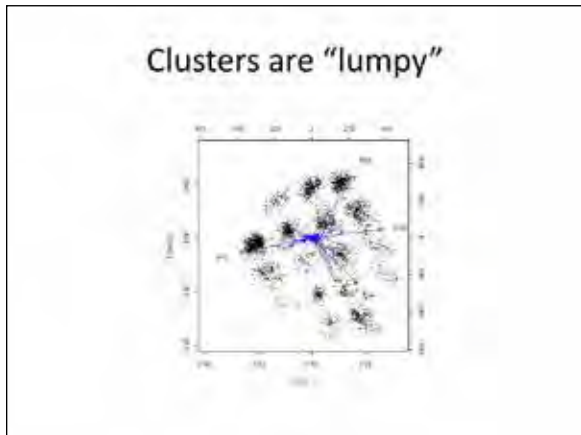
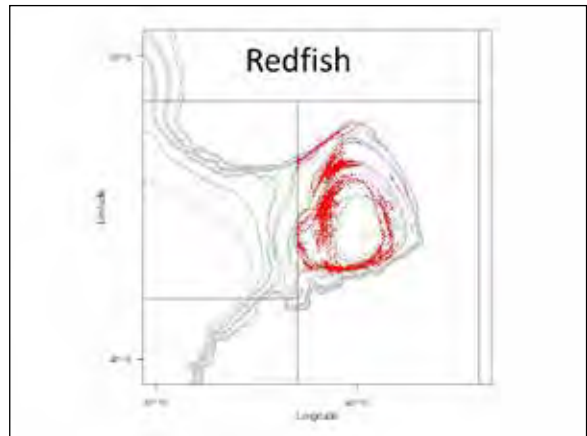
- ## CAT Data Clustering
- Requested as part of “fishery assessment” by WGEAFM
  - PCA on daily CAT reports (4515 fishing days)
  - Vessel, flag state, division, position, not included
  - Includes 21 species which are reported as largest bulk in at least 1 days fishing

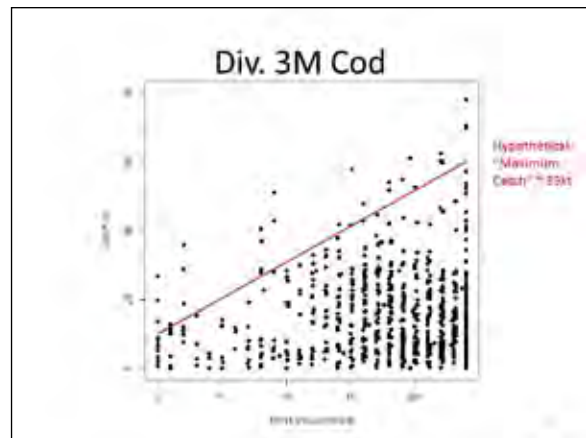
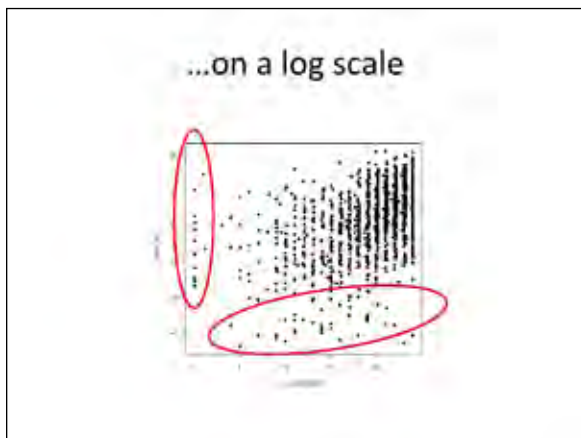
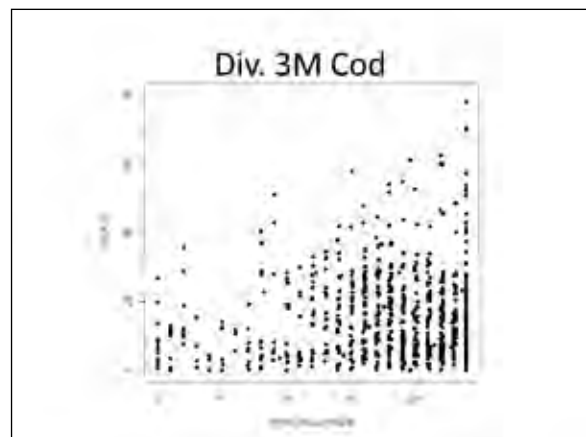
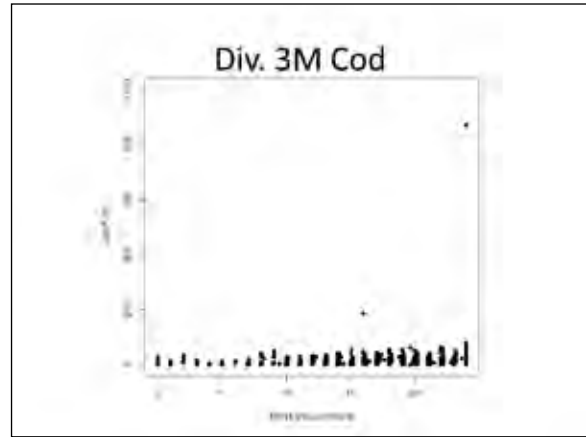
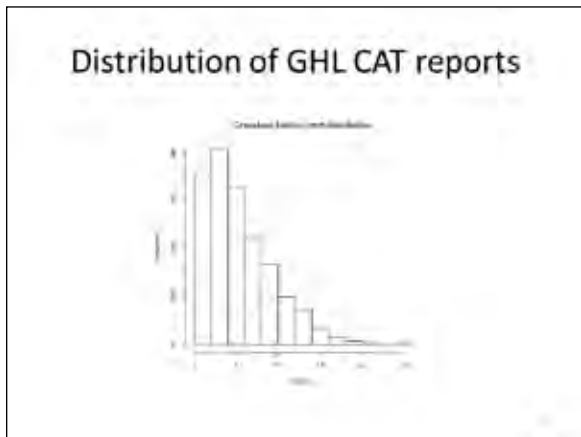
- Making STACTIC data more useful in accessing STATLANT 21 reliability**
- STATLANT 21 and MPC: Coastal states submissions distinguish catches in EZZ and NRA.
  - Monthly provisional catch reports: Report by flag States, not by CPs.
  - Port Inspections: Landings by stock or species and by division e.g. Cod or Redfish in Div. 3LMNO would not be acceptable; GHL in Div. 3LMNO would be acceptable.
  - Logbook (as reported in Port Inspections): same as in Port Inspection Reports; make available directly to Secretariat.
  - Observer reports: At least report catch by species by division. Compliance to recording of haul-by-haul.
  - CAT reports: continuing compliance in daily transmission of catch reports by each fishing vessel, by species and by Division.



**No surprises...**

- Identifies 4 fisheries
  - Cod
  - Redfish
  - Greenland halibut
  - Skate/Plaice/Yellowtail
- However...





**SECTION IV**  
(207–235)

**Report of the Fisheries Commission and Scientific Council  
Joint Working Group on Risk-Based Management Strategies**

**5–7 February 2014  
Halifax, NS, Canada**

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**Report of Fisheries Commission and Scientific Council  
Joint Working Group on Risk-Based Management Strategies**  
(FC-SC Doc. 14/02)

**5-7 February 2014  
Halifax, NS, Canada**

### **1. Opening**

The working group (WG) met at the Prince George Hotel, Halifax, Canada, during 5-7 February 2012. The meeting was attended by representatives from Canada, EU, Japan, Norway, the Russian Federation and the United States of America, as well as from the Scientific Council (SC). The NAFO Executive Secretary, Fisheries Commission (FC) Coordinator and Scientific Council (SC) Coordinator were in attendance. Observers from World Wildlife Fund and Dalhousie University were present. The meeting was co-chaired by Carsten Hvingel (Norway) and Kevin Anderson (Canada) (Annex 1).

The Chairs opened the meeting at 10:00 hrs on Wednesday, 5 February.

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

With the agreement of the WG, the FC Coordinator, Ricardo Federizon, and SC Coordinator, Neil Campbell, were appointed as joint Rapporteurs.

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

A proposal was made to add Div. 3L Shrimp to item 7c of the agenda. This was accepted and the agenda adopted otherwise as previously circulated (Annex 2).

### **4. Review of Terms of Reference**

The terms of reference of the WG as documented in FC Doc 13/18 were reviewed. The WG considered membership, work form, reporting procedures, observers and future meetings. The Chairs informed participants that at the suggestion of SC if the WG breaks from plenary session and reverts to delegation for the purpose of drafting recommendations, individual scientists would remain as part of their delegations and SC as a whole would be represented by the SC Chair or a designated alternate.

### **5. Review and Update of the Precautionary Approach Framework**

The NAFO Precautionary Approach Framework (PAF) was reviewed (FC Doc 04/18). The WG received a presentation from Bill Brodie (Canada) on the history and development of the NAFO Precautionary Approach Framework (PAF) (Annex 3). As a matter for consideration in revising the PAF, the co-chair Carsten Hvingel (Norway) introduced a paper (FCSC RBMS WP 14/1) and made an accompanying presentation outlining the current scope of the PAF, highlighting discrepancies surrounding risk-based assessment of stocks and the inconsistency in treatment of target and limit reference points for biomass and fishing mortality under the current system (Annex 4).

It was emphasised that the PAF forms the basis of risk based management strategies and for this reason it is important to ensure the PAF and the General Framework for Risk Based Management Strategies are well aligned.

It was further recognized that application of PAF is dependent on the existence of reference points and, the importance of SC in determining the reference points for all stocks was underscored.

To initiate the revision of the PAF, it was determined that feedback from the SC is needed particularly regarding the relevance and implications of having  $F_{lim}$  at  $F_{msy}$  and  $F_{msy}$  as a target, and the utility of buffer reference points (see item 9).

The risk values highlighted in the current PAF were discussed. The WG agreed that the noted percentages were not to be interpreted as prescriptive values/ ranges but rather directional amounts. It was also agreed that FC retains flexibility to specify acceptable levels of risk and that the degree of risk tolerance may be context specific.

## 6. Review and Update of existing interim Conservation Plans and Management Strategies

### a) Div. 3NO Cod

A review of the interim 3NO Cod Conservation Plan and Rebuilding Strategy (CPRS), which is embodied in Articles 7.6 – 7.11 of the NAFO Conservation and Enforcement Measures, was conducted. In the absence of  $B_{msy}$  reference point, it was proposed that: an interim  $B_{target} = 185\ 000\ t$  and an interim  $F_{target}$  of  $F_{0.1} = 0.19$  be considered. Annex 5 reflects the revisions and represents the updated CPRS to be forwarded to FC with a recommendation for adoption (See item 9).

### b) Div. 3LNO American Plaice

There were no changes proposed to the existing CPRS.

## 7. Follow-up to WGFMS-CPRS 2013 Recommendations

### a) Evaluation and finalization of General Framework on Risk-based Management

In 2013, the FC adopted the *General Framework on Risk-based Management Strategies*. However, the section *Closing of Directed Fishing* still needed to be elaborated. The WG evaluated and finalized the *General Framework* by removing the brackets in the section and replace the word “fishery” with “stock”. Annex 6 reflects the revision. It will be forwarded to FC with a recommendation for adoption (see item 9).

### b) Discussion on development of alternative strategies for stocks that may not be suited to formulaic rules and/or for stocks where reference points do not exist or cannot be developed.

Alternative strategies would not be needed if robust reference points are determined. At its June 2013 meeting, SC indicated that reference points can theoretically be constructed for all stocks and that this work is given high priority. The WG agreed to recommend SC provide a status report and possible timeliness for this work for consideration of FC in September 2014 (see item 9).

It was noted that further discussion on alternate strategies for specific stocks may be required if SC’s review determines that robust reference points are not likely to be established in a reasonable period of time.

### c) Development of CPRS

The process towards management strategies for priority stocks was initiated. Draft plans for 3M cod and 3LN redfish were developed based on the *General Framework on Risk-based Management Strategies*. It was noted that the drafts plans (Annexes 7 and 8) represent a first step and may need further elaboration and adjustment once feedback is received from SC and FC. It was also noted that while a framework is in place to guide development of management strategies, the strategies themselves are stock-specific and no single strategy is likely to be appropriate for all stocks.

There was concern expressed by some CPs on the use of  $F_{msy}$  (or its proxy) as a target versus a limit as well as consideration of consequences of fishing above this level.

#### i. Div. 3NO witch flounder

There was no progress to report on the development of a risk-based management strategy for this stock. The importance of the upcoming stock assessment, in particular, efforts to develop a limit reference point was noted.



## ii. Div. 3LN redfish

The WG initiated the development of a risk-based management strategy for 3LN redfish (Annex 7). As noted in the preamble, NAFO identified the development of a risk-based strategy for 3LN redfish as a priority in 2012, and reaffirmed that priority in 2013. As next steps, the WG requests SC to evaluate the management strategy relative to the performance statistics prior to the 2014 NAFO Annual Meeting, and to comment on likely by-catch levels associated with the implementation of the proposed Harvest Control Rule (HCR) for this stock (see item 9).

## iii. Div. 3M cod

The WG initiated the development of a risk-based management strategy for 3M Cod (Annex 8). As noted in the *Background*, NAFO identified the development of a risk-based management strategy for Cod in Div. 3M as a priority in 2012, and reaffirmed that priority in 2013. As next step, the WG recommends SC to discuss selection of operating models and evaluate the 3M Cod management strategy prior to the 2015 Annual Meeting (see item 9).

## iv. Div. 3L shrimp

Recognizing that this stock is currently thought to be near  $B_{lim}$ , the WG agreed to give further consideration to development of a management strategy, subject to the outcome of the 2014 stock assessment, and requested that the item be retained on the agenda for future meetings.

## 8. Approach and workplan to review the Greenland Halibut Management Strategy Evaluation in 2017

In order to provide the Fisheries Commission with the opportunity to approve the review of the Greenland halibut MSE during its 2017 September meeting, the following work plan was proposed:

1. Until 2016 Scientific Council will continue to evaluate the harvest control rule based on the primary indicators (catches and surveys indices).
2. During its 2016 June meeting Scientific Council should update two assessment models, one XSA based and one SCAA based, and evaluate the development of the stock since the introduction of the MSE.
3. FC/SC WGRBMS should review the results before September 2016 and determine the next steps.
4. In advance of the 2017 Annual Meeting, the working group will develop recommendations on the way forward.

Noting the priority given to this stock by the *ad hoc* FC-SC Working Group on Catch Reporting it is expected that catch estimates will be available to carry out the MSE review.

## 9. Recommendations to forward to FC and SC

1. In order for the WG to start the process of revising the PA framework the WG *recommends* SC provide feedback on the following:
  - Discuss the relevance and implications of:
    - having  $F_{lim}$  at  $F_{msy}$
    - $F_{msy}$  as a target

These analyses should include situations where quantitative analysis of uncertainty are limited and situations where uncertainty has been well incorporated into evaluation of Harvest Control Rules.
  - Consider the utility of buffers (particularly  $B_{buf}$ ) in the framework and in management plans and provide advice on whether the use of buffers is considered appropriate for stocks which have  $B_{lim}$ .
 

Note: the WG recommends that  $B_{isr}$  is not considered part of the PA (but may be used as an interim milestone to aid decision making).
  - The working group noted that SC, in its 2013 June report, concluded that reference points can



theoretically be constructed for all stocks, and that this work is given high priority. The WG recommends SC provide a status report and possible timelines for this work for consideration of Fisheries Commission in September 2014.

- In its assessments and advisory sheets, the working group *recommends* Scientific Council provide a table or list of reference points available for each stock that includes information on their derivation, and if reference points are missing, explain why.
2. The WG *recommends* FC adopt amendments to the interim management plan for Div. 3NO Cod (Annex 5).
  3. The WG *recommends* FC adopt amendments to the General Framework on Risk Based management (Annex 6).
  4. The WG *recommends* SC discuss selection of operating models and evaluate the Div. 3LN Redfish management strategy relative to the performance statistics prior to the 2014 Annual Meeting (Annex 7).
  5. The WG *recommends* SC comment on likely by-catch levels associated with the implementation of the proposed HCR for 3LN Redfish (Annex 7)
  6. The WG *recommends* SC to discuss selection of operating models and evaluate the Div. 3M Cod management strategy prior to the 2015 Annual Meeting (Annex 8)

## 10. Other Matters

There were no other matters raised.

## 11. Adoption of the Report

The report was adopted by correspondence following the meeting.

## 12. Adjournment

The meeting adjourned at 1030 hrs on 7 February. The Chairs thanked the Secretariat for their support and the participants for their cooperation and input. The participants in turn voiced their thanks to the Chairs for their leadership.

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## Annex 2. Agenda

1. Opening
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Review of Terms of Reference
5. Review and Update of the Precautionary Approach Framework
6. Review and Update of existing interim Conservation Plans and Management Strategies
  - a) 3NO Cod
  - b) 3LNO American Plaice
7. Follow-up to WGFMS-CPRS 2013 Recommendations
  - a) Evaluation and finalization of General Framework on Risk-based Management
  - b) Discussion on development of alternative strategies for stocks that may not be suited to formulaic rules and/or for stocks where reference points do not exist or cannot be developed.
  - c) Development of CPRS
    - i. 3NO witch flounder
    - ii. 3LN redfish
    - iii. 3M cod
    - iv. 3L shrimp
8. Approach and workplan to review the Greenland Halibut Management Strategy Evaluation in 2017
9. Recommendations to forward to FC and SC
10. Other Matters
11. Adoption of the Report
12. Adjournment

### Annex 3. The NAFO Precautionary Approach Framework

**The NAFO Precautionary Approach Framework (PAF)**

Modified from presentations at ICES Theme Session L, 2012 ICES ASC and at NAFO SC in June 2013 as SCR Doc13/24, by W. Brodie, P.A. Shelton, E.Couture, K.Dwyer

1

Joint SC/FC WG on the PA, 1998-2002

- Comprised of scientists and managers
- Identified specific roles of SC & FC in PA process
- Discussed decision rules, management strategies for 3 case studies (3M shrimp, 3NO cod, 3LNO yellowtail)
- Considered implementation plans for the 3 stocks. Considered criteria for reopening fishery under a PA.
- Clarified concerns with initial PAF, set groundwork for revised PAF adopted by NAFO in 2004 (FC Doc 04/18).

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**Original Framework for NAFO PA proposed by SC in 1997**

Consisted of four main zones – with different courses of action proposed in each zone

Reference points (limit, buffer, and target) used for delineation of zones – some similarity with current PAF

Not adopted at that time

**Roles of SC and FC in the NAFO PA process (Table 1 from FC Doc 98/02)**

Scientific Council	Fisheries Commission
1. Determine status of stocks.	1. Specify management objectives, select target reference points, and set limit reference points.
2. Classify stock status with respect to biomass/fishing mortality zones.	2. Specify management strategies (courses of actions) for biomass/fishing mortality zones.
3. Calculate limit reference points and security margins.	3. Specify time horizons for stock rebuilding and for fishing mortality adjustments to ensure stock recovery and/or avoid stock collapse.
4. Describe and characterize uncertainty associated with current and projected stock status with respect to reference points	4. Specify acceptable levels of risk to be used in evaluating possible consequences of management actions.
5. Conduct risk assessments.	

**Original Reference Point Definitions**

$B_{lim}$  Level of SSB that stock should not be allowed to fall below

$B_{buf}$  Level of SSB acting as buffer to ensure high probability that  $B_{lim}$  not reached

$B_{tr}$  Target recovery level for SSB (perhaps  $MSY$  ?)

$F_{lim}$  F that should not be exceeded ( $\leq F_{msy}$ )

$F_{buf}$  Level of F acting as buffer to ensure high probability that  $F_{lim}$  is not reached

$F_{tr}$  Target depends on mgmt objectives, but  $\leq F_{buf}$

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**NAFO - Current PAF – adopted 2004**

NAFO Precautionary Approach Framework

		$B_{lim}$	$B_{buf}$		
Fishing Mortality	5	5	4	2	F <sub>lim</sub>
	4	5	4	2	F <sub>buf</sub>
		3		1	
		Stock Biomass			

The darker the shade, the greater the risk of stock collapse

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**Some key elements in developing the NAFO PAF**

- No explicit targets for Biomass or F
- The PAF does not require Buffer reference points if the risk of being below Blim, or above Flim, can be determined
- Main zones demarcated by limit RPs, Blim is a key reference point
- Suggested risk levels, courses of action (HCR) are provided

**Zone 3 – Cautionary F Zone**

Cautionary F Zone: The closer biomass is to Blim, the lower F should be below Fbuf to ensure there is a very low probability that biomass will decline below Blim within foreseeable future.

**Zone 1 – Safe Zone**

Safe Zone: Select and set F from range of values that have low probability of exceeding Flim (where SSB has low probability of being below Blim). Target RPs in this zone are selected by managers, based on criteria of their choosing.

**Zone 4 – Danger Zone**

Danger Zone: Reduce F to below Fbuf. The closer biomass is to Blim, the lower F should be below Bbuf to ensure there is a very low probability that biomass will decline below Blim within foreseeable future.

**Zone 2 – Overfishing Zone**

Overfishing Zone: Reduce F to below Fbuf

**Zone 5– Collapse Zone**

Collapse Zone: B is below Blim. F should be set as close to zero as possible



Risk of exceeding LRPs must be low in the PAF

- Flim must be  $\leq$  Fmsy in the PAF, corresponding to UN Fish Stock Agreement.
- Flim should only have a low (<20%) probability of being exceeded.
- There must be a very low risk (5-10%) of not falling below Blim in the next 5-10 years.

- low probability might be defined as 20%, but the actual level should be specified by managers

- very low probability might be defined as 5-10%, but the actual level should be specified by managers

- foreseeable future might be defined as 5-10 years, but the actual time horizon should be specified by managers

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### PA Implementation challenges

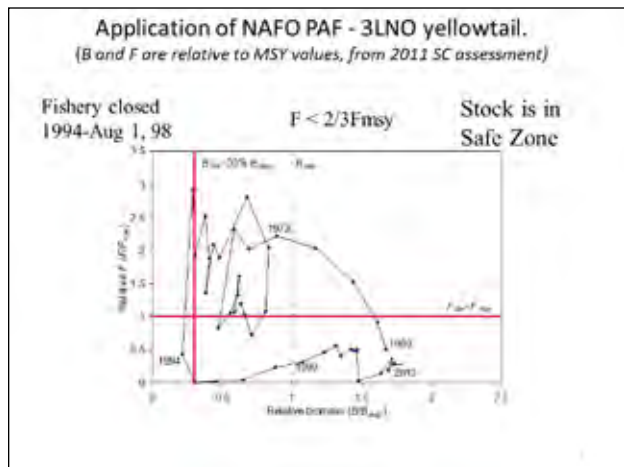
- Some stocks data poor. About half have any reference points defined. None have buffer RPs
- 3 stocks have rebuilding plans, 4 stocks have harvest control rules
- More HCR, rebuilding plans being developed – NAFO WG of managers and scientists on Conservation Plans and Rebuilding Strategies
- Consideration of catch vs stock growth. By-catch mortality a factor for some collapsed stocks with no directed fishery
- Determining risk levels

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### Reasons for continuing to advise that Flim $\leq$ Fmsy (from FC Doc 04/18)

- Perhaps most importantly, Fmsy as a limit is in conformance with the PA in UNFSA.
- $F < F_{msy}$  results in relatively small loss in avg catch, but a large increase in avg biomass.
- Traditional bio-economic models indicate that F associated with max economic yield (Fmey) is usually considerably less than Fmsy.

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### Reasons for continuing to advise that Flim $\leq$ Fmsy (from FC Doc 04/18)

- Ensuring no major stock is fished harder than the single-species Fmsy has often been recommended as a good first step towards ecosystem-based management
- Ecosystem-based management will likely require even more conservative fishing mortality targets than “traditional” single species- based management.

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### PA and Rebuilding Plans

Recent Rebuilding Plans developed in NAFO have focussed some attention on PA

- Need for rebuilding targets (at or near Bmsy). What about timelines, risk levels?
- Additional ref pts proposed (Bisr - intermediate between Blim and Safe Zone). Properties?
- Explicit, testable HCRs desirable
- GHl HCR based on trend in survey data – not PA ref pts. Resulted from an MSE process.

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### Summary

- Blim is key ref pt in PAF – available for more stocks than other RPs
- Many stocks below Blim – NAFO has kept these under moratorium
- Buffer RPs not calculated for any stocks, but is start of Safe Zone
- PAF not yet implemented for many NAFO stocks
- Development of Rebuilding Plans has PA implications (e.g. Bmsr definition)

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### **Future Directions ...?**

- How to delineate Safe Zone, if no buffer RPs?
- Definition of targets (MSY-based?). What about Bmsy and Fmsy (target vs limit debate)?
- Consistency among PAF, generic framework for rebuilding plans, actual rebuilding plans, SC advice, HCRs
- Ecosystem approach? PAF is single species

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## Annex 4. Paper and presentation discussed in item 5

### Limit reference Flim at Fmsy – a Flimsy point? On some possible revisions of the NAFO Precautionary Approach framework (FC/SC RBMS WP 14/1)

by

Carsten Hvingel and Michael C.S. Kingsley

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#### Abstract

The NAFO PA framework intends to specify “limit” reference points for stock status and exploitation as those implying “serious harm” to the resource. Limits for biomass comply with this definition. However, in descriptions of the PA framework, the limit for fishing mortality is stated to be the MSY rate ( $F_{msy}$ ), although it is sustainable without serious harm. At the same time, the MSY rate ( $F_{msy}$  or its proxies e.g.  $F_{0.1}$  and  $F_{max}$ ) is in practice—i.e. for setting TACs—often taken as a target value instead. We suggest a revision of the PA framework to admit target reference points, and setting limit values for mortality that correspond more closely with limit values for biomass.

#### Introduction

The “Precautionary Approach” in fisheries management entails establishing reference points with which estimates of stock status and exploitation pressure can be compared—the results of the comparison then directing decisions for the management of the fishery. The key stock-status parameter monitored is typically (recruited) stock biomass ( $B$ ), and fishing mortality ( $F$ ) is the corresponding key tactical management parameter. Two sets of reference points may be set: a “target” level, which it is seen as desirable to reach, and a “limit” level, marking an area of “serious harm” which should to be avoided.

The NAFO PA framework (Anon., 2004) only specifies limit reference points. However, while this framework does not explicitly define target reference points, the present management plans for American plaice in Div 3LNO and cod in Div 3NO do implicitly define  $B_{msy}$  as a target reference point for biomass (see appendix).

Limit reference points, marking extreme boundaries for exploitation and stock size, function to protect stocks from recruitment overfishing and from stock sizes associated with a high risk of recruitment failure. In addition, target reference points, marking desired exploitation and stock size, can be considered to be a means of obtaining best long-term management of the stock. We think that the NAFO PA framework would be strengthened if they were formally included. But the explicit limit and implicit target reference points for biomass and fishing mortality presently existing in the NAFO PA and management frameworks are not complementary and they are not treated in a consistent manner in the scientific advice and in management actions.

#### Background

In a typical stock-production or stock-recruitment relationship (convex upwards for biomass below  $B_{msy}$  and non-increasing elsewhere) (Fig.1), fishing mortality and stock biomass inescapably constitute a linked pair of management objectives. Managing consistently at a given fishing mortality will converge (in a stable environment) on a certain corresponding stock biomass. Equally, taking a given stock biomass as a management objective will require the imposition of some corresponding fishing mortality (Fig. 1).

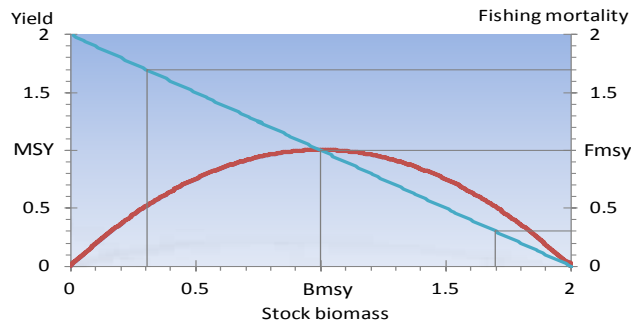


Fig. 1. Example dome-shaped stock-recruitment relationship: the production/yield according to the logistic model (*red curve*) and corresponding fishing mortality,  $F$  (*blue straight line*). For illustration three corresponding points of stock biomass and fishing mortality are shown. MSY=Maximum Sustainable Yield;  $B_{msy}$ =stock biomass at MSY;  $F_{msy}$ =fishing mortality corresponding to MSY.

But fishing mortality and stock biomass are not wholly interchangeable as management objectives. Stock dynamics and the effect of fisheries are such that biomass can not be changed in the short term. However much a stock assessment might show that biomass has diverged from a target level, we cannot by fiat restore it, and its target level has to remain a longer-term objective. On the other hand, fishing mortality is within reach, and can—within practical limits—be readily altered in the short term.

If precautionary reference points for both fishing mortality and for biomass are to be defined, it will be logical if the target reference point for biomass converges on the target reference point for fishing mortality—and vice versa—and similarly the limit reference point for biomass should logically correspond to the limit reference point for fishing mortality. In that way specifying fishing pressure relative to  $F$  reference points will determine evolution and final destination of stock development relative to the associated  $B$  references.

If limit and target reference levels are not corresponding pairs, difficulties will ensue in both the formulation of advice and the taking of management action: going after one target will mean abandoning another; respecting one limit could mean transgressing another.

### Present specifications

#### *Fishing mortality reference points*

The NAFO PA framework specifies both that  $F_{lim}$  is to be no greater than  $F_{msy}$  and that  $F_{lim}$  is to be exceeded ‘with low probability’; *a fortiori*,  $F_{msy}$  will also be exceeded with low probability. Although inconsistent with the ‘serious harm’ definition of limit reference points this specification has been defended (Anon. 2004a) by referring to UN fisheries agreements:

*“Perhaps most importantly,  $F_{msy}$  as a limit is in conformance with the Precautionary Approach as described in several United Nations agreements (in particular, Annex II of the United Nations Straddling Stocks Agreement)”*

This Annex, cited in part below, explicitly uses the word ‘limit’ in connection with  $F_{msy}$  as a reference point for mortality and requires that management strategies shall ensure that it is not exceeded.

**Annex II of the UNFSA:** *“The fishing mortality rate which generates maximum sustainable yield should be regarded as a minimum standard for limit reference points. For stocks which are not overfished, fishery management strategies shall ensure that fishing mortality does not exceed that which corresponds to maximum sustainable yield.”*

As said above, the NAFO PA framework does not define target reference points. .

Taking  $F_{msy}$  as a limit implies that it is considered to be associated with serious harm to the resource—which it isn’t—and also means that any reference level accepted as a target would have to be much lower. In practice, other standard reference levels for fishing mortality— $F_{0.1}$  or  $F_{max}$ , sometimes considered proxies for  $F_{msy}$ —are now already treated as acceptable target levels rather than as limits to be avoided (e.g. 3M cod).

### Stock biomass reference points

A limit reference point for biomass in the NAFO PA framework for stocks managed with a production model is commonly taken as 30% of  $B_{msy}$ . For data-poor stocks managed without a quantitative assessment model, the lowest observed biomass may be taken as a limit biomass reference. For some stocks for which a stock-recruitment plot is available, its break-point is taken as  $B_{lim}$ . All are fully consistent with the definition as a “serious harm” level.

Target reference points are as mentioned before generally absent from the NAFO PA framework. However, the rebuilding strategy adopted by NAFO for 3LNO American Plaice and 3NO Cod seems to have  $B_{msy}$  as a long-term objective for biomass. Annex II of UNFSA also considers that  $B_{msy}$  ‘can serve as a rebuilding target’ for overfished stocks.

### Inconsistency

Therefore, the present definitions of limit values for biomass do not correspond to definitions of limit values for fishing mortality—but specified *targets* for biomass do.

### Discussion

We propose two changes to the NAFO PA framework. The first is that target levels should be set in addition to limit levels. In their absence, there is a risk that limit levels, which should be avoided, become *de facto* targets because they are the only definite and specified values on the board, whereas considered target reference points marking desired exploitation and stock size should be the means of obtaining best long-term management of the stock.

Secondly, we propose that the pairs of reference levels should be made consistent: a target level for fishing mortality should in the long term lead to the target level for biomass; and the limit level for biomass should be efficiently avoided by avoiding the limit level for mortality. The present NAFO structure lacks this consistency. For example, a limit level for biomass set at 30% of  $B_{msy}$  (e.g. for Northern Shrimp in Div. 0A and SA1, Yellowtail Flounder in Divs 3LNO) corresponds in the long term to a mortality of 170% of  $F_{msy}$ . Instead, the limit level for mortality is set at 100% of  $F_{msy}$ , and if this is to be ‘exceeded with low probability’, we should expect biomass to remain rather above  $B_{msy}$ —or at three to four times what is now considered its limit level (Fig. 1). We regard the defence of this inconsistency by referring to the UN Straddling Stocks Agreement as weak, as it appeals to one part of a text which itself is internally inconsistent (the fishing mortality to achieve MSY, i.e.  $F_{msy}$ , is referenced as both a target and a limit – see appendix).

There is reason to suppose that for rationally managed commercial fisheries the economic optimum stock biomass lies above  $B_{msy}$ . Stock assessments commonly assume that biomass is linearly related to the fishery catch:effort ratio; the corollary is that catch:effort (CPUE) is linearly related to stock, and that therefore fishing becomes more efficient as stock biomass increases. To be consistent with this biomass target, a tactical management target range for mortality should be slightly below  $F_{msy}$ ; or in risk-based advice, a moderately low probability of exceeding  $F_{msy}$ . Incontrovertibly, the safety margin on fisheries management would also increase with increasing the biomass target.

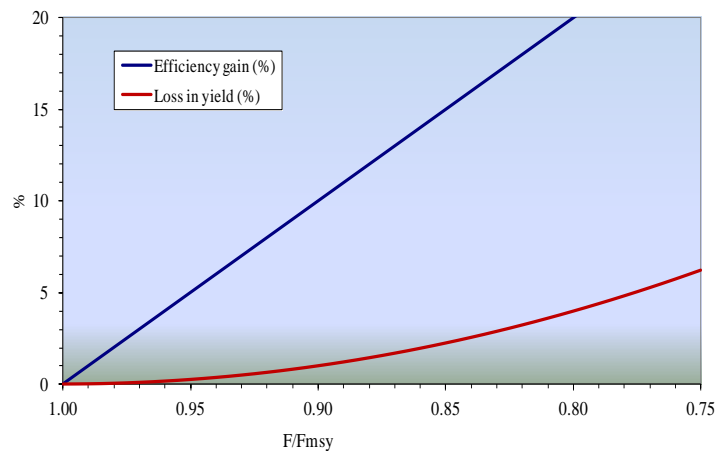


Fig. 2. Effect on fishing efficiency (CPUE) and on loss in yield of reducing fishing mortality (F) from  $F_{msy}$ .

For a range of fishing mortalities slightly below  $F_{msy}$ , the reduction in yield from the stock is small, but the gain in the efficiency of the fishery is much greater (Fig. 2). Estimation of economic optimum is outside the scope of this working paper, but it seems likely that there is little to lose by maintaining biomass slightly above  $B_{msy}$ . These economic considerations were referred to (Anon 2004a):

*Fishing somewhat below  $F_{msy}$  results in a relatively small loss in average catch, but a large increase in average biomass (which, in turn, results in a decreased risk to the fish stock, an increase in CPUE, and a decrease in the costs of fishing).*

*Traditional bio-economic models indicate that the fishing mortality associated with maximum economic yield ( $F_{mey}$ ) is usually considerably less than  $F_{msy}$ .*

but should properly relate to the defence of this range of values—‘somewhat below  $F_{msy}$ ’—as an optimum-seeking target, not as a last-ditch-defence limit. The text has lost sight of the NAFO definition of limit values as those which indicate ‘serious harm to the resource.’ Our suggestion remains that mortalities ‘somewhat below’  $F_{msy}$  should be adopted as a target range in the NAFO PA framework.

The adoption, as a target, of a mortality range somewhat below  $F_{msy}$  has also been recommended in the context of ‘ecosystem-based management’:

*Ensuring no major stock is fished harder than the single-species  $F_{msy}$  has often been recommended as a good first step towards ecosystem-based management (NRC, 1999; Mace, 2001). Ecosystem-based management will likely require even more conservative fishing mortality targets than “traditional” single-species-based management. (Anon 2004a)*

### Conclusion

The precautionary reference points in use under the present NAFO interpretation of the precautionary principle do not match up. Target reference points, should be added, and the limit and target levels for biomass and for mortality should constitute consistent pairs.

### References

Anon. 2004. NAFO Precautionary Approach Framework. NAFO/FC Doc. 04/18, Serial No. N5069. 5pp

### Appendix

**Annex 2 of the UNFSA:** “The fishing mortality rate which generates maximum sustainable yield should be regarded as a minimum standard for limit reference points. For stocks which are not overfished, fishery management strategies shall ensure that fishing mortality does not exceed that which corresponds to maximum sustainable yield, and that the biomass does not fall below a predefined threshold. For overfished stocks, the biomass which would produce maximum sustainable yield can serve as a rebuilding target.”

**3LNO American Plaice and 3NO Cod Conservation Plans:** “Long-term Objective: The long-term objective of this Conservation Plan and Rebuilding Strategy is to achieve and to maintain the Spawning Stock Biomass (SSB) in the ‘safe zone’, as defined by the NAFO Precautionary Approach framework, and at or near Bmsy.”

**Accompanying PowerPoint Presentation:**

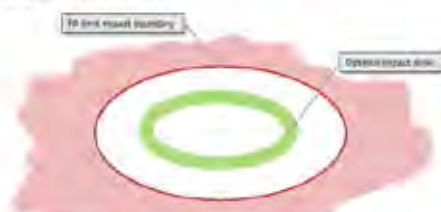
FC-SC RBMS WP 14-1

## NAFO and the Precautionary Approach – some considerations

Carsten Hvingel & Michael Kingsley

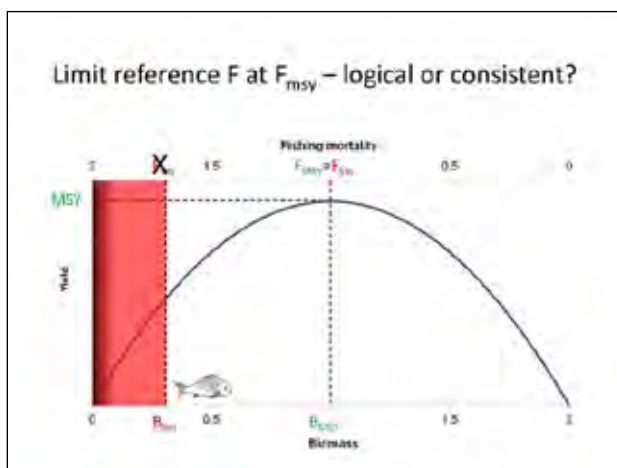
### The role of PA in fisheries management

- PA *target* references are for optimal resource management –the balance between risk and yield.
  - Purpose: mark area of desired exploitation and stock size
  - Aim: Maximize probability of best long-term economical and social benefit.



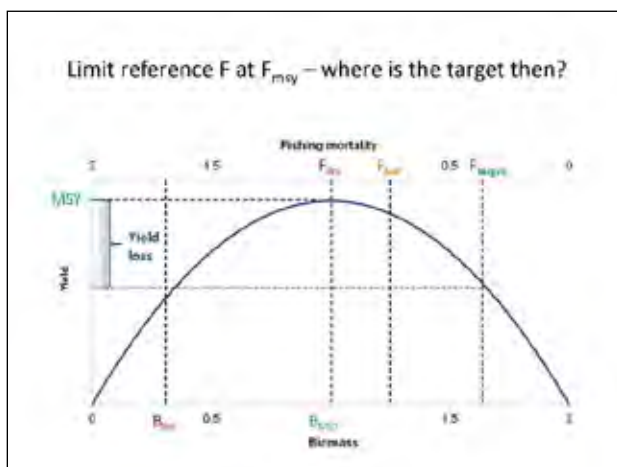
### NAFO fisheries management

- Precautionary Approach
  - Focus: Single stock impact
  - Aim: Manage stock productivity
  - Tool: Control *removals* of the target stock
- Ecosystem Approach
  - Focus: ecosystem impact
  - Aim: Manage biodiversity, habitat integrity, species interaction
  - Tool: Control the *fishing activity*



### The role of PA in fisheries management

- PA *limit* references are for conservation
  - Purpose: Mark the extreme boundaries for exploitation and stock size
  - Indicate: Drastic action needed
  - Aim: avoid recruitment overfishing and high risk of recruitment failure (recruitment overfished stock)

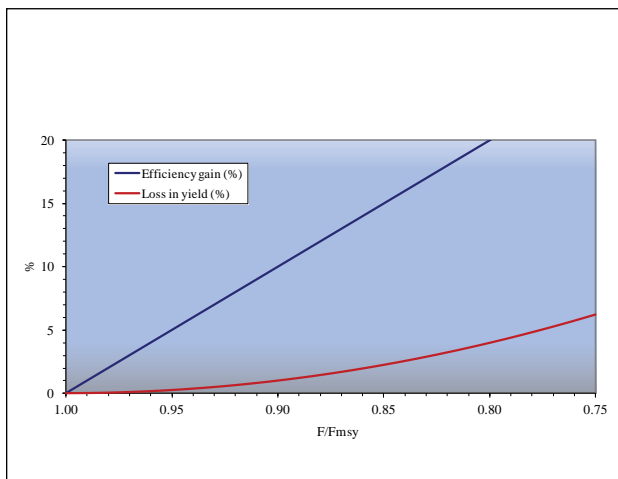



### Conclusion

- Current Flim (=Fmsy)
  - does not indicate “serious harm”.
  - does not correspond to the B-limit reference.
  - Instead it corresponds to the B-target references (implicitly defined in management plans
  - proxies (FO.1, Fmax) is not treated by NAFO as limits but rather as targets
  - Implies Ftarget at ~40%Fmsy → 160%Bmsy → yield loss ~ 37%)
- Arguments for Flim=Fmsy:
  - UNFASA
    - but is internally inconsistent: implicitly refers to Fmsy as both a limit and a target
  - History
    - but does not show a Fmsy strategy to be harmful
- Suggested revision
  - Make Flim complementary to Blim
  - Set complementary F and B targets

### What should Ftarget then be?

- Economic optimum B slightly larger than Bmsy
  - Therefore, target F should be slightly less than Fmsy (NAFO PA paper talks about this) – or in risk-based advice, have a moderately low probability of exceeding Fmsy.
- “First step towards Ecosystem approach” (NAFO PA)
- [The have-a-look-at- potential-Ftargets tool \( HALAPFT-tool\)](#)





## Annex 5. Updated 3NO Cod Conservation Plan and Management Strategy

### Interim 3NO Cod Conservation Plan and Rebuilding Strategy

#### 1. Objective(s):

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

#### 2. Reference Points:

- (a) Limit reference point for spawning stock biomass ( $B_{lim}$ ) – 60,000t<sup>1</sup>
- (a) An intermediate stock reference point or security margin  $B_{isr}$ <sup>2</sup> – [120,000t]
- (b) Limit reference point for fishing mortality ( $F_{lim} = F_{msy}$ ) – 0.30
- (d)  $B_{msy}$  – [240,000t] Interim  $B_{target}$  – 185 000 t and interim  $F_{target}$  of  $F_{0.1}$  – 0.19<sup>3</sup>

#### 3. Re-opening to Directed Fishing:

- (a) A re-opening of a directed fishery should only occur when the estimated SSB, in the year projected for opening the fishery, has a very low<sup>4</sup> probability of actually being below  $B_{lim}$ .
- (b) An annual TAC should be established at a level which is projected to result in:
- (i) continued growth in SSB
  - (ii) low<sup>5</sup> probability of SSB declining below  $B_{lim}$  throughout the subsequent 3-year period, and
  - (iii) fishing mortality  $< F_{0.1}$

#### 4. Harvest Control Rules:

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

- 
- 1 The Fisheries Commission shall request the Scientific Council to review in detail the limit reference point when the Spawning Stock Biomass has reached 30,000t.
- 2 A 'buffer zone' ( $B_{buf}$ ) is not required under the NAFO PA given the availability of risk analysis related to current and projected biomass values; however, SC has advised that an additional zone(s) between  $B_{lim}$  and  $B_{msy}$  could be considered. An intermediate stock reference point ( $B_{isr}$ ) is proposed to delineate this zone. The proposed value is set at a level equivalent to twice  $B_{lim}$ . Should the SC review of the limit reference point ( $B_{lim}$ ) result in a change to that value then the intermediate stock reference point ( $B_{isr}$ ) should also be re-evaluated.
- 3  $B_{target}$  is a proxy of  $B_{msy}$ . The level of F has very low probability of being higher than  $F_{lim}$ . The  $B_{target}$  is the equilibrium SSB that results from  $F_{target}$ . These are interim targets until more stock recruitment and productivity regime information is available to better estimate MSY-based reference points.
- 4 'very low' means 10% or less
- 5 'low' means 20% or less



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

(i) no directed fishing, and

(ii) by-catch should be restricted to unavoidable by-catch in fisheries directing for other species

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

(c) When SSB is between  $B_{lim}$  and  $B_{isr}$ :

(i) TACs should be set at a level(s) to allow for continued growth in SSB consistent with established rebuilding objective(s)

(ii) TACs should result in a low probability of SSB declining below  $B_{lim}$  throughout the subsequent 3-year period, and

(iii) Biomass projections should apply a low risk tolerance

(d) When SSB is above  $B_{isr}$ :

(i) TACs should be set at a level(s) to allow for growth in SSB consistent with the long term objective, and

(ii) Biomass projections should apply a risk neutral approach (i.e. mean probabilities)

(e) When SSB is above  $B_{msy}$   $B_{target}$ :

- TACs should be set at a level of  $F$  that has a low probability of exceeding  $F_{msy}$ , and

- Biomass projections should apply a risk neutral approach (i.e. mean probabilities)

## 5. Ecosystem Considerations:

Considering the importance of capelin as a food source, consistent with the ecosystem approach, the moratorium on 3NO capelin will continue until at least 31 December 2015.

## 6. By-catch Provisions

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

## Annex 6. Revised General Framework on Risk-based Management Strategies

### 1. Introduction:

The purpose of this document is to provide guidance on the development and implementation of risk management strategies based on the application of the Precautionary Approach framework.

While not intended to be a template, the following are recommended elements for the development and implementation of risk based management strategies

### 2. Biological Synopsis / Fishery Overview:

A brief overview outlining the main biological characteristics of the stock with emphasis on the aspects which impact rebuilding of the stock, as appropriate, including:

- A species' **life history characteristics** (e.g. growth rates, fecundity, longevity, age-at-maturity, size-at-maturity) - critical elements to consider in determining a stock's response to both fishing pressures and rebuilding measures
- **Multispecies interactions** – these can have a strong influence on stock recovery potential and ability of all stocks to reach MSY
- **Environmental conditions** (e.g. temperature, salinity) - will impact the rebuilding dynamics of a stock by affecting life history characteristics, such as fecundity, growth and general productivity. Environmental conditions will also influence predator and prey abundance, which in turn impacts a stocks' overall health and recruitment.

A brief overview of the fisheries in which the stock is captured, including both targeted catch and by-catch, including:

- Impacts of rebuilding on other fisheries - rebuilding efforts for a depleted stock harvested in a mixed-stock or multispecies fishery may have impact on / be impacted by fishing opportunities on targeted stocks/species whose populations are healthy

### 3. Objective(s):

Objectives (fishery and conservation related) should be clearly stated and direct the development of specific measures. Milestones may also be established as interim steps to achieving objectives.

Objectives and milestones may take into account the following components:

- A target, which is preferably quantifiable (e.g. specified biomass goal)
- A desired time to reach the target (e.g. specified # of years/ generations)
- An acceptable probability level for reaching the target within the specified timeframe

The long-term objective of a Risk-based Management Strategy is to achieve and to maintain the Stock Biomass and the Fishing Mortality in the 'safe zone', as defined by the NAFO Precautionary Approach framework and to ensure that fisheries resources are maintained at or restored to levels capable of producing maximum sustainable yields, according to the Convention objectives (resolution NAFO/GC Doc. 08/3).

### 4. Reference Points:

The level of information available to perform a quantitative assessment and to define biological reference points may vary considerably between stocks. There are currently stocks with an adopted quantitative assessment and with limit and/or potential target reference points defined but there are stocks with inadequate information to perform a quantitative assessment and for which the definition of reference points is difficult or not possible.

Where limit reference points can be defined, they should be calculated by the Scientific Council (SC).

SC should also provide advice and analysis in support of the development of other reference points (e.g. targets).

## 5. Guidance on Management Strategies and Harvest Control Rules<sup>1</sup>

### a. Stocks below limit reference point

- no directed fishing, and
- by-catch should be restricted to unavoidable by-catch in fisheries directing for other species

### b. Re-opening to direct Fishing:

A decision to reopen the fishery should only be considered when Biomass is above  $B_{lim}$ .

When a stock has recovered beyond  $B_{lim}$ , initial TAC levels should be set at conservative levels to allow for continued recovery and growth.

Decisions to reopen a fishery should take into account any available risk analysis.

Where quantitative risk analysis is available, reopening the fishery should only be considered when there is a very low<sup>2</sup> probability of Biomass actually being below  $B_{lim}$ .

In the absence of a quantitative risk analysis, a decision to reopen a fishery would only occur when FC has a high degree of confidence, taking into account any available advice/analysis from SC, that biomass is above  $B_{lim}$  or its proxy. Any subsequent increases in TAC should be gradual in order to allow for monitoring of the stock response to the fishery.

### c. Open fisheries:

The NAFO Precautionary Approach framework should be applied and Harvest Control Rules (HCR) should be developed in order to specify actions to be taken.

Fisheries specific harvest control rules should be designed with the objective of keeping the fishery in the safe zone.

There should be a low probability that fishing mortality will exceed  $F_{lim}$ .

Scenarios may be considered which mitigate decline in biomass and/or limit increases in TACs as a means to balance fishery socio-economics and long-term conservation objectives.

### d. Closing of Directed Fishing:

{As noted in NAFO's PA Framework, a fishery stock will be closed when it is below  $B_{lim}$ . Fisheries Managers will consider the probability and establish risk tolerance taking into consideration short term projections and stock fluctuations.}

### e. Additional management measures

When practical, considerations may be given to specific management measures to reduce fishing mortality associated with bycatch including discards, and/or improve selectivity.

## 6. Ecosystem Considerations:

Risk-based management strategies should be consistent with the ecosystem approach and take into consideration the associated species.

## 7. By-catch provisions:

For closed fishery, by-catch provisions in the CEMs should be reviewed periodically, to coincide with scheduled assessments of the stock by Scientific Council, and adjusted to reflect the overall trend in spawning stock biomass.

<sup>1</sup> Noting the merits of quantifiable and testable harvest control rules, these aspects should be considered, on a stock by stock basis, in the development of risk-based management strategies.

<sup>2</sup> The actual level of risk should be specified by managers.

## 8. **Monitoring and Review:**

Reviews should be completed on a regular basis at intervals such that failures of the plan (e.g. prolonged declining or stagnant stock growth) can be detected, and changes made as required.

On-going changes in stock status, resulting in implementation of associated harvest decision rules should be continuously examined; trends observed in long-term monitoring are an essential element for consideration in reviewing rebuilding plan performance.

Additional management action may be considered if the stock does not show signs that rebuilding is occurring.

## Annex 7. Development of a Risk-Based Management Strategy for 3LN Redfish (FC-SC RBMS WP 14/4 Rev 3)

### Preamble

NAFO identified the development of a risk-based management strategy for 3LN redfish as a priority in 2012, and reaffirmed that priority in 2013.

#### 1. Context

This is a recently re-opened fishery and the response of the stock to fishing at higher levels is uncertain at this stage.

In addition, a high percentage of the fish are juveniles. **Implementation of the proposed HCR should allow for an increase in the spawning stock biomass but it is not possible to test this element at this time.**

The proposed management strategy is intended to initially focus on the short to medium term. A review/evaluation would be recommended at the end of the 7 year period (outlined below).

#### 2. Objectives and Performance Statistics:

- a) *Objective(s)*: Maintain the stock at or **above**  $B_{msy}$ , achieve a TAC of 20 000t within 7 years, and maintain a TAC at or above<sup>1</sup> 20,000t for subsequent years.
- Rationale for 20 000t is that it represents the approximate average catch for the period 1965–1985 - a prolonged period of relative stability in the TAC/ resource.
  - The current average fish size in the stock and fishery is low and a slow increase in the TAC should promote survival and growth. This should result in an increased SSB.
- b) *Performance Statistics*:
- i. Low (30%) probability of exceeding  $F_{msy}$  in any year
  - ii. Very low (10%) probability of declining below  $B_{lim}$  in the next 7 years
  - iii. Less than 50% probability of declining below 80%  $B_{msy}$  in the next 7 years

#### 3. Harvest Control Rule:

Increase the TAC in constant increments starting in 2015 – i.e.  $TAC_{y+1} = TAC_y + 1,900t$  to a maximum of 20 000t. This would provide the following annual TACs:

2015: 8 900  
 2016: 10 800  
 2017: 12 700  
 2018: 14 600  
 2019: 16 500  
 2020: 18 400  
 2021: 20 000

#### 4. Proposed Next Steps:

- The working group request Scientific Council to evaluate this management strategy relative to the performance statistics prior to the 2014 NAFO Annual Meeting.
- **SC is requested to comment on likely by-catch levels associated with the implementation of the proposed HCR for 3LN redfish.**

<sup>1</sup> Evaluating at 5 000t increments, i.e. 25 000, 30 000, etc.

## Annex 8. Development of a Risk-Based Management Strategy for 3M Cod (FC-SC RBMS WP 14/2 Rev2)

### Background

The cod stock in Division 3M (Flemish Cap) experienced very low biomass levels in the 1990s and was under moratorium to direct fishing between 1999 and 2009. The stock rebuilt and the direct fishery reopened in 2010. The spawning stock biomass increased substantially since mid-2000s and is now well above the limit reference point and among the highest levels observed since the 1970s. The rebuilding of this cod stock was a success for NAFO. NAFO identified the development of a risk-based management strategy for 3M cod as a priority in 2012, and reaffirmed that priority in 2013. The development of such a management plan should be based on scientific advice.

This paper presents the outline of a future 3M Cod Risk-based Management Strategy, indicating reference points with associated risks, options of candidate Harvest Control Rules (HCR) and performance statistics and targets to evaluate these HCR. Two candidate HCRs are proposed: 1) a model based HCR, with different options of target fishing mortality ( $F_{target}$ ) and 2) a model free HCR based on survey trends. The model based HCR would require a stock assessment each year, to estimate the necessary stock parameters, while the model free HCR would only be based on surveys and assessments would not be necessary.

These different HCR will give managers a wide range of options to choose from, based on the different risk and performances. The Scientific Council should review this plan, propose alternative HCRs and performance statistics and perform a Management Strategy Evaluation (MSE).

#### 1. Objective

The objective of this Conservation Plan is to maintain the 3M cod Spawning Stock Biomass in the safe zone as defined by the NAFO precautionary approach framework and to assure the optimum utilization, rational management and conservation of the 3M cod stock.

#### 2. Reference Points:

- (a) A limit reference point for spawning stock biomass ( $B_{lim}$ ) – 14 000 tons<sup>1</sup>
- (b) A target reference point for fishing mortality ( $F_{target}$ )

$F_{target}$  is to be defined by Managers. Several options regarding risks of being above  $F_{MSY}$  are indicated in one of the HCRs.

Reference points should be calculated and updated by the Scientific Council (SC).

#### 3. Harvest Control Rule:

- (a) When SSB is above  $B_{lim}$ , the future total allowable catch (TAC) shall be adjusted each year according to the following harvest control rule (HCR):

- OPTION 1 (Model based HCR):  $TAC = \text{Biomass} \times F_{target} \times \text{Probability of SSB above } B_{lim}$

$F_{target}$ : Four different levels of  $F$  will be considered as  $F_{target}$  corresponding to probabilities of 20%, 30%, 40% and 50% of exceeding  $F_{MSY}$ .

If  $F_{MSY}$  is not available, an appropriate proxy (e.g.  $F_{max}$ , current proxy) should be used.

- OPTION 2 (Model free HCR):  $TAC_{y+1} = TAC_y \times (1 + \lambda \times \text{slope})$

Biomass projections should apply a risk neutral approach (*i.e.* mean probabilities).

- (b) When SSB is below  $B_{lim}$ , no directed fishing and by-catch should be restricted to unavoidable by-catch in fisheries directing for other species

For this purpose, fisheries managers will consider the probability and establish risk tolerance, noting that the probability of biomass to be above  $B_{lim}$  is an integral part of the HCR proposed in option 1.

- (c) Noting the desire for relative TAC stability, TAC should be constraint to a fixed percentage of annual change (+- [XX]%).

<sup>1</sup> STACFIS 2008

Level of constraint is to be defined by Managers. Different scenario will be tested: 10%, 15% and 20%.

*The management objectives, performance statistics (PS) and performance target (PT) are indicated in Annex 1.*

**4. By-catch Provisions**

The by-catch provisions in the CEM for 3M cod are defined in Article 6.3.

**5. Reviews**

Reviews should be completed on a regular basis at intervals such that failures of the plan (e.g. prolonged declining stock) can be detected, and changes made as required.

**6. Final provisions**

The current Risk-based Management Strategy (RBMS) for Cod stock in Div. 3M shall be applied in consistency with the Precautionary Approach Framework and the General Framework on Risk-based Management Strategies.

It shall be in force initially until 2019.



### Annex 1: Parameters for the evaluation of the management strategy

The priority regarding management objectives is (ranked from higher to lower priority): 1) low risk of breaching  $B_{lim}$ , 2) low risk of overfishing and 3) low risk of steep biomass decline, 4) maximise average catch and 5) limited annual catch variation.

The HCRs, PS and PT are not fully mathematically specified and are left open for the Scientific Council to propose adequate formulation. The length of the evaluation period is to be defined by the Scientific Council.

Management Objectives	Performance Statistics (PS)	Performance Targets (PT)
Low risk of steep decline	$SSB_{10}/SSB_{0^*}$ , where $SSB_{10}$ = spawning stock biomass in year 10 and $SSB_{0^*}$ = spawning stock biomass in year 0, where year 0 is the current year $SSB_5/SSB_0$ $SSB_{lowest}/SSB_{0^*}$ , where $SSB_{lowest}$ = lowest spawning stock biomass level during projected evaluation period	The probability of the decline of 25% or more of spawning stock biomass from year 0 to year 5 is kept at 10% or lower.
Very low risk of breaching $B_{lim}$	$SSB / B_{lim}$	The probability of a spawning stock biomass under $B_{lim}$ at 10% or lower
Limited annual catch variation	Number of times the constraint (at the lower and at the higher boundaries) has been applied on average during the period.	This will be achieved through the constraint on the TAC variation.
Maximum average catch over the period	Yearly TAC for the period Average TAC over the period	The average TAC over the period should be maximized
Low risk of overfishing	$F/F_{MSY}$ $F_{max}$ is used as a proxy for $F_{msy}$ .	For the model free HCR only: The probability of $F$ exceeding $F_{msy}$ during the evaluation period should be kept at 30% or lower.





**SECTION V**  
(237–246)

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

**18–19 March 2014**  
**Halifax, Nova Scotia, Canada**

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## **Report of the Joint Advisory Group on Data Management (JAGDM) meeting** (FC Doc. 14/02)

**18–19 March 2014**  
**Halifax, Nova Scotia, Canada**

### **1. Opening**

The Interim Chair, Ellen Fasmer (Norway), opened the meeting at 9:00 am on Wednesday March 18, 2014 held at the NAFO Secretariat Headquarters in Dartmouth, Canada and welcomed all participants to the first meeting of the Joint Advisory Group on Data Management (JAGDM) (Annex 1). The NAFO Executive Secretary, Fred Kingston welcomed participants to the Secretariat and wished everyone a productive inaugural meeting of this group.

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

Mark Harley (NAFO Secretariat) was appointed rapporteur.

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

The previously-circulated agenda was adopted with the following modifications: a new sub-item under item 5 as 5.c *the Guidelines for the Secretariats* was inserted. The *JAGDM website* became sub-item 5.d. Under item 11. *Any other business*, Denmark (in respect of Faroe Islands and Greenland) proposed a presentation by the Faroese participant on their Catch Reporting website.

The *adopted* agenda is presented in Annex 2.

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

This item was discussed, and while participants were unable to commit to the nomination of a Chair or Vice-Chair, they *agreed* to reflect further on possible candidates in advance of the next meeting. The item was deferred to the next meeting (see agenda item 13).

The current Interim Chair Ellen Fasmer (Norway) appealed to the participants to be prepared to have an election in the next meeting and agreed to continue serving until that time.

### **5. The inception of JAGDM**

#### **a) Terms of Reference (ToR)**

The ToR (document JAGDM 2014-01-03) as adopted by both NEAFC and NAFO at their 2013 Annual Meetings was reviewed by participants. The review first focused on item 1 of the ToR where it is stated that the wording “data management” in the name of the group refers to technical issues as listed in this item. Furthermore, participants *agreed* that cooperation to achieve harmonization and standardization was an important element of the ToR's. The group took note of the fact that ToR, item 8, allows the group to amend its Rules of Procedure as may be required.

#### **b) The Rules of Procedure (RoP).**

The RoP (document JAGDM 2014-01-04) was reviewed. Participants noted that item 6 states that the communication to and from the Joint Advisory Group shall go through the NEAFC and NAFO Secretariats. It was *agreed* that there was a need for Guidelines describing this process and the cooperation of the Secretariats. (see item 5.c) It was decided that no changes to the RoP were necessary at this time. It was *agreed* that the RoP would be moved to the password-protected portion of the JAGDM website.

c) **Guidelines for Secretariats**

Guidelines for NEAFC and NAFO Secretariats in fulfilling their roles in the JAGDM were developed and presented to participants. The group edited the document (JAGDM 2014-01-13 REV 1) and *adopted* the Guidelines as amended (Annex 3).

d) **The webpage ([www.jagdm.org](http://www.jagdm.org))**

The JAGDM website was reviewed. The group *agreed* on the following changes:

- The NEAFC and NAFO logos should be placed at the bottom of the page
- The heading of Terms of Reference and Rules of Procedure should be as in the JAGDM 2014-01 documents.
- The Rules of Procedure should be moved to the password-protected section
- The Guidelines for Secretariats (Annex 3) should be uploaded to the password-protected section
- The NAFO Secretariat address on the front page should be changed to the street address
- A tab for Reference Documents should be added
- A link to the JAGDM website should be added to the NAFO and NEAFC websites

It was suggested that meeting files should be digitally compressed and be made available for easy download by the participants; as well Index, Search and Filter features should be available. The Secretariats indicated that they will investigate this possibility.

## 6. Data Exchange statistics

a) **NAFO**

No document presented.

b) **NEAFC**

The NEAFC Secretariat presented document JAGDM 2014-01-11 which provides statistics on VMS reporting of flag States. There were discussions on these statistics with regards to its usefulness in providing performance indicators of VMS reporting obligations. Some participants stressed that these are important for monitoring not only compliance, but also to follow up the systems from a more technical point of view. A similar report was requested, by some participants, but based only on COE/CAT/COX data covering a range of years for comparative purposes.

## 7. Technical implications of the implementation of recommendations

a) **NAFO**

No document presented.

b) **NEAFC**

The NEAFC Secretariat advised that NEAFC is in the process of implementing an Information Security Management System (ISMS), which will cover both physical and virtual security. The document JAGDM 2014-01-12 provides an overview of the system and stresses the need for Information Security Administrators to manage the system. NEAFC will review the new ISO standard (27001:2013) for changes implemented since the old standard (27001:2005) was put in place.

The Group stressed that it continues to look into the technical issues related to ISMS in order to assist NEAFC in the process of implementation. NAFO Secretariat indicated the significance of the ISMS. As it indicated in the previous AGDC meetings, NAFO looks with interest on this development as it plans to embark on a similar process for the data security system of NAFO.

## 8. NAFO issues

### a) Documents referred by STACTIC for discussion

No document presented.

## 9. NEAFC issues

### a) Documents referred by PECCOE for discussion

No document presented.

### b) Changes to the PSC 1 and 2 forms (additional info from FAO PSMA)

The NEAFC Secretariat explained that the new text developed by NEAFC was intended to align the NEAFC Port State Measures with those of the FAO Port State Measures Agreement (PSMA). Participants were advised that the proposed changes would only be implemented after the five NEAFC Contracting Parties ratify the FAO PSMA. It was also noted that new fields will also be added to the PSC 1 and PSC 2 forms to further align the port provisions.

The NAFO Secretariat indicated that STACTIC would also be conducting a similar alignment exercise based on the PSM to be implemented by NEAFC, with the aim of further harmonization of PSM provisions between NEAFC and NAFO.

### c) Clarification on the automated procedures after a cancellation (CAN) report is received (related to vessels status)

The NEAFC Secretariat provided its interpretation on this subject, noting that a Cancel (CAN) report relating to a Catch on Exit (COX) report will extend the “fishing trip”. It was further noted that any Catch (CAT) report sent after the CAN should be considered part of the same trip. Accordingly, the vessel operators must send a CAT report to record any catch (CAT) that was originally included in the COX. Participants confirmed that the NEAFC Secretariat’s understanding and described message sequencing, were also the group’s common interpretation of the reporting provision.

## 10. Management of the North Atlantic Format (NAF)

### a) The webpage [www.naf-format.org](http://www.naf-format.org)

It was discussed that the maintenance of the website aligns with the ToR item 2.d. There was agreement that the webpage needs updating. Document JAGDM 2014-01 10 was presented.

Some participants indicated that the NAF is used by parties other than NEAFC and NAFO, and the website should include the data elements used by those parties. It was also noted that some CPs fish outside of the North Atlantic and the NAF does not have enough codes to accommodate all the elements needed.

The following changes were *agreed* upon by the participants:

- Remove “Standard Procedures”
- Revise the text on the home page by removing all current body text and inserting the following:

*The North Atlantic Format (NAF) is used for fisheries related electronic data transmission. Some Flag States and Regional Fisheries Management Organisations (RFMO’s) including The Northeast Atlantic Fisheries Commission (NEAFC) and The Northwest Atlantic Fisheries Organization (NAFO) are using NAF data-elements or messages.*

*NAF uses internationally recognized standards for e.g. vessel types (ISSCFV), for gear (ISSCFG), and for fish species (ISSCAAP). In addition NAF uses the ISO3166 3-Alpha Codes standard for states and fishing entities including specialty developed codes for international waters and RFMOs.*

*NEAFC and NAFO have created a new group called the Joint Advisory Group on Data Management (JAGDM).*

*This group was started in 2014 and, as part of its mandate, is considering new data exchange formats that may replace NAF. For further information please visit [www.jagdm.org](http://www.jagdm.org).*

- Remove “Types of Messages” from the Messages tab
- Remove the FAQ tab
- Rename the Messages tab to Users
- Remove FAA from the Messages page
- Add a “Last modified” message to each page
- Remove the Codes tab
- Remove the Contact tab
- Add the following text to the Data tab:

*Disclaimer: The lists provided are intended for information purposes only and are not necessarily exhaustive.*

- Update NEAFC logo to the current one
- Add a NAF tab to the JAGDM website. The proper way to display correct formats will be discussed at the next meeting.

The group *agreed* to start work to list the messages/reports, elements and codes currently agreed in NEAFC and NAFO and in bilateral agreements of the CPs which may serve as an inventory to aid in the development of standardization and harmonization of electronic data exchange. The list is on completion intended to be made available at the JAGDM website. The work on this item will be addressed on the next meeting of JAGDM.

The Chair offered to revise the NAF History content for presentation at the next meeting. The participants were asked to reflect on the website.

#### b) **Issues raised by a NAF user**

Document JAGDM 2014-01-06, 07, 08 and 09 reflects questions received at the NAF website from Mark Oates, Quick Access Computing, Papua New Guinea. Document JAGDM 2014-01-05 was presented and the e-mail text to answer the questions received was agreed by the group (see Annex 4). Matt Kendall was asked to send the response on behalf of the group.

### **11. Any other business**

The Faroese participant gave a presentation on their web based Catch Reporting system. Participants noted the value they received in seeing the presentation and asked a few follow up questions.

### **12. Report to the NAFO and NEAFC Annual Meetings**

The Chair noted the draft report will be distributed to participants for review before it is finalized. The final report will also be sent to both NEAFC and NAFO Annual meetings.

### **13. Date and place of next meeting**

The next meeting will be held in London at NEAFC Headquarters on 17–18 June 2014.

### **14. Closure of the meeting**

Thanks was given to the Chair for a productive meeting. The Chair also thanked everyone for a good meeting and wished everyone a safe trip home.

The meeting was adjourned at 3:30 p.m. on March 19, 2014.

## **Annex 1. Participant List**

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## **Annex 2. Agenda**

1. Opening
2. Appointment of rapporteur
3. Discussion and adoption of the Agenda
4. Election of Chair and Vice-Chair
5. The inception of JAGDM
  - a. Terms of Reference
  - b. Rules of Procedure
  - c. Guidelines for Secretariats
  - d. The webpage ([www.jagdm.org](http://www.jagdm.org))
6. Data Exchange statistics
  - a. NAFO
  - b. NEAFC
7. Technical implications of the implementation of recommendations
  - a. NAFO
  - b. NEAFC
8. NAFO issues
  - a. Documents referred by STACTIC for discussion
9. NEAFC issues
  - a. Documents referred by PECCOE for discussion
  - b. Changes to the PSC 1 and 2 forms (additional info from FAO PSMA)
  - c. Clarification on the automated procedures after a cancellation (CAN) report is received (related to vessels status)
10. Management of the North Atlantic Format (NAF)
  - a. The webpage [www.naf-format.org](http://www.naf-format.org)
  - b. Issues raised by a NAF user
11. Any other business
  - a. Faroese Catch Report Application presentation
12. Report to the NAFO and NEAFC Annual Meetings
13. Date and place of next meeting
14. Closure of the meeting

### **Annex 3. Guidelines for the Secretariats**

#### **Meeting organisation**

Meetings of the Advisory Group shall be hosted alternately by the NEAFC Secretariat and the NAFO Secretariat, unless otherwise decided by the Advisory Group.

- Both Secretariats - Formal announcement to Contracting Parties and Heads of Delegation on the date and place of next meeting; invitation to appoint participants; invitation to put forward documents and/or agenda items for discussion and/or information; 60 days before the meeting unless otherwise agreed.
- Organising Secretariat (Secretariat hosting the meeting) - Announcement on the date of the next meeting to participants.
- Both Secretariats - Assist the Chair formulating the draft Agenda;
- Organising Secretariat - On behalf of the Chair to produce and circulate the draft Agenda 45 days before the meeting.
- Organising Secretariat – Upload meeting documents and inform Participants 15 days before the meeting; keep an archive of all documents relevant to the meeting.
- Both Secretariats – Assist the Chair and participants during the meeting; upload new documents; amend and upload documents produced during the meeting.
- Organising Secretariat – Act as rapporteur for the meeting.
- Both Secretariats - Assist the Chair on the preparation of the report.
- Organising Secretariat - Distribute the draft report and incorporate comments and/or amendments proposed by the participants.
- Both Secretariats – On behalf of the Chair circulate the final report to Heads of Delegation, chairs of constituent bodies, participants, and the JAGDM website.

#### **Inter-sessional work**

- Both Secretariats assist the Chair following a request for advice.
- Both Secretariats will manage the JAGDM website.
- NAFO Secretariat presently manages the North Atlantic Format (NAF) website.

#### **Annex 4. NAF User Reply**

Dear Mark,

We apologize for the delay in fully responding to your correspondence of 31 October 2013. As we advised on 30 January 2014, The Joint Advisory Group for Data Management (JAGDM) had its first meeting 18-19 March 2014 where your request was discussed.

In relation to Tuna related issues we are aware of the existence of several initiatives related to data management for tuna and we direct you hereby to the following contact persons who may be of assistance in this regard. Tim.Lemmens@ec.europa.eu, Gail.Lugten@fao.org or Neil.Ansell@europa.eu.

For your information the Joint Advisory Group on Data Management (JAGDM), as part of its mandate, is considering new data exchange formats that may replace NAF in NAFO and NEAFC and as a result no new codes will be added to and the information on the webpage has been changed accordingly.

For JAGDM

Yours sincerely,



**SECTION VI**  
(247–272)

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

**5–7 May, 2014**  
**Copenhagen, Denmark**

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## **Report of the Standing Committee on International Control (STACTIC)** (FC Doc. 14/03)

**5–7 May 2014**  
**Copenhagen, Denmark**

### **1. Opening by the Chair, Gene Martin (USA)**

The Chair opened the meeting at 10:00 a.m. on Monday, May 5, 2014 at the Nordatlantens Brygge (North Atlantic House) in Copenhagen, Denmark. The Chair welcomed the representatives of the following Contracting Parties (CPs): Canada, Denmark (in respect of Faroe Islands and Greenland), the European Union, France (in respect of Saint-Pierre-and-Miquelon), Iceland, Norway, the Russian Federation, Japan, and the United States of America (Annex 1).

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

Daniel Orchard (United States) was appointed Rapporteur.

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

The following amendments were made to the agenda:

- Under agenda item 11, the Russian Federation postponed presentation of STACTIC WP 14/5 concerning Return Error Numbers (NCEM Annex II.D.2.B) until September's Annual Meeting.
- EU the following proposals:
  - STACTIC WP 14/8: Directed Fishery and By-Catch Rules in Case of Creation of a Quota By Transfer, which was added under agenda item 11.
  - STACTIC WP 14/9: Simplification and Clarity on Calculation of By-Catch Limits, which was added under agenda item 11.
  - STACTIC WP 14/10: Observer Program – Article 30 of NCEM, which were added under agenda items 11 and 14.
- Canada added the following proposals:
  - STACTIC WP 14/13: Provision of Haul by Haul Logbook Data to the Secretariat, which was added under agenda item 11
  - STACTIC WP 14/12: Length of a Trial Tow in Accordance with By-catch Provisions under Article 6.6(b)(iii) , which was added under agenda item 11.
- France (in respect of Saint-Pierre and Miquelon) asked to add a request for interpretative guidance concerning the use of "Others" quota under a chartering arrangement, which was added under agenda item 14.

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

### **4. Port State Measures Review**

The Chair opened the agenda item and reminded representatives that at the September 2013 Annual Meeting NAFO decided it did not have to wait for Northeast Atlantic Fisheries Commission (NEAFC) to complete implementing FAO Port State Control (PSC) measures.

Iceland provided an update on the status of the measures of NEAFC implementation. STACTIC representatives had originally recommended awaiting NEAFC deliberations on this issue to benefit from the considerable work already underway. NEAFC has adopted a recommendation to incorporate the FAO Port State Measures Agreement (PSMA) and it is scheduled to become effective in July 2015. Iceland pointed out that it was very helpful to have a small working group to work on adopting the FAO Port State measures for NEAFC.

The Chair stated that NAFO is now at a point to decide how it should go forward in implementing the FAO PSMA and indicated that NAFO can benefit from the NEAFC exercise. The Chair asked for suggestions on next steps.

Canada stated that PSC is a complex and important issue, and that NAFO does not need to wait until NEAFC completes its scheme to move forward. Although there are a lot of similarities between NAFO and NEAFC, there are also some distinctions due to the different fisheries. Canada recommended that STACTIC form a subgroup to compare and synchronize its current PSC scheme with NEAFC and FAO schemes.

Iceland requested that if there is a working group, it should remain as small as possible to remain effective. Iceland thought it would be useful for the Chair of STACTIC to serve as Chair of the working group.

Norway and US support a working group.

EU requested an explanation of the major changes that NEAFC is considering that are different than its current system.

Iceland responded that the differences relate to the scope of the inspection, the information required prior to port entry, and other issues related to fresh versus frozen product.

DFG added that the PSC in NEAFC applies to the entire Convention Area, whereas NAFO applies only to the Regulatory Area.

The Chair summarized to say that there is general agreement to form a working group to incorporate the FAO PSMA into the NCEM. It should be small enough to be effective but large enough to consider the broad interests in NAFO. The Chair suggested a “Friends of the Chair” group with a nucleus of the EDG group be formed to develop a draft of a paper establishing a mandate and terms of reference for the PSC working group. This draft would be made available at least 30 days prior to the next Annual Meeting so all CPs have a chance to review. At the Annual Meeting, STACTIC will finalize the draft paper for recommendation to Fisheries Commission for adoption. The Chair suggested that any other CPs interested in joining this informal group should communicate their interest to him. If a CP decides not to participate in the working group, it should remain attentive to the working group’s progress so that the progress is not delayed unnecessarily. The working group’s information will be provided to all CPs before the September meeting so that they have time to comment.

**It was agreed that STACTIC would *recommend* a working group to integrate the FAO PSMA into the NCEM as appropriate and as soon as possible. It was also agreed that a “Friends of the Chair” group would draft a paper to establish the mandate and terms of reference for the working group and that this paper would be finalized at the next Annual Meeting so that it can be presented to the FC for adoption.**

## **5. Compilation of fisheries reports for compliance review (2004-2013), including review of Apparent Infringements**

Under this agenda item, the Secretariat presented the 2013 profiles and trends of fisheries in the NAFO Regulatory Area (Annex 3). Accompanying the presentation was the circulation of the draft *Table 1 – Overview of 2013 Fishing Trips in the NRA*, and *Table 6 – Details of the 2013 Apparent Infringements*, which constitute the Compliance Tables on which the STACTIC Compliance Review document is based. The following is a summary of the specific items discussed by the Secretariat and CP representatives concerning ways to clarify or improve the tables and the document.

### **General Issues / Observations reported by the Secretariat**

- More vessels went to the NRA from 2012 (54 up from 44), but they spent less days there (4778 down from 5510).
- Groundfish dominated landing; pelagic redfish and shrimp totals have dramatically decreased.

### **Observations and Changes to Table 1**

- Table 1 is now arranged by fishing trip start dates (to avoid identifying the vessel).
- Secretariat removed four columns (e.g. COE- Catch on Entry and COX – Catch on Exit, ENT and EXI)) because there were no compliance issues.

- EU supports the changes to Table 1. Additionally, there are some differences apparent in the data between declared catch and actual landings. EU requested information that indicates whether transshipment or some other event occurred that explains this change. Iceland agreed.
- Canada clarified that the information in Table 1 is declared information, not landed.

**The Secretariat will re-label the “Total Catch (logbook)” column as “declared Catch”.**

#### **Breakdown of groundfish statistics**

- Canada asked whether the groundfish statistics on slide 6 can be broken down further into the directed fisheries by species. Canada suggests that the highest catch of the day could be used for this purpose.
- DFG stated that the catch report already requires the vessel to declare the directed species. EU clarified that the NAFO definition of “directed species” is in Article 5.
- US stated that the confidentiality clause appears to be inhibiting NAFO’s ability to effectively evaluate control of the fishery. Domestically, the U.S. has working groups that review “confidential” information, but does not release it to the public.

**The Secretariat will expand the column “Total Catch from CAT’s” to present the catches of the directed species and their by-catch by species.**

#### **AI Issued At Sea**

- Secretariat reported that eleven out of twelve AIs issued at sea related to the retention of 3M redfish after closure notification.
- In two cases, no follow-up information was provided.
- Follow-up information is required under Article 40.
- One case involved a move away provision. Resolution is pending.
- EU stated that many of the redfish AIs were due to the timeliness of the closure notifications; a problem that has been rectified.

#### **“No Infringement” vs. “No Prosecution”**

- Canada disagreed with the phrase “no infringement” in Table C6 as it implies that no infringement occurred, but may mean that an infringement occurred, but the CP decided not to prosecute.
- EU clarified that Table C6 should say “No Prosecution” instead of “No Infringement”.

**Agreed that EU would submit an updated version of the annual report on infringements and that the Secretariat would update Table C6 accordingly.**

#### **By-catch Data**

- Canada requested that the Secretariat explore analytical methods on the CAT reports and determine whether compliance on by-catch regulations can be inferred.

**The Secretariat will analyze the CAT reports as requested.**

#### **AIs Issued in Port**

- The Secretariat reported that sixteen infringements occurred. The statistics about these cases were gathered from the port inspection reports, particularly in section E.1B of the PSC-3.
- Secretariat noted the problem that CPs did not report follow-up information for AIs issued in port
- EU pointed out that there is no clear direction on how to report port infringements.
- Canada stated that this appeared to be an oversight and suggested that EDG draft a paper considering a revision of Article 47 to include reporting requirements.



- US highlighted that there is a requirement in Article 47 when it states that the provisions in Article 40(1), (2), and (3) apply, and that Contracting Parties are responsible for providing information to the executive secretary on AIs detected in port.
- Chair suggested adding the phrase “To Be Clarified” under the headings in the last two columns and removing the question marks. CPs agreed.

**The phrase “To Be Clarified” will be added under the headings in the last two columns in Table 6. The question mark will be removed.**

### Serious or non-Serious Port Violations

- Secretariat reported that the NCEM does not clearly designate whether a port violation was serious or non-serious (not covered by Art. 47).
- U.S. stated that it will attempt to draft a paper to compare the list of “serious” infringements between port and at-sea infringements.

**US will draft a paper to compare the list of “serious” infringements between port and at-sea infringements.**

### Unresolved Cases

Iceland stated that the Annual Compliance Review lists details for each AI case from the past year but that unresolved cases from prior years are not reported. The Secretariat responded that the Annual Compliance Review provides statistics on unresolved cases dating back to 5 years (e.g. Table 5 of the 2013 Annual Compliance Review). Iceland recommended that the Secretariat should include information in its compliance report about the measures taken by each of the flag states against the vessels with an AI for all unresolved whether new or old.

EU stated that each pending case for the EU is reported in the template adopted by STACTIC and asked the Secretariat if that template was used by other CPs.

The Secretariat responded that it does compile the information that CPs submit and it is presented to STACTIC during the Annual Meeting.

Canada added that none of the unresolved cases should come off the list in the Annual Compliance Review until they are resolved.

US concurred.

**The Secretariat will modify Table 5 of the Annual Compliance Review document to include more details of the update on the case. AI cases will continue to be reflected in the table until they are resolved.**

### CAT Reporting

- Secretariat reminded CPs to correctly address errors in reports by cancelling them using the CAN message.
- Additionally, CPs should remind vessels about a potential error. On the last day of trips, vessels must report their catch of the day as well as their total catch on exit.

### “Phantom Vessels”

- The Secretariat mentioned that it had discovered a situation where a “phantom” vessel was sighted in the NRA. No VMS and VTI reports had been received for this vessel. Were it not for the alert from the CPs with inspection presence, the Secretariat would not be aware of its presence in the NRA. The concerned flag State eventually corrected the situation by “re-sending” the required VMS and VTI reports of the fishing vessel.
- DFG urged that FMC should monitor the return messages in order to verify whether their reporting had been acknowledged by NAFO.

- DFG further suggested that the Secretariat look into the manual reporting (MAN) from vessels which have faulty VMS units in order to see if there are any trends, such as same vessels, same area, or certain fisheries.

#### **Electronic monitoring when number of trips is less than four**

- The Secretariat indicated that the reporting requirements for port States can become problematic when there is a few number of port landings and the inspection coverage requires at least 15%. For example, for a port State with just one PSC-1 received in a year, the coverage would either be 0% or 100%.
- US states that a similar problem can occur for flag States applying Article 30 B.2(a). This would require the flag State to estimate the number of trips that will not carry observers to be able to comply with the minimum 25% observer coverage. This could be a mechanism requiring flag States to estimate the number of trips. The compliance report should retain evaluation metrics for these measures.
- CPs agreed that NCEM requires port State meet “at least” percentage. Therefore, if a CP expects it will have only one trip landed, it should inspect the vessel at port. And if only one trip will be conducted by a flagged vessel, it should have an observer.
- A similar problem exists for ensuring the compliance with the port State inspection rate in Chapter 7 of the NCEM.

**Agreed to have this issue remain on the table for further clarification from the EDG.**

#### **Disconnect between the Compilation Tables as prescribed by STACTIC and the Annual Compliance Review drafted by Secretariat.**

The Secretariat stated that some Compilation Tables forwarded to STACTIC that are not used in Annual Compliance Review, and vice versa. Secretariat requested that STACTIC reflect on this to bring the two in concurrence.

EU states that Annual Compliance Review has improved significantly over the last few years.

The Chair suggested an ad hoc group be created, as in years past, to draft the Trends and Conclusion section. This group will provide a draft of this section to other CPs before the Annual Meeting.

Canada suggested that the members be at least those CPs with an inspection presence (Canada, EU, and US).

US agreed to participate, but requested clarification for the goal. US stated that annual compliance reviews for other RFMO include conclusions, areas of risk, and recommendations to prevent AIs from occurring again. The review, as drafted by the Secretariat, does a good job of highlighting the trends, but does not include these recommendations. US suggested that a more useful way to use the review is to suggest ways forward or discussion points.

Canada agreed and stated that the review could be used to ensure better compliance and to help inspection resources be deployed in areas of highest risk.

EU stated that STACTIC previously decided that there should not be recommendations included. EU was not against the principle of using the review as a way forward, but if it is, it must be exhaustive and STACTIC must respond to the recommendations the following year. EU suggested that these recommendations be included in a separate document.

The Chair suggested that the working group (consisting of at least Canada, US, and EU) follow the template created in 2013 and present it to STACTIC at the Annual Meeting. CPs agreed.

**Some CPs were tasked to use last year’s template to draft the Trends and Conclusion section of the Compliance report which will be presented at STACTIC at the Annual Meeting. This group shall provide the draft to other CPs for their review before the Annual Meeting.**

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

The Chair opened the agenda item noting that this is a standing agenda item. The intention is to provide CPs with the opportunity to share domestic practices and procedures.

The Secretariat presented STACTIC WP 14/2 listing the documents uploaded to the NAFO website. It indicated that the US had added some documents concerning observer practices and procedures. No discussion occurred on this agenda item.

**CPs were encouraged to continue to submit relevant documents to the Secretariat to augment the NAFO Members' Pages.**

## **7. Review of current IUU list pursuant to NAFO CEM Article 54.3**

The Chair reminded representatives of their responsibility, in accordance with Article 54.3, to review the IUU list and provide evidence related to any vessels that may meet the delisting or listing criteria in order to facilitate updating.

The NAFO Secretariat presented STACTIC WP 14/3, noting that the IUU list was last reviewed at the NAFO Annual Meeting in September, 2013. It was further noted that there have been no changes and the list still includes 8 vessels.

No comments.

## **8. Half-year review of the implementation of new measures in the 2014 NCEM**

The NAFO Secretariat presented STACTIC WP 14/4 (Rev.) related to its experience and observations in the implementation of the new measures that came into force in 2014.

### **Advance notification for 50% TAC-uptake of 3M redfish**

- Paper provides chronology of notification events.
- Secretariat requested opinion of whether the chronology presented in WP 14/4 (Rev.) follows STACTIC's intent when it revised the date to suspend the directed fishery. Specifically, did the Secretariat appropriately adjust the date to suspend the directed fishery since, after the initial advance notification was released, fishing rates increase significantly?
  - US supported the actions taken by the Secretariat and stated that adjustments should be made to reflect the most accurate catch rates.
  - Canada stated that the Secretariat acted appropriately in adjusting the date of the closure given the increase in fishing rate.
  - EU recognized that the advanced notification process overall is an improvement from 2013, but still has some concerns. EU raised the possibility of deleting footnote 8 in Annex 1.A because it is confusing and is duplicative when reading Article 5. The Chair and other CPs noted that this change would have to be initiated by the FC.
    - US suggested that the purpose of footnote 8 is to slow down the fishery and thinks it is necessary.
    - DFG stated that the FC created footnote 19 to provide vessels with some ability to plan a trip prior to 1 July.
  - It was noted that the NCEM is unclear as to whether that the Secretariat must notify the CPs when the total 3M redfish uptake reaches 100% of the TAC. All agreed that the NCEM must be clarified to instruct the Executive Secretary to notify CPs when 100 % of 3M redfish has been taken.

**It was agreed that the EDG would clarify that the ES should notify CPs when 100% of 3M redfish TAC has been taken. The Chair and other CPs noted that the deletion of Footnote 8 in Annex 1.A would have to be initiated by the FC.**

### Observer Report template set out in Annex II.M

- US requested clarification to footnote 2 in STACTIC WP 14/4 (Rev.). US understood that trip reports must be submitted at the end of the trip, not the end of a deployment.
  - The Secretariat explained that an observer’s assignment sometimes includes multiple trips on the same vessel, and they do not submit their reports until 30 days after the assignment, not the individual trips.
  - It was agreed that the NCEM requires reports at the end of individual trips. .
- EU suggested removing the reference to OBRs in Table 1 of STACTIC WP 14/4 (Rev.). All parties agreed.
- EU and Canada stated that the compliance rate may be low because the observer report template is new and it will take time to adapt.

**No further action on the observer report template needs to be taken at this time. The data will be reviewed again in September at the Annual Meeting.**

## 9. Inspectors Webpage

The Secretariat gave a presentation and gave an update on Phase III – Port State Measures – of the Inspector Webpage project. It noted that there has been minimal use of the first two phases of the Inspector’s webpage. In summary, the bulk of the development of Phase III involves the Port State Control forms which can now be filled out online. There will be a trial period between now and July for CPs to try out Phase III. The Secretariat invited suggestions from CPs concerning changes to the layout.

Regarding security, the system will use:

- HTTPS connection (SSL)
- Complex Passwords
- Least-privilege user accounts (Functionality will be based on user)

Next Steps include

- Pilot Phase: May-July 2014
- Updates/enhancements
- Ready for release in September, 2014

The Secretariat pointed out that Phase IV concerning integration of Real Time VMS on the web page is the next step. The Secretariat however believes that before Phase IV is begun, the CPs should become more conversant in the first three phases and they should be fully tested.

EU was pleased with the improvements and can participate in the pilot program. EU asked if at sea inspection forms be available through the webpage. Secretariat answered that they could be available, but functionally, it could be difficult to establish connectivity at sea.

Canada was pleased with the progress and will participate in the pilot program. Canada has submitted around ten inspections to the webpage. For consistency, Canada only has one person enter data. Currently the webpage only allows a user to enter reports from the last 60 days. Canada requested to go back further than 60 days so that it can enter more inspections.

Secretariat stated that 60 day limit has been corrected, but has not gone live yet. The Secretariat can set up an “umbrella account” for one person to manage multiple functions/vessels.

DFG was pleased and will participate in the pilot program. Requested clarification on whether there is a process to delete or clean up a form that has not been accepted. Errors are often with catch reporting and master is instructed to make a new form (PSC-1).

Secretariat stated that there is an option to return to the form and modify it before it is signed. But some errors will have to be handled during the pilot phase on a case by case basis so that a process can be developed.

EU requested to know whether improvements were made to the vessel registry system based on the suggestions presented at the Annual Meeting (e.g. hail messages, directed species, etc.).

Secretariat showed the changes were made by displaying information about one vessel as an example.

France-SPM asked if the access to real time VMS in Phase IV would be technically available to all persons duly authorized by each CP or only those CPs with an inspection presence.

The Secretariat said that either is possible, but that STACTIC would have to decide.

Secretariat asked if Phase IV should be postponed until Phase III is implemented.

DFG stated the Phase IV could be costly, and should wait until after the other phases have more fully tested so that information learned during the first three phases can help shape Phase IV.

The Chair asked the Secretariat whether it needs more guidance on how to develop Phase IV. The Secretariat stated that there are a number of questions concerning scope and usage on how to develop Phase IV.

Canada stated that because this is a multi-phase project, the first phases should be completed before moving on the Phase IV. More participation in Phases II and III is needed so that the CPs can answer questions about what will be required in Phase IV which sounds like it will be more complex.

EU noted that Art. 29.10 states that VMS data must be made available to all CPs with an inspection presence in the Regulatory Area. EU sought clarification about the cost of Phase IV.

Iceland stated that the FC will need to decide if Art. 29.10 is used, because of its limitation to CPs with an inspection presence.

At the request of the Chair, the Secretariat provided some general questions for Phase IV:

- Who will be the users? At sea inspectors?
- What technology will the at sea inspectors be using? Laptops, satellite/internet, bandwidth?
- What will be their scope of authority? Should they be able to modify items at sea or just gather information?

EU suggested that the more complete the site is, for example including observer reports, the more people will want to use it.

DFG stated that the best solution would be for inspection vessels to enjoy full access to the VMS system by direct connection by a VPN to the NAFO VMS system.

The Secretariat indicated that costs for developing Phase IV would have to be identified and brought to STACFAD for consideration.

The Chair encourages CPs to reflect further on what guidance to give to the Secretariat for developing Phase IV.

**CPs agreed to work through the first three phases before developing Phase IV. CPs were encouraged to begin thinking about Phase IV so that they are prepared to discuss the functionality and scope of the VMS-tracking application during the Annual Meeting. CPs with an inspection presence are encouraged to participate in the first three phases so that the Secretariat can determine how well it is working. Finally, the Secretariat is encouraged to prepare any guidance or questions for STACTIC to consider that will guide the development of Phase IV.**

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

US presented an overview of the EDG's progress to date through STACTIC WP 14/6 and STACTIC WP 14/7. The working papers concern editorial revisions of Chapter II – Bottom Fisheries in the NRA and Chapter VIII - Non-Contracting Party Scheme of the CEM, respectively. The EDG's goal was to redraft the NCEM for consistency and clarity as summarized in the working papers and also in a presentation (Annex 4).

Japan thanked the EDG for its hard work. One substantial comment was made concerning Article 55 in STACTIC WP 14/7. As proposed, the EDG replaced “should” with “shall” and deleted the phrases “to the extent possible” and “in accordance with applicable legislation.” Japan stated that this will substantially change a CP's obligations

and go beyond the scope of the EDG. Specifically, there would be some cases where the government of Japan would not be able to comply. Japan stated that this change would require Fisheries Commission initiation and approval.

Japan has other changes that are not substantive and requested to defer adoption until the Annual Meeting to allow for more time to review and provide feedback.

Russian Federation stated it disagreed with the change to Article 52.1 regarding transshipment “inside or outside” of the Regulatory Area. Russian Federation stated that the current version of the NCEM only controls transshipments inside the RA and is concerned about potential infringements if Russian vessels tranship to non-CPs once outside the RA.

The Chair clarified that this article only concerns IUU vessels and that this prohibition applies only to transshipment with IUU vessels. Russia would still be able to tranship with non-IUU vessels from non-CPs outside of the RA.

The Russian Federation will review further, but would prefer to leave Article 52.1 unchanged.

Iceland stated that in STACTIC WP14/6, articles 18.2c and 22.1B replace the term “scientific observer” with “an observer with sufficient scientific expertise.” Iceland stated that these terms are not defined and do not determine who decides what is “sufficient.”

US stated that the EDG had the same discussion. The current NCEM does not define “scientific observer” but could have because that term carries significant implications. The EDG wanted to use less formal terminology to describe someone with some scientific skills until some actual standards could be developed. The US supports more standardized definitions and provided its domestic standards for observers on the shared website.

Iceland thanked the US for the explanation and pointed out, for example, that it would be difficult to train observers to identify all of the species in Annex I.E.

Canada suggested that CPs could differentiate between scientific observers and compliance observers when submitting their lists of observers.

EU stated that this would be a problem because STACTIC should not engage in definitions of scientific observer. EU supported the language drafted by the EDG because it places the burden on the CP to train observers with some level of scientific expertise for the fishery they are involved in. That way, they would not necessarily need to know the entire list of species in Annex I.E.

Canada recommended that CPs take some time to review the working papers and provide comments before a given deadline. Then the EDG would provide another revision of the working papers before the Annual Meeting.

EU and US agreed.

The Chair summarized that because some CPs had concerns about editorial changes and that Japan and Russia objected to substantive changes, this agenda item should be deferred to the Annual Meeting.

The Secretariat also informed STACTIC that the FC/SC WG on Ecosystem Approach Framework to Fisheries Management will meet in July and review the provisions of Chapter II of the NCEM. This could affect STACTIC WP 14/6.

**This agenda item was deferred to the next Annual Meeting. CPs agreed to review STACTIC WP 14/6 and WP 14/7 and provide comments to the Secretariat by June 16. The EDG will consider these comment and redraft changes, if necessary, based on the comments for presentation at the Annual Meeting.**

## 11. Possible Revisions of the NAFO CEM

### a) Product Labelling by Date of processing

Canada presented STACTIC WP 14/14 (replaces WP 13/27) concerning product labelling by date of processing. Canada presented three case studies indicative of a control problem. These vessels move between Divisions in illogical ways, such as when a vessel moves from an area where it reports having an extremely high catch rate to an area where it has a very low catch rate. In another case, the vessel is in one



area for a long period of time with low reported catch rates, but then reports extremely high catch rates while steaming (according to VMS) through another area. Although this information is being reported by the vessel, there is no way for an inspector to determine when or where the fish were caught. Date labelling would allow inspectors to compare the fish on board with the reporting. NAFO previously approved date labelling in the shrimp fishery and Canada is looking to expand that to all fisheries. There are significant indications that some vessels are mis-recording their catches by Division. Labelling by date would allow inspectors to verify at sea the amount of species caught during a specific time.

DFG asked why date labelling for shrimp was different from groundfish.

The original working paper indicated date of capture but that some CPs suggested that date of production might be more appropriate.

EU thanked Canada for the presentation, agreed that misreporting of area is a potential problem, but disagreed on the solution. EU stated that STACTIC has debated the issue for many times before and that STACTIC decided in 2013 not to retain the date of capture/production except for shrimps. There does not appear to be new elements that justify the reopening of that debate. EU does not support a date labelling requirement because it is not in EU legislation and because of the direct impact it has on inspection both at sea and in port. Referring to the NEAFC scheme which requires it, EU referred to port inspection report that demonstrate that this provision is not respected by NEAFC CP vessels. EU argued that there may be other ways to address the problem and STACTIC should confer with other NAFO working groups to explore all of the possible solutions before it moves forward with a new technical measure.

Norway strongly supported Canada's proposal, stating that the date of production is a key piece of information for compliance. Additionally, it is not a burden for the fisherman because it is a simple task of organizing. The labelling information is important for comparing the catch on board with the logbook information and vessel reports.

Iceland agreed with Norway and fully supported the proposal. Regarding date labelling in NEAFC, Iceland stated that the EU cites many of its own vessels for mislabelling boxes of fish, so the rule is respected.

In response to Norway, the EU stated that the burden is not to fix a date in a logbook or a box, but the impact on inspection. To illustrate this burden, the EU underlined a normal fishing trip may last for 100 days and produce more than 60,000 boxes. In response to Iceland, the EU stated that no one under NEAFC follows the rule requiring date labelling and when there are that many infringements, maybe the problem is the provision itself.

Iceland stated if inspectors are not able to differentiate the catch, then date labelling is the simplest way to address this problem.

Russian Federation thanked Canada and supported the provision as well as the comments by Norway and Canada. Date labelling would not be a problem for Russian vessels.

DFG stated that it spoke to the master of one of its fishing vessels who concurred that this would be a positive step forward. What is in logbook and the production log and what is in hold could be linked together.

The Chair recognized that there is not a consensus on this issue.

Canada recognized that STACTIC is the appropriate forum to deal with this issue but as there appears to be an impasse Canada will continue to pursue but perhaps in a different forum.

**This proposal was not adopted because there was no consensus.**

**b) Directed fishery and by-catch rules in case of creation of a Quota by transfer.**

EU presented STACTIC WP 14/8 concerning by-catch rules in case of creation of a quota through a transfer. EU proposed that if a mid-year "transfer generates a quota for a CP that had no such quota before, the by-catch rules in Article 6 for the stock concerned cease to be applicable to that CP on the date the transfer enters force." For example, if a CP started the year with no yellowtail quota, the yellowtail bycatch incurred prior to the transfer should not count against the amount of yellowtail quota acquired through a transfer during that year.

DFG stated that it was in favor of the change but requested clearer language in the proposed provision.

Canada agreed with the provision in theory but had concerns about its application. For example, if a vessel acquired quota during the middle of a trip, how could an inspector determine what part of the catch was caught as by-catch and what was caught as quota, especially if there is no date labelling requirement? Also, if this is a temporary quota, how can the FC penalize the CP for going over the quota?

EU stated that if a CP overharvested its quota, then the FC could determine a way to have it penalized, in accordance with the existing NAFO rules.

US shared Canada's concerns about accountability. This provision could make control more difficult.

EU shared the concern with regard to overharvesting a temporary quota and suggested that the provision could be modified to include the ability for the FC to penalize a CP by deducting quota of one of the other species.

**It was agreed to defer STACTIC WP 14/8 until the Annual Meeting for further discussion and consideration.**

### c) Simplification and clarity on calculation of by-catch limits

EU presented STACTIC WP 14/9 concerning simplification and clarity on calculation of by-catch limits. This working paper has three parts:

- i) The first part involved the deletion of the by-catch limit liaised to "others" quotas. In summary, EU stated that CPs that have no quota benefit from the by-catch rules with a limit of 2500 kg or 10%. However, if these CPs exploit the "others" quota, this limit is reduced to 1250 kg or 5%. EU proposed consolidating the provisions and setting all by-catch limits for CPs without allocation at 2500 kg or 10%.

Iceland stated that this change would be beyond STACTIC's authority and required FC initiation and review.

US agreed it is beyond STACTIC's authority.

Canada agreed that this is an FC issue. Canada also cautioned against making changes to by-catch rules piece by piece because they are complex and need to be viewed in totality before making any changes.

EU agreed that the change might be more appropriate for the FC, but stated that by-catch measures should be simplified and clarified. In this specific case, the purpose was to streamline the rules by reducing the number of scenarios when "others" by-catch limits apply from three to two.

**EU agreed to withdraw this paper at this time.**

- ii) The second part of STACTIC WP 14/9 sought clarity on the calculation of by-catch limits on board and proposed to redraft Article 6.4. EU stated that the article as currently written is confusing and recommended dropping one of the provisions. The change would avoid an inspector having to choose between fishing logbook figures or fish retained on board when calculating by-catch limits. The EU suggested that the limit should be based only on the logbook.

Canada agreed that if an inspector has the discretion to choose one method of measurement or the other there would be problems. However, the current article as only referring to one, the weight retained on board as recorded in the logbook. The logbook is used to calculate by-catch limits.

US appreciated the EU's effort to clarify the provision. The EDG's intent was to state that the logbook had to reflect the amount retained on board.

EU appreciated the explanation by the US and Canada and agreed with it.

Iceland asked whether discards are measured in this calculation. The fishing logbooks might record them even though they are not retained on board.

Canada stated that "retained on board" has been the standard for a long time. Iceland's question is a good one and by-catch should include discards, but that is a larger issue for FC to consider.



The EU stated that the concept adopted by NAFO is retained on board. After the US and Canada made it clear that the provision refers to what is retained on board determined using the fishing logbook figures, the EU withdrew its request for a change.

**EU withdrew changes to 6.4 based on explanations by Canada and US that retained on board is to be determined by logbook figures. EU will communicate that interpretation to its inspectors.**

- iii) The third part of STACTIC WP 14/9 concerns clarity on by-catch limits in any one haul. The current provision limits by-catch to the greater of a weight limit or a percentage. EU suggested that the provision only include the percentage.

Canada stated that the EU is correct that the previous provision used the term percentage. The EDG changed it to be in line with other provisions that had limits. Inspectors currently do not have discretion.

The Chair asked whether the change clarified the provision or altered it substantively when it removed the possibility for the inspector to use the limit.

EU preferred a single method to prevent two different inspectors from interpreting it in two different ways. However, EU decided to withdraw the change for further examination.

**EU withdrew this proposal.**

#### d) **Observer Program – Article 30 of NCEM**

EU proposed STACTIC WP 14/10 concerning the completion of scientific work by Control Observer and Standard Observer report Template (Annex II.M). [Note: The second section of this working paper, which concerned electronic reporting, was addressed under agenda item 14.] The first section of this paper had four parts.

- i) The first part attempts to clarify who is responsible for measuring the length of fish when both a control observer (“observer” as referred to in Article 30) and a scientific observer are aboard a vessel. The EU stated that the Scientific Council disregards the science collected by the observer. Therefore, it suggested clarifying language making the scientific observer responsible for this data collection in situations when both observers are on board. When the observer is alone, then the existing provision remains in place and the observer will take length measurements.

US expressed appreciation for EU’s effort to differentiate between the roles of observers. The US asked if the proposed language could be interpreted to imply that if the Scientific Council recognized the scientific program of a flag state, then it automatically endorsed the collections of data.

Canada also sought clarification and did not agree with the premise that the entire SC disregards the data collected by observers.

Norway concurred with Canada concerning the value of the data collected by observers. Norway’s scientists use information collected by fishermen, observers and inspectors.

Iceland agreed with Norway and did not understand why the SC rejects observer data. In Iceland, scientists rely heavily on observer data and if they are not happy with data, then they don’t use it or change the program. Iceland did not see the risk of having two sets of length measurements.

US attended the ad hoc FC/SC WG on Catch Reporting and conveyed that some SC representatives suggested that length data would be more useful if they had associated age samples. Observers in US programs collect the scales and otoliths necessary for age determinations.

DFG agrees with Iceland, Norway, and US and shared that its observers are trained to take age measurements as well.

EU responded that if the observer is a biologist, there is no problem. But when the observer is not a scientist, there could be a problem by producing two different sets of data for the same fleet. We need a definition of scientific observer, but that must come from the SC. The EU stated that at the ad hoc FC/SC WG on Catch Reporting the SC stated that the scientific data collected by observers is of little value. EU’s opinion is to keep observers responsible for compliance, not science.

Canada attended that same FC/SC working group meeting as well and stated that there appeared to be different opinions in that working group. Some say the information from observers is valuable and others say that it is not valuable. Canada did not support the proposal as written because it was part of a broad question about the observer program that will require significant input by CPs.

Canada suggested forming a working group to explore observer functions and duties.

US supported Canada's proposal for a working group.

**The first part of the STACTIC WP 14/10 did not have consensus and was not adopted. CPs were encouraged to propose the creation of an observer working group at the Annual Meeting to consider a comprehensive review of the observer program.**

ii) The second part of STACTIC WP 14/10 proposed to modernize the observer report template (Annex II.M) which structure was developed in 2000. The working paper provided the changes.

Canada agreed that some of the elements of the form are outdated, but suggested that STACTIC wait to see what data comes back from the observer template before making these changes.

US appreciated the EU's effort to update the template, but cautioned against removing some of the elements from 1A such as trip number or directed species without further explanation. Additionally, the US supported Canada's proposed delay to review information gathered during the fishing year.

Iceland agreed with Canada and expressed a need to review this with the Icelandic government.

DFG stated that it needed more time and guidance with the proposed changes.

Norway stated that some of the information on the form, such as the crew list, might not be as important in fisheries, but could be important to other parts of the government.

The Chair stated that several Contracting Parties were concerned about the timing of this proposal and need guidance on the proposed changes. He suggested deferring the changes until the Annual Meeting.

**EU withdrew the proposed changes and will present a revised draft of Annex II.M at the Annual Meeting.**

**e) Length of a trial tow in accordance with by-catch provisions under Article 6.6(b) (iii)**

Canada presented STACTIC WP 14/12 concerning the maximum length of a trial tow in accordance with the by-catch provisions under Article 6.6(b) (iii). The proposed change reduces the maximum time for a trial tow from 3 hours down to one hour.

Japan stated that it will need more time to consult with the Japanese government concerning this new working paper. Japan asked why three hours was originally established and why Canada proposes to reduce it now.

Canada stated that if a vessel is exceeding by-catch limits it has to leave the zone for a period. When it returns it has to conduct a trial tow. The trial tow is supposed to be a trial, but a vessel can catch a significant amount in three hours. A one hour tow can provide enough information with less potential damage to moratoria species. If it's a clean fishery, then the vessel re-sets the net. But if there's a lot of by-catch, then the vessel can do a lot of damage in three hours to find out something that it could have learned in an hour.

EU appreciated the direction of the working paper, but questioned the technical change. The EU noted that the duration of the trial tow varies according to depth. Furthermore, Canada's proposal implies the creation of two new points in the definition of a tow and subsequent concerns on how to control the effective duration of the trial tow.

Canada stated that the proposed provision accounted for difference in fishing depths by introducing the phrase "time on the bottom." The captain knows when his net is on the bottom, and when he is hauling back.

Iceland agreed with Canada that a vessel does not need to fish for three hours to determine if by-catch is

still an issue or not. Iceland stated that if there are foreseeable problems controlling the one hour time we would have the same problems controlling the three hour tow.

The Chair stated that one CP has said that it needs additional time to consult with government officials and therefore the working paper might be deferred until the Annual Meeting.

**It was agreed to defer STACTIC WP 14/12 until the Annual Meeting to give all CPs time for consideration.**

**f) Provision of haul by haul logbook data to the Secretariat**

Canada presented STACTIC WP 14/13 concerning the provision of haul by haul logbook data to the Secretariat. Canada expressed a concern that this valuable information could be lost if it is not provided to the Secretariat. Although the information could be in a different format, Canada expressed confidence someone might be able to use it. The working paper proposed that CPs submit logbook information to Executive Secretary by January 30 for each fishing trip concluded during the previous fishing year.

DFG supported the proposal and believes that the logbook information should be available to science. However, it had some reservation that the time limit might be too short.

US supported the concept.

EU stated that it did not have a problem with the concept. It noted that the ad hoc FC/SC WG on Catch Reporting did not make a precise recommendation but suggested that there should be consideration of the issue. Secondly, the EU would prefer that this provision be implemented through electronic reporting, since the amount of paper logbooks required could be voluminous. When it is adopted, however, it should be real-time, not once a year.

Iceland supported the working paper and agreed that there should be more frequent reporting. An electronic format would be the best and easiest way and many Icelandic vessels already use electronic logbooks so this would not cause an additional burden.

Canada agreed to incorporate CPs comments and redraft the paper including a template for the September meeting.

**It was agreed that STACTIC WP 14/13 is deferred until the Annual Meeting. Canada will reflect on comments, redraft the paper, and provide a template.**

## **12. FC/SC Ad hoc Working Group on Catch Reporting**

The Secretariat presented the results of the first meeting of the FC/SC ad hoc Working Group on Catch Reporting which was held on February, 2014 (FC-SC Doc. 14/01). The meeting report offered five recommendations addressed to FC.

DFG commented generally about the entire meeting report, concluding that it was evident that the SC could be using logbook information to improve its scientific analysis. DFG stated that it is a disgrace that the logbook information is not forwarded to SC.

Iceland echoed the words of DFG, stating that FC is in need of scientific advice of good quality in a timely manner and the SC is in need of the information that produces that advice.

EU stated that STACTIC has made tremendous efforts to improve the reliability of commercial data. On recommendation #5 of the meeting report, EU supported the exchange of catch on entry and exit information with NEAFC. EU stated that there are differences in the definition of catch elements between the two organizations that need to be rectified before this can happen.

Iceland stated that NAFO must move forward with sharing information with NEAFC and that it should not be difficult for the two databases to communicate with each other.

Canada supported sharing information between NEAFC and NAFO, especially because some vessels operate in both areas on one trip. Canada will consider drafting a proposal to share information.

DFG stated that Greenland and Iceland can include a proposal for sharing info with NEAFC. When an attempt was made several years ago, it was abandoned because the quality of the data was so poor. It was agreed that another effort should be made when the quality improved.

**The Chair encouraged CPs to reflect on the recommendations in the meeting report in case the FC forwards them to STACTIC for action.**

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

The Secretariat presented the results of the first meeting of JAGDM which was held on 18-19 March 2014 of the JAGDM (FC Doc. 14/02).

In summary, the JAGDM reviewed terms of reference and rules of procedure, developed a webpage and discussed NEAFC's Information Security and Management System (ISMS) for data security.

DFG stated that this group is a great opportunity to harmonize communication and data management and hopes that CPs of NAFO will actively participate.

Canada agreed with DFG.

The Chair suggested that one issue that STACTIC could consider is ISMS because it relates to protecting NAFO data.

DFG agreed and suggested that NAFO should look to implement the same system as NEAFC for compatibility.

**CPs support the effort to consider ISMS. The Secretariat was requested to look into the NEAFC application of ISMS as it was technically evaluated by JAGDM and report back to STACTIC on the potential application to NAFO.**

### **14. Other Matters**

#### **a) Electronic reporting (Article 30 B)**

EU presented the second section of STACTIC WP 14/10 concerning electronic reporting. Currently, any infringement that is discovered on a vessel without an observer will be viewed as a serious infringement. The EU suggested that this should be removed as unnecessary. EU proposes redrafting Article 30 B.3 to remove the automatic designation as serious and replace with a requirement to deploy an observer as soon as possible.

US did not support the change and stated that the threat of a serious infringement served as a deterrent and was an important component of Part B. Without the deterrent, there are a lot of incentives to not take an observer. The US was also concerned with the loose language of "as soon as practicable," because it could be used to extend a timeline for a long period.

Canada concurred with the US and strongly objects to changing this article which was created so there would be ramifications for those that break the law without an observer on board. If the observer program is going to be reviewed, the electronic reporting scheme could be part of the comprehensive review.

Iceland stated that it has never been keen on the observer program because in one way or another, the observers are members of the crew and they cost money. Iceland agreed with the EU that because other parties are not interested in this part of the scheme, the benefits have not been demonstrated. The Icelandic fleet has the same compliance rate whether they have observers on board or not. However, Iceland agreed with US and Canada that when a vessel sails without an observer it is given trust. If that trust is violated there must be consequences. Changing this provision would water down those consequences. Iceland recommended that STACTIC wait for an overall evaluation.

The Chair stated that the working paper did not appear to have consensus because there were process objections to part 3 and substantive objections to part 4.

**This specific proposal in STACTIC WP 14/10 was not adopted because of a lack of consensus.**

**b) Use of “Others” quota under chartering arrangement**

FRA-SPM presented STACTIC WP 14/15 concerning the use of “Others” quota under a chartering arrangement. FRA-SPM requested to hear other CPs’ interpretation of the sections of the rules pertaining to a vessel’s ability to fish under the “Others” quota when it is fishing under a chartering arrangement. FRA-SPM provided an example of the situation in question:

If FRA-SPM chartered its yellowtail flounder quota to an EU vessel, is the EU vessel prohibited by NCEM from fishing for an “Others” quota of another stock during the specific charter operation? EU, US, and Canada agreed that even if there is no explicit provision concerning this question, the chartering provisions strongly imply that the EU vessel based on the example could not fish for “Others” quota. All agreed that this could be clarified by the EDG. The Chair asked CPs to reflect further on this question to provide additional insight at the Annual Meeting.

**It was agreed to defer this working paper until the Annual Meeting for others to provide interpretations of the NCEM.**

**15. Time and Place of next meeting**

The next STACTIC meeting will be held in Vigo, Spain, September 22-26, 2014.

**16. Adoption of Report**

The report was adopted on May 7, 2014.

**17. Adjournment**

The Chair adjourned the meeting at 1:45 p.m. on May 7, 2014.

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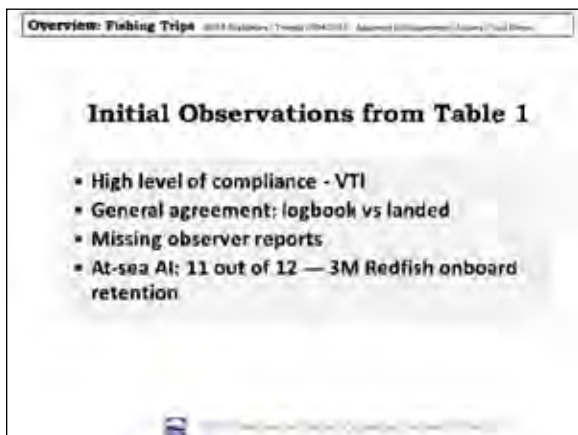
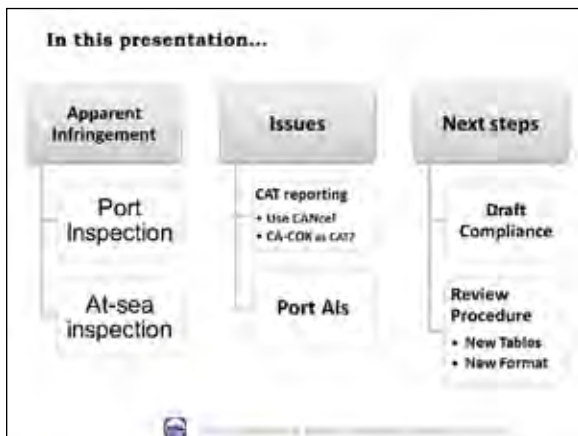
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## **Annex 2. Agenda**

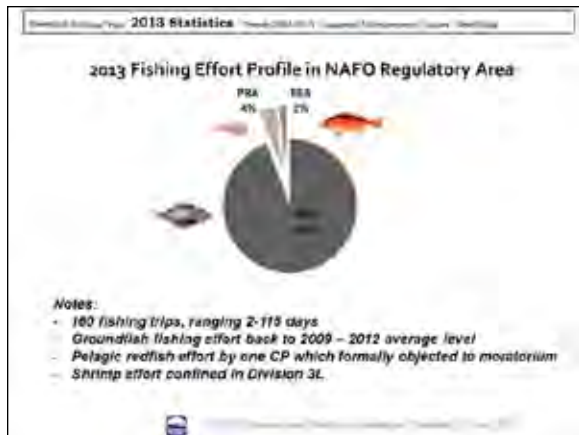
1. Opening by the Chair, Gene Martin (USA)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Port State Measures Review
5. Compilation of fisheries reports for compliance review (2004-2013), including review of Apparent Infringements.
6. Review and evaluation of Practices and Procedures
7. Review of current IUU list pursuant to NAFO CEM Article 54.3
8. Half-year review of the implementation of new NCEM measures
9. Inspectors Website
10. Editorial Drafting Group of the NAFO CEM (EDG)
11. Possible revisions of the NAFO CEM
  - a) Product labelling by date of processing (Article 27)
  - b) Directed fishery and by-catch rules in case of creation of a Quota by transfer
  - c) Simplification and clarity on calculation of by-catch limits
  - d) Observer Program – Article 30 of NCEM
  - e) Length of a trial tow in accordance with by-catch provisions Article 6.6 (b) (iii)
  - f) Provision of haul by haul logbook data to the Secretariat
12. FC/SC Ad hoc Working Group on Catch Reporting
13. Joint Advisory Group on Data Management (JAGDM)
14. Other Matters
  - a) Electronic reporting (Article 30 B)
  - b) Use of “Others” quota under chartering arrangement
15. Time and Place of next meeting
16. Adoption of Report
17. Adjournment

### Annex 3. NAFO 2013 Fisheries Profile and Trends



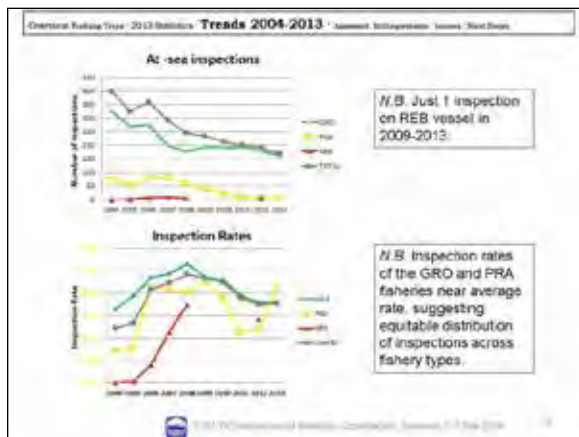
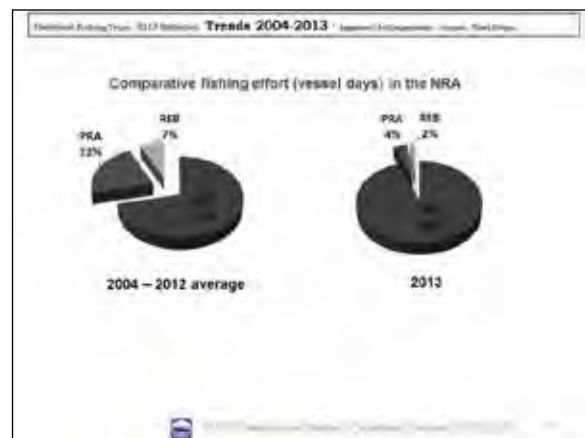
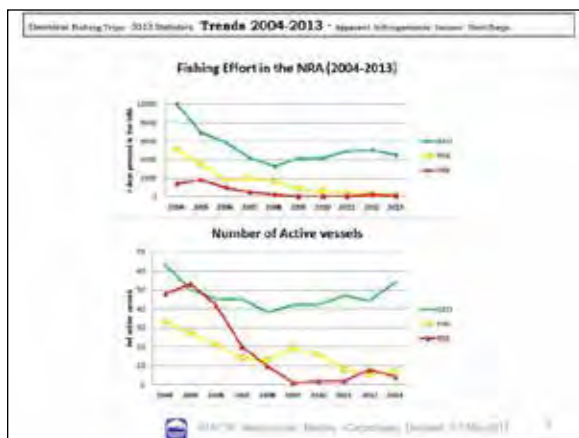
**2013 Fishing Effort Profile in NAFO Regulatory Area**

	Groundfish in Div 3UMNO (GRO)	Shrimp in Div 3L (PRA)	Redfish in Div 3F2J (REB)	TOTAL
Number of vessels	54	7	4	64
Effort (days present)	4509	190	75	4778
% effort	94.4%	4.0%	1.6%	100%



### 2012-2013 Fishing Effort Profile Comparison

Year	Number of fishing vessels			TOTAL	Fishing effort (days present)			TOTAL
	GRO (GRO)	PRA (PRA)	REB (REB)		GRO (GRO)	PRA (PRA)	REB (REB)	
2012	44	5	8	57	5050	750	210	5510
2013	54	7	4	65	4509	190	79	4778
% change	22.7%	40.0%	-50.0%	12.3%	% change	-10.7%	-24.0%	-13.3%



### Apparent Infringements

#### Apparent Infringements (at-sea) and disposition in 2013

All issued by Canadian inspectors

- \* 1 case – move-away provision, pending
- \* 12 cases – retaining (not discarding) 2M redfish after closure notification; 3 cases pending, 7 cases resolved (no infringement) 2 cases with no follow-up information

Follow-up required under Article 40

Decisional Finding Type: 0113 000004 - Trends 2014-2017 - Apparent Infringements - Issues - Task Item

### Apparent Infringements detected at ports

- 5 cases of Product labelling
- 4 cases of Capacity Plans
- 1 case of Bypass
- 3 cases of mis-recording
- 1 case of tampering of seals
- 1 case of obstructing inspectors
- 1 case of falsification of documents

16 cases in all

- In 8 separate port inspections issued by EU port authorities
- 6 EU vessels - no information on disposition or follow-up or update
- 1 DFG vessel - case pending as reported by EU

Decisional Finding Type: 0113 000004 - Trends 2014-2017 - Apparent Infringements - Issues - Task Item

### CAT reporting

- Accuracy, use CANCEL to correct errors
- CA field in COX as last CAT of trip?

### PORT Apparent Infringement

- Serious or Non-serious?
- Some AIs not covered by Art. 47

Decisional Finding Type: 0113 000004 - Trends 2014-2017 - Apparent Infringements - Issues - Task Item

### Specific issues/observations

- "Phantom vessel" - CPs must ensure Secretariat receive VMS and VTI.
- CPs having technical difficulty sending VMS-VTI. The Secretariat should not encourage CPs to send via email instead.
- Port State with just one PSC report and no PSC coverage 0%. Art 83 requires at least 15%.
- Elaborate: the need to have accurate CAT reports, as it is used for quota monitoring.

Decisional Finding Type: 0113 000004 - Trends 2014-2017 - Apparent Infringements - Issues - Next Steps

### 2013 Compliance Review

- Compliance Tables by 22 June (RoP 5.1.e)
- Draft Compliance Review document based on Compliance Tables (RoP 5.1.e) by Sept

### Review Cycle

- Disconnect between Compliance Table and Compliance Review Document
- Review and update process by EDG?

Decisional Finding Type: 0113 000004 - Trends 2014-2017 - Apparent Infringements - Issues - Next Steps

Completion Tables as prescribed by STACTIC prepared by Secretariat in June, as required in **Rules of Procedure 5.1.e**.

Annual Compliance Review, drafted by Secretariat, finished by STACTIC in September, required in **Rules of Procedure 5.1.e**.

Disconnect? →

1. Issue prescription to Completion Tables
2. Issue further notice of Annual Compliance Review

A task for EDG?

Decisional Finding Type: 0113 000004 - Trends 2014-2017 - Apparent Infringements - Issues - Next Steps

Completion Tables as prescribed by STACTIC prepared by Secretariat in June, as required in **Rules of Procedure 5.1.e**.

Annual Compliance Review, drafted by Secretariat, finished by STACTIC in September, required in **Rules of Procedure 5.1.e**.

Disconnect? →

**Current format of Completion Tables:**

1. Overview
2. Effort and at-sea inspections
3. Comparison of reported catches from different sources
4. IM PRA Effort
5. VMS/VTI data
6. AI details

**A new task for EDG?**

1. Issue prescription to Completion Tables
2. Issue further notice of Annual Compliance Review

**Current outline of Compliance Review:**

1. Effort and Trends
  - Distribution by depth
2. Compliance by fishing vessels
  - VMS and VTI
  - Vessel activity after IM red closure
  - On-trip vessels
  - Closed Areas and Exploratory Fisheries
  - Catch reporting on EASAs
  - At-sea inspections
  - Port inspection
  - Citation Rates
  - Apparent Infringements
3. Reporting Obligations of CPs and observers
  - Port inspection reports
  - Observer reports
  - Timeliness of submission
4. Follow-up to infringements
5. Observed trends and Contradictions

## Annex 4. EDG Update

### EDG Revisions

#### 2 working papers for consideration:

1. STACTIC WP 14/6
  - Revisions to Chapter II (VME measures)
2. STACTIC WP 14/7
  - Revisions to Chapter VIII (NCP scheme)

### STACTIC WP 14/6

1. Refined definitions & put in alphabetical order
2. Switched Articles 16 & 17
3. Added table/figure headings
4. Reorganized/reformatted several articles to be consistent with standard format

### STACTIC WP 14/6

- Article 17.5: Substituted “coral and sponge” with “VME indicator species” to be inclusive of all species
- Replaced term “scientific observer” with “observer with sufficient scientific expertise” (Article 18.2(c) and 22.1(b))
- Replaced “fishing trip” with “exploratory bottom fishing activities” (Article 18.2(d))
- Replaced “unfinished bottom area” with “outside the footprint”

### STACTIC WP 14/7

- Deleted “in RA” - transshipments can occur outside
- Replaced “investigation with “inspection” in Art. 48.2
- Substituted GC with FC in Article 53.1
- Reorganized/reformatted several articles to be consistent with standard format
- Article 49.1(c): STACTIC should consider referencing all RFMO IUU lists for consistency
- Article 52.1: Replaced “may” with “shall” share information that can assist with IUU identification

### Annual Review of CEM Changes

1. Secretariat provides EDG with all adopted WPs
2. EDG meets via conference call/webinar (October)
3. EDG reviews changes to CEM in adopted WPs
  - Consistency with updated format/organization
  - Text that needs further clarification
4. EDG provides recommendations to Secretariat
5. Secretariat updates CEM prior to publication

### Future EDG Revisions

#### Revisions for the 2014 annual meeting:

1. Integrating some Annex I.A footnotes into CEM
2. Additional format/reference corrections
3. Further tasking, as necessary

#### Questions?



**SECTION VII**  
(273-287)

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

**17-18 June 2014**  
**NEAFC Secretariat, London**

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## **Report of the Joint Advisory Group on Data Management (JAGDM) meeting** (FC Doc. 14/04)

**17–18 June 2014**  
**NEAFC Secretariat, London**

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

The interim Chair, Ellen Fasmer (Norway), opened the meeting and welcomed the participants. The following NEAFC and NAFO Contracting Parties were represented: Denmark in respect of the Faroe Islands and Greenland, the European Union, Iceland, Norway and the Russian Federation. Both NEAFC and NAFO Secretariats were present. The Chair noted the absence of some NAFO Contracting Parties considering that their presence is important for the development of JAGDM future work.

The list of participants is Annex 1 of this report.

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

The NEAFC Secretariat was appointed rapporteur.

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

The draft agenda (document JAGDM 2014-02-01 rev2) was approved as circulated before the meeting. The agenda is Annex 2 of this report. The list of documents is Annex 3 of this report.

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

The interim Chair described the different tasks and responsibilities of the Chair and Vice-Chair and questioned the participants on their availability to chair JAGDM. The participants expressed their unavailability and the Chair considered that she would address a letter to the Presidents of NEAFC and NAFO on the matter. The letters are Annex 4 of this report.

### **5. NEAFC issues**

#### **5.a. Issues raised by PECCOE**

##### **5.a.1. Possibility to use “none” and more than one gear type in the mandatory data-element “vessel gear” (GE) on the notification (Annex II.a.1 of the Scheme)**

The Chair introduced document JAGDM 2014-02-03 summarising that since cargo/reefer vessels do not have gear on board the Mandatory Fishing gear reporting obligation cannot be fulfilled.

Also noted that the Secretary proposed in NEAFC SCH 13/28 an interim solution, use the worth “NIL”. Information about this special situation is in the NEAFC Scheme for 2014 presented as footnotes. The implementation of this is done in the IT system at the Secretariat and probably also in the Contracting parties that want to use this code.

Participants elaborated on possible solutions: keeping the interim solution, or start a process to get better coding. Several proposals for better coding were mentioned, but the fact that ERS will have the gear information as part of catch reports means that doing changes to this coding now is not right. It was agreed that the interim solution (“NIL”) should be kept once it is already implemented by the Secretariat and the FMCs concerned.

The possibility of using more than one “vessel gear” in the notification was also discussed.

It was concluded that it would be technically possible to allow more than one gear code in the data-element GE but it was considered not cost effective to change the IT systems. Allowing more than



one gear will most likely not add the information wanted. It would be more correct to give the gear information together with the catches as is done in most ERS systems.

**5.a.2. Possibility to use more than one regulated species in an authorisation and suspension without having to amend the Scheme. The data-element “regulated resource” (RR) of the authorisation and suspension are in Annex II.b.1 and Annex II.b.2 of the Scheme.**

The Chair invited the Russian Federation to introduce document JAGDM 2014-02-04. The proposal to allow more than one species code in the data-element RR was presented noting that if approved this measure would not be imposed on CPs not wishing to use it.

It was agreed to advise that it should be possible to send more than one species code (RR) in the authorisation and suspension reports. Further it was agreed that only minor changes were needed to Annex II (b.1. and b.2.) and to the examples given in Annex IX.C.1. But the IT system at the NEAFC Secretariat must be updated to handle the new reporting possibility in addition to the old one.

**5.b. NEAFC Information Security Management System (ISMS)**

**5.b.1. Upgrade to ISO 27001 2013 version (ISMS article 4 last paragraph)**

The Chair introduced document JAGDM 2014-02-05 on the eventual need to upgrade NEAFC’s ISMS in line with the 2013 version of ISO 27001. NEAFC has an ISMS in line with the ISO 27001:2005 standard being the current until September 2013. NEAFC has no ISO certification so it is up to NEAFC to decide if and when the ISMS shall be changed to be in line with the 2013 version of the standard. It was agreed that the Secretariat will identify the areas of the ISMS that will require upgrading and will report to the group at the next meeting. Iceland volunteered to prepare a presentation of the highlights of the 2013 version relevant to the ISMS to be presented at the next meeting.

It was agreed that with these two presentations the group will be in a better position to decide the best way forward.

**5.b.2. The work of the Security System Administrators**

The Chair reviewed the nomination of Security System Administrators (SSAs) by the CPs. Iceland, the Russian Federation, DFG/Greenland, and Norway already nominated SSAs. The Chair encouraged the other CPs of NEAFC to nominate their representative as soon as possible.

The NEAFC Secretariat informed that from August it will resume the organisation of a meeting of the SSAs.

**5.b.3. Information Security Incident Management (ISMS article 13)**

The Chair questioned the participants about any known security incidents. The NEAFC Secretariat informed that a system log was created to monitor and register incidents and the response. No incident was reported. The participants discussed the possibility of making such log available to SSAs.

It was agreed that this issue should be discussed at the SSAs meeting and that a framework for Security Incident Management might be useful.

**5.b.4. Risk management (ISMS article 3) status of the work**

The NEAFC Secretariat explained that there were no recent developments on the establishment of risk levels for the Secretariat or for NEAFC bodies.

The Secretariat will resume work on the risk assessment from August. PECCOE has risk assessment (data classification) on the agenda for its September meeting. PECMAS, the WG Statistics, the Finance and Administration WG and the Future WG will also have to address this issue in the next meetings. A part of the risk management is also the Access control handling. A new role for Observers that will need access for a limited period must be included in the Guidelines Access Control for the NEAFC website document.

**5.b.5. Annual review of the NEAFC inventory (ISMS article 7.1)**

The NEAFC Secretariat introduced document JAGDM 2014-02-11 describing the inventory of hardware

and software use. Participants questioned the secretariat on data storage security and business continuity. The total description of the NEAFC inventory will only be presented to the Security System Administrators. The one listed in document JAGDM 2014-02-11 from 16/06/2014 is an updated version of the one from 22/08/2013 that can be distributed to the JAGDM members.

## 6. NAFO issues

### 6.a. Recommendations for adopting an ISMS for NAFO

Document JAGDM 2014-02-08, the NAFO Secretariat informed that in the last STACTIC it was instructed to start an evaluation of the relevance for NAFO to have an ISMS. It was agreed that the group should give the NAFO Secretariat some thoughts about why NAFO needs an ISMS. This should be done in a short letter to the NAFO Secretariat to be used for presentation at the STACTIC meeting in the NAFO Annual meeting in September. First the chair should write a draft and sent it to the participants of the JAGDM June meeting for comments with deadline one week. The letter sent to the NAFO Secretariat is Annex 7 of this report. Then STACTIC will revise this ISMS issue and the NAFO CPs will decide the go forward or not. If the decision is to go forward, it is also important to decide some main guidelines for the work. The ISMS of NEAFC is in line with the ISO 27001:2005, the current version of this standard since September 2013 is ISO 27001:2013. If possible it is important to know if NAFO will start the work in line with the ISO 27001:2013, follow another standard or not follow any standard. The Chair conveyed to the NAFO Secretariat the availability of JAGDM as a joint group to help on the preliminary work.

If needed a specialised meeting within JAGDM could take place in 2015 to exclusively address NAFOs ISMS obviously including all the CPs.

## 7. Management of the North Atlantic Format (NAF)

### 7.a. Issues raised by a NAF user

As a follow-up of what was already discussed in the previous meeting the Chair introduced document JAGDM 2014-02-06 and summarised the exchange of emails with a NAF user, Mr Mark Oates from “Quick Access Computing” Papua New Guinea.

No further follow-up is required.

### 7.b. Issue raised by Norway concerning the use of the two-letter code DS (Directed Species) in the NAFO CEM

The Chair, as Norway representative, introduced document JAGDM 2014-02-07 describing the recent approval by NAFO of an “authorisation” message (AUT) where the data-element “directed species” (DS) raised implementation problems since the Observer Report(OBR) already has a “directed species” (DS) data-element with a different content. Document JAGDM 2014-02-07 also proposed a solution to the issue. This solution was not fully supported by the group.

The participants agreed that it is important that the description of data-elements in the Annexes of the NAFO CEM is detailed and unique enough to easily be used in IT systems. The AUT data-element DS includes a geographic area in addition to the species and this area is several combinations of known geographical areas. This is a new definition of content of an existing, still used, two-letter code. A duplicated use of code and unclear details will create implementation problems and a technical solution must be found.

It was agreed that there are different technical possibilities to solve the issue. The two-letter code name DS in the AUT report must be changed to avoid misunderstanding and the combinations of areas must be described better. The area description may be done more clearly in the existing Annexes of the NAFO CEM. A possibility is to include the use of a new coding of geographic polygons or combinations thereof, as some CPs already use a new list of polygon codes having some NAFO area combination codes already defined.

EU documents illustrating this coding of geographical polygons can be found Info 1 and 2 under this agenda point.

It was agreed that there is the need to develop a table with geographic polygons reflecting the definitions of NAFO's quota tables.

#### **7.c. CCAMLR follow-up on NAF developments**

The NAFO Secretariat introduced document JAGDM 2014-02-09 where CCAMLR Secretariat manifested the interest of following-up the development of NAF.

It was agreed that CCAMLR would be referred as a NAF user in the NAF website and that the Chair would send a letter to invite the CCAMLR Secretariat to attend future JAGDM meetings. The letter is Annex 5 of this report.

It was agreed that the Chair will inform formally other RFMOs, namely SEAFO, ICCAT, IOTC, WCPFC and SPRFMO, about the work of JAGDM as a joint advisory group. The letters are Annex 6 of this report.

## **8. Management of the websites**

### **8.a. JAGDM**

The Chair summarised the recent developments and proposed an exercise of mapping of all the codes used by NAF. EU volunteered to distribute existing code listing (see agenda item 9) and invited other CPs to complement description or add codes as required.

It was agreed to add a NAF tab to the JAGDM website. It was also agreed that on the next JAGDM meeting it would be discussed the best way forward on this matter.

### **8.b. NAF**

The Chair introduced document JAGDM 2014-02-10 containing the improved NAF history drafted by herself as the historical document from the NAF website with track changes. Some text improvements were agreed having the document on the screen, and a rev 1 of the document is uploaded. It was agreed that further additional improvements to the text would be exchanged by email and also addressed on the next JAGDM meeting.

## **9. Any other business**

### **9.a. State of play of standardisation project of data exchange in fisheries**

The EU representative did a presentation describing the procedures and content of the Project number 1000 of the UN/CEFACT aiming to standardise fisheries data exchange. Participants discussed different aspects of such a project including shortcomings and recent developments. The EU noted the importance of standardisation especially in the future ERS context. The EU invited participants and CPs to cooperate in the project. The EU volunteered to present project developments during the next JAGDM meeting.

Additional information was made available by the EU and is available as meeting documents Info 1 to 4.

## **10. Report to the Annual Meetings**

The Chair will present the summary of the reports from both JAGDM meetings to the Annual Meeting of NAFO in September and NEAFC in November.

## **11. Date and place of next meeting**

The Chair noted that depending on developments in NAFO's ISMS or possible issues raised by PECCOE or STACTIC in their autumn meetings there could be the need to call for a meeting in the first quarter of 2015 with the date and place to be agreed.

Independently of the possibility of have a meeting in the first quarter it was agreed that the group should meet in June 2015 in Canada

### **12. Closure of the meeting**

The Chair thanked the participants for the fruitful meeting and wished all a safe journey home.

The Chair closed the meeting at 16H00 on the 18 June 2014.

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

**Chair Fasmer, Ellen** (Last chair of NEAFC AGDC acting until the chair of JAGDM is elected.)

**NAFO Secretariat**

Kendall, Matt

**NEAFC Secretariat**

Neves, João

**Denmark (in respect of the Faroe Islands and Greenland)**

Gaardlykke, Meinhard

Kruse, Martin

Lund, Mads

**European Union**

Callewaert, Francky – EC

Eliassen, Jorgen – Denmark

**Iceland**

Sighvatsdóttir, Elín

**Norway**

Fasmer, Ellen

**Russia**

Volkov, Viktor



## Annex 2. Agenda

1. Opening of the meeting
2. Appointment of the rapporteur
3. Discussion and adoption of the Agenda
4. Election of the Chair and Vice-Chair
5. NEAFC issues
  - a) Issues raised by PECCOE
    - i. Possibility to use “none” and more than one gear type in the mandatory data-element “vessel gear” (GE) of the notification (Annex II.a.1 of the Scheme)
    - ii. Possibility to use more than one regulated species in an authorisation and suspension without having to amend the Scheme. The data- element “regulated resource” (RR) of the authorisation and suspension are Annex II.b.1 and Annex II.b.2 of the Scheme).
  - b) NEAFC Information Security Management System (ISMS)
    - i. Upgrade to ISO 27001:2013 version (ISMS article 4 last paragraph)
    - i. The work of the Security systems administrators
    - ii. Information Security Incident Management ( ISMS article 13)
    - iii. Risk management ( ISMS article 3) status of the work
    - iv. Annual Review of the NEAFC Inventory ( ISMS article 7.1)
6. NAFO issues
  - a) Recommendations for adopting an ISMS for NAFO
7. Management of the North Atlantic Format
  - a) Issues raised by a NAF user
  - b) Issue raised by Norway concerning the use of the two-letter code DS (Directed Species) in the NAFO CEM.
  - c) CCAMLR follow-up on NAF developments
8. Management of the websites
  - a) JAGDM
  - b) NAF
9. Any other business
10. Report to the Annual Meetings
11. Date and place of the next meeting
12. Closure of the meeting

### Annex 3. Draft List of Documents

Document	Agenda Item	Document title
JAGDM 2014-02-00	1	Draft list of documents
JAGDM 2014-02-01	3	Draft Agenda
JAGDM 2014-02-02	-	Draft list of participants
JAGDM 2014-02-03	5.a.i	Description of the interim solution (SCH letter 13/27
JAGDM 2014-02-04	5.a.ii	Document PE 2014-01-24 (The Russian proposal that is the reason for PECCOE to ask JAGDM for advice.
JAGDM 2014-02-05	5.b.i	When and how to upgrade the NEAFC ISMS to be in line with the ISO 27001:2013 version.
JAGDM 2014-02-06	7.a	Questions from a NAF user (JAGDM 2014-01) Copy of emails sent and received on behalf of JAGDM.
JAGDM 2014-02-07	7.b	Norway request-NAF coding problem
JAGDM 2014-02-08	6.a	Information Security and Management System (ISMS) from Static Meeting
JAGDM 2014-02-09	7.c	Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) on May 19th, 2014
JAGDM 2014-02-10	8.b	Proposed changes to the history page of <a href="http://www.naf-format.org">www.naf-format.org</a>
JAGDM 2014-02-11	5.b.v	NEAFC Inventory
Info.1		FMZ and Fishing Stocks Geodata v2.2 dataset
Info.2		FMZ available for NAFO
Info.3		NAF 2 FLUX Vessel Position 1p1 mapping
Info.4		Mapping ERS NO RFMO short (3)
Info.5		FLUX VMS IG v02
Info.6		FLUX P1000-7 Vessel Position domain v1-0-0



#### Annex 4. Election of Chair and Vice-Chair (Agenda Item: 4)

As agreed in the JAGDM 2014-02 meeting this e-mail was sent to the presidents of NEAFC and NAFO, hoping to solve the problems with the election of chair and Vice-Chair of JAGDM.

In the Terms of Reference for JAGDM it is stated that the Chair and Vice-Chair shall be elected from among the participants of the group. But a delegate of JAGDM needs a mandate from "home" to be able to step forward to take a chair election. Hopefully this e-mail will result in somebody getting the mandate needed to commit themselves to these roles that is so important for the function of the group.

**Copies were sent to:** Sylvie Lapointe (Chair of Fisheries Commission NAFO), Gene S. Martin (Chair of STACTIC NAFO), Fred Kingston (Executive Secretary of NAFO), Stefan Asmundsson (Secretary of NEAFC), Gylfi Geirsson (Chair of PECCOE NEAFC).

**Fra:** Ellen E. Fasmer

**Sendt:** 31. juli 2014 13:09

**Til:** 'Johan-H.Williams@nfd.dep.no'; 'jhw@nfd.dep.no'; 'veronika.veits@ec.europa.eu'

**Kopi:** 'sylvie.lapointe@dfp-mpo.gc.ca'; 'gene.s.martin@noaa.gov'; 'fkingston@nafo.int'; Stefan Asmundsson; Gylfi GEIRSSON

**Emne:** Election of Chair of the Joint Advisory Group on Data Management (JAGDM)

Dear Presidents of NEAFC and NAFO  
Johan H. Williams  
Veronika Veits

As you will know, the Annual meetings of NEAFC and NAFO last year both adopted the establishment of an Joint Advisory Group on Data Management (JAGDM) to be the successor of the NEAFC Advisory Group for Data Communication (AGDC). I was the last Chair of AGDC.

Following the establishment of JAGDM, I was informally approached by some people regarding the possibility of being the Chair of JAGDM. I made it clear that this was not something I could do. I had already chaired AGDC for some time, and other professional commitments would make it difficult for me to take the role of JAGDM Chair.

However, I volunteered to serve as the interim Chair of JAGDM from 1 January 2014 when the group's establishment would become formally effective until the first JAGDM meeting in March 2014. This to ensure continuity and make it possible for the NEAFC and NAFO Secretariats to have a representative of the Contracting Parties to work with in preparing the first meeting of the new group.

The initial JAGDM meeting was in Halifax in March and went well, but the delegates were unable to elect a Chair. There seemed to have been a lack of consultation before the meeting, both within and among the Contracting Parties, regarding who should and could take the role of Chair and Vice-Chair. I accepted to continue as interim Chair until the second meeting, but appealed to the participants to be prepared to have an election then. I was therefore confident that this issue would be resolved at the June meeting of JAGDM. Unfortunately still no candidates were identified, and the election of Chair and Vice-Chair of JAGDM could not take place. I am still the interim Chair of JAGDM.

I am writing to you to ask you please to consult between the two of you, and with your respective Contracting Parties, to ensure that candidates are identified for the positions of JAGDM Chair and Vice-Chair well in advance of the next meeting of the group. I realise that the joint nature of JAGDM makes this a slightly more complicated issue than regarding groups that are simply NEAFC groups or NAFO groups. However, for JAGDM to function properly it needs to have a Chair and Vice-Chair. It is certainly not a good reflection on the cooperation between the two organisations if it continues to be a problem to find candidates for the chairing that can get authorisation to commit themselves to these roles.

As I said at the outset, it is not possible for me to continue in the role of Chair. I have nevertheless been doing my best to serve as an interim Chair and will represent the group in the Annual meetings of NEAFC and NAFO this year to present the reports from the two JAGDM meetings, but I am sure you will understand that this is not a situation I can continue with.



I trust that the result of your joint efforts will be that candidates for JAGDM Chair and Vice-Chair will be identified soon. This will hopefully make it possible for such candidates to start working with the two Secretariats to prepare for the next meeting of JAGDM. I can assist in such preparations, as appropriate.

Best regards

***Interim Chair of JAGDM***  
***Ellen E. Fasmer***

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## **Annex 5. Commission for Conservation of Antarctic Marine Living Resources (CCAMLR) follow-up on NAF development** (Agenda Item: 7c)

The NAF secretariat received e-mails in May 2014 from Tim Jones IT manager CCMLAR. The organization is using the North Atlantic Format and want to register interest in this format and be listed as a user in the webpage.

Mail sent 22 August

CCAMLR as NAF user and JAGDM participant

**To IT Manager Tim Jones**

**CCAMLR**

Thank you for contacting. Please be informed that the **Joint Advisory Group on Data Management (JAGDM)** since January 2014 has the responsibility for the NAF web page. This group has in its *Terms of Reference* the responsibility to act as the repository for the formats used by NEAFC and NAFO. ([www.jagdm.org](http://www.jagdm.org)).

JAGDM had a meeting 17-18 June and agreed that it would be correct and useful to have CCAMLR listed as a NAF user on the <http://www.naf-format.org>

The group also has the following in its **Terms of reference** "*The Advisory Group may, as appropriate, invite other RFMOs, and/or intergovernmental organizations to nominate persons with relevant expertise to be participants in the Advisory Group.*"

Please be informed that the Advisory Group decided in their June meeting that CCAMLR will get invitations to the upcoming JAGDM meetings. CCAMLR is welcome to nominate meeting participants if you think that is appropriate and possible to manage.

Best regards

For JAGDM  
Ellen E. Fasmer  
Interim chair

## **Annex 6. New Joint Advisory Group on Data Management (JAGDM)**

### **To Secretariats of:**

SEAFO  
ICCAT  
IOTC  
WCPFC  
SPRFMO

Friday 22 August 2014

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### **Re: New Joint Advisory Group on Data Management (JAGDM)**

Please be informed that in 2013 NEAFC and NAFO decided to form a ***Joint Advisory Group on Data Management***. This group started its work in January 2014 and has the web page [www.jagdm.org](http://www.jagdm.org). It is the successor to the *NEAFC Advisory Group on Data Communication (AGDC)*.

For the purposes of JAGDM, “data management” refers to the design of relevant frameworks and any technical issues related to the generating, storing, transmitting and use of fisheries related data, including data processing, protocols, standards and data security and confidentiality.

According to the *Terms of Reference* the Advisory Group shall consider and evaluate developments in, and issues related to, data management in relation to NEAFC, NAFO and to the extent practical other Regional Fisheries Management Organisations (RFMOs).

The Advisory Group will have at least one meeting each year, and if needed also work electronically to elaborate on issues between meetings.

The Advisory Group shall contribute to a close cooperation regarding data management among the Secretariats of NEAFC and NAFO, and, as appropriate, their cooperation with the Secretariats of other RFMOs.

If your organisation wants to take part in the work of this technical experts Advisory Group, have questions relevant for the Advisory Group to elaborate on, or just have questions according to this new group, please contact the NEAFC or NAFO Secretariats.

Best regards  
For JAGDM  
Ellen E. Fasmer (Interim chair)

## **Annex 7. Recommendation for adopting an ISMS for NAFO** (Agenda Item: 6a)

**Mail sent 22 August**

To the NAFO Secretariat

Bergen 22 August 2014

From JAGDM

At its June 2014 meeting, JAGDM was asked to give advice to the NAFO Secretariat concerning why NAFO needs an Information Security Management System (ISMS).

When the IT-system of NAFO first was developed many years ago, security and confidentiality aspects were addressed by an annex in the CEM. This covered the needs at that time. However, the handling of IT-information in NAFO is no longer limited to sending data between Contracting Parties and the NAFO Secretariat using secure lines and storing data in the computer at the office of the Secretariat.

Moreover, the NAFO website raises further concerns. People with several needs and wishes may want to access and have information presented on the website, and in some cases may also want to input data into the system.

Without an overview and some formalization of the total information handling within NAFO, it is not possible for the Contracting Parties to know what the security and confidentiality policy of the organization is. Currently the NAFO Secretariat has followed its own policies without any guidelines, other than the Annex II.B of the CEM. Although the NAFO Secretariat tries to follow industry standards, it is not clear whether these standards would be acceptable to all Contracting Parties, particularly those that might have different standards in their own countries. This raises risks that certain confidential data may be accessed incorrectly and the organization get negative reactions.

NAFO does not need to have an ISMS in line with a standard such as NEAFC has done. However if NAFO is going to have an overview and formalize its information security it is beneficial if it is done in line with a standard, specially taking into consideration that NAFO has many Contracting parties that might have very different systems in their own countries.

Data stored on the NAFO IT-system largely contains copies of data also stored by the Contracting Parties so new copies of data could be submitted if ever needed. However the Port State data is different. The only copy of this data is only stored on the Secretariat's servers.

In a modern IT-world it is very important to be sure that one has a system that is secure enough to give the organization the decided level of business continuity.

Data has to be classified correctly and from that handled according to the risks identified.

Having an ISMS will not necessarily give the organization a higher or lower level of security, but it makes it possible for the Contracting Parties to know what the status is and from that decide if changes are needed. There will be guidelines for many situations that are meant to help the employees to take the correct decisions.

Preparing the ISMS for NEAFC has been a lot of work and if NAFO is planning an ISMS there has to be people in the Secretariat doing the information-finding job. It is important that one starts with an assessment of the current situation.

If NAFO wishes to use an international standard we recommend that NAFO follow the same ISO standard as NEAFC uses. This will help harmonization between the two organizations. If so NAFO should most likely use the latest ISO 27001:2013 standard that NEAFC will be updating their ISMS to presently.

Best regards

For JAGDM  
Ellen E. Fasmer  
Interim chair



**SECTION VIII**  
(289–316)

**Report of the Fisheries Commission  
Ad hoc Working Group to Reflect on the Rules Governing Bycatches, Discards and  
Selectivity in the NAFO Regulatory Area**

**7–8 July 2014  
Dartmouth, Nova Scotia, Canada**

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## **Report of the Fisheries Commission Ad hoc Working Group to Reflect on the Rules Governing Bycatches, Discards and Selectivity in the NAFO Regulatory Area**

(FC Doc. 14/06)

**7–8 July 2014  
Dartmouth, Nova Scotia, Canada**

### **1. Opening**

The Fisheries Commission (FC) Chair Sylvie Lapointe (Canada) opened the meeting at 0930 hrs on Monday, 7 July 2014 at the NAFO Headquarters in Dartmouth, Nova Scotia, Canada.

Representatives from Canada, Denmark (in respect of the Faroe Islands and Greenland) (DFG), European Union (EU), Japan, Norway, the Russian Federation, and the USA were in attendance. Observers from Ecology Action Centre and World Wildlife Fund were in attendance (Annex 1).

It was noted that this WG as the name implies deals with bycatch, discards, selectivity which have significant science component; and that the Scientific Council (SC) should be adequately represented at this WG. In the absence of the SC Chair, the SC Coordinator, Neil Campbell was asked to attend the meeting.

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

Ricardo Federizon (NAFO Secretariat) was appointed Rapporteur.

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

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

### **4. Review of Terms of Reference (FC Doc 13/25)**

The terms of reference (ToR) of this ad hoc WG as documented in FC Doc 13/25 were reviewed. There was no need to revise the document.

### **5. Discussion on the document *FAO International Guidelines on Bycatch Management and Reduction of Discards***

The Secretariat presented the document *FAO International Guidelines on Bycatch Management and Reduction of Discards* (Annex 3). The Guidelines were developed during the FAO Technical Consultation Meeting in Rome in 2010 and endorsed by the FAO Committee on Fisheries at its meeting in Rome, Italy in February 2011. The Guidelines are intended to assist States and Regional Fisheries Bodies like NAFO.

Sections of the Guidelines and their specific provisions were identified and highlighted in the presentation --- Management Framework, Bycatch Management Planning, Data Collection and Bycatch Assessments; Research and Development; Measures to Manage Bycatch and Reduce Discards, and Monitoring Control and Surveillance (MCS)—as these were deemed relevant to NAFO. In the section of Data Collection and Bycatch Assessment, for example, the importance of standardized logbooks and VMS data, as well as observer programs was stressed.

The WG was in agreement that NAFO policies and measures concerning bycatch and discards should be in alignment with international instruments such as the *FAO International Guidelines on Bycatch Management and Reduction of Discards*. It became known that FAO currently does not have a monitoring program on the implementation of the Guidelines; but NAFO could inform FAO about its initiative in this regard.

### **6. Discussion on flag State practices concerning bycatch, discards and selectivity**

Presentations were made by some Contracting Parties (CPs) on their bycatch and discard policies and practices (Annex 4).



The Canadian presentation described the range of measures and tools used domestically in addressing the bycatch and discard issues. One of the key underlying principles is effective accounting for all catch including bycatch and non-retained catch. Bycatch and discard issues are generally fisheries-specific and fisheries-specific solutions are developed with stakeholders based on a suite of tools and measures.

The EU presentation was about the landing obligation in the new EU Common Fisheries Policy. The scope covers all catches under TAC management and implementation of the new policy for North Sea and Atlantic waters starts in 2016 and implementation will be gradual to be fully in place in 2019.

The Norwegian presentation focused on the Norwegian policy in this regard, history and the basic ideas. Discard ban was first introduced in Norwegian fisheries in 1987 in fisheries on cod and haddock in the Barents Sea. Since then the ban has been expanded and developed and now there is a general discard ban in Norwegian fisheries. The discard ban itself is an important political statement, but at the same time it is recognised that there is a need for supporting mechanisms to help the fishermen to avoid to be set in a situation where they feel a need to discard. The whole management system needs to be designed in a way that will counter the discards. Taking account of the dynamics of the fishing industry the management system needs to be in a continuous development.

USA informed that it uses a variety of tools including, but not limited to, effort controls, catch limits on target and bycatch species, minimum fish size, gear requirements (e.g. mesh size and gear modifications to enhance selectivity), gear restricted areas, area closures, electronic monitoring (video cameras), full retention, measures to improve survivability of catch and discards (e.g. specific handling practices).

DFG informed that in the Faroese fisheries discards are prohibited and all fish must be landed. This policy has been in place since 1994.

The WG found the presentations to be informative and they formed a good basis for discussion. The WG encouraged CPs to continue the information sharing regarding their policies and best practices on catch and discards.

## **7. Review and Discussion of NAFO Conservation and Enforcement Measures (NCEM) provisions governing bycatch, discards and selectivity**

The Secretariat made a presentation on bycatch and discards in the NAFO Regulatory Area. It highlighted the specific provisions in the NCEM that governs bycatch and discards. The presentation reported on the results of the qualitative and quantitative analysis using the 2013 daily catch reports (CATs) as the data source. Bycatch of major stocks (cod, redfish, Greenland halibut, yellowtail, and skates) on the Flemish Cap and at the Tail and Nose of the Grand Banks, as well as temporal variability of bycatch and discards were presented. The need for consistency in the use of terms and clarity in the intent of meaning in the NCEM was also stressed (Annex 5).

The WG appreciated the significance of the information that was presented by the Secretariat. The following were some of the highlights of the observations and issues that emanated from the presentation:

- There were higher incidences of bycatch in certain fisheries and areas. Furthermore, in some instances, there also appears to be a temporal component. For example, Greenland halibut is a relatively “clean” fishery compared to Thorny skate which has high a bycatch of cod and American plaice (which are under moratorium), as well as yellowtail flounder. In the Flemish Cap, the amounts of the redfish bycatch of the cod fishery, and vice versa, suggest that these two stocks constitute a mixed fishery. It was noted that further analysis in these areas should be considered.
- The presence of some bycatch anomalies was observed, for example, bycatch consisting of witch flounder and skates in the Flemish Cap, which are currently unregulated. It was suggested that future analysis pay particular attention to such anomalies and any related trends.
- The discard analysis relied on the “rejects” information contained in the CAT reports as they are the only available quantitative information on discards in the NAFO Regulatory Area. Due to the limited data available, the WG expressed concern that the reported quantities may not reflect the true magnitude of the actual discards. More generally, there appears to be concerns about how discards are accounted for. The reasons for discards seem complex. Further analysis would be necessary to understand the different factors influencing discards.

- Some CPs commented that the bycatch and discard analysis could have produced more useful results with the tow-by-tow data (gleaned from fishers' logbooks), which would allow the identification of precise areas and fisheries encountering bycatch. Alternatively, CAT reports only provide information on a broad level (i.e. Division taken and other species caught during the same day).

Other CPs suggested that the use of CAT data in the bycatch and discard analysis as presented by the Secretariat was sufficient for this purpose (the tow-by-tow data are not forwarded to the Secretariat). Some CPs indicated that there are some practical reasons why these logbooks are not forwarded (e.g. paper submissions are in practice very difficult and for CPs having an Electronic Recording System in place the electronic standards are not defined/compatible with the system at the NAFO Secretariat).

The debate – whether CPs forward tow-by-tow data to the Secretariat – remains unresolved. It was noted the similar debates have ensued in other fora, e.g. at WG Catch Reporting for catch estimation purposes, and at STACTIC for the purpose of evaluating compliance of catch reporting requirements. In this regard, recommendations in addressing this issue were drafted (see Recommendations 6 and 8 in item 8).

A proposal to amend Article 5, specifically the sub-articles relating to retaining the catch of the fish stocks after their fishery closure was brought forward by the Russian Federation (FC-BDS WP 14/01). Some CPs noted concerns with the proposal, in particular the potential for 3M Redfish catch to exceed the TAC. There was a brief discussion as to whether the overall TAC for managed species, particularly 3M Redfish, should include both retained and discarded catch. It was subsequently noted by one CP that the NCEM currently include discards in the TAC/quota. Another CP noted that there are different possible interpretations on counting discards and that some provisions of the NCEM can be interpreted as if discards are not counted against the quotas. Several CPs observed that current management regime for 3M Redfish may be contributing to discards of this stock, as it may reduce CP's ability to effectively manage bycatch because some CPs have been allocated more quota than the scientifically-derived TAC. Although the WG was unable to come to a consensus on this proposal, other approaches to improve or reform the current system were briefly discussed, including: setting aside a portion of the TAC explicitly for bycatch; spreading the TAC across a larger time period (e.g. quarterly allocation); and reducing allocations to align their total with the TAC. Some CPs noted that the Russian proposal had greater implications and must be scrutinized in connection with other articles in the NCEM; and that this WG was not the appropriate body to deliberate on the proposal. It was suggested that proposals like this should be presented in Fisheries Commission/STACTIC.

Under the general discussion on how to manage bycatch and reduce discards, EU presented a discussion paper (FC-BDS WP 14/02) entailing three general steps: 1) determining the dimension of the problem, 2) identifying NCEM provisions and other factors that might incentivize discards, and 3) identifying potential management measures. The working paper was not adopted by the WG but provided a basis for discussion, in particular on the dimension of issues related to discards and contributed to the identification of specific recommendations to FC (outlined in item 8).

## 8. Recommendations to forward to the Fisheries Commission

Noting the negative impacts that bycatch and discards may have on regulated species in the NAFO Regulatory Area, it is **recommended**:

1. **that the Fisheries Commission continue to address this issue by inter alia allowing this WG to continue;**
2. **that the objectives of this Working Group focus on effective management of bycatch and minimization of discards in the NAFO Regulatory Area, to the extent practicable, by recommending appropriate policy and regulatory changes that recognize the diverse factors influencing and incentivizing bycatch and discards in each fishery, the current biological status of affected species, and domestic legislation affecting bycatch and discards;**
3. **that the Fisheries Commission consider amendments to the management measures and approach for managing 3M redfish fishery that address factors promoting discards;**

4. that the FC task STACTIC to support the WG as necessary including the development of standardized language for by-catch and discards throughout the CEM, including clarifying ambiguous or inconsistent terminology;
5. that the FC include SC on this issue as necessary through this WG. To start with the FC-SC dialogue will give specific consideration to the discussions of this WG;
6. that the Secretariat continue to analyze data about bycatch and discards in NAFO fisheries. The analysis in particular should identify areas and fisheries of concern; identify anomalies and trends regarding bycatch and discards; and give priority to species under moratorium or instances where there may be conservation issues;
7. that Contracting Parties continue to share available information on domestic practices and/or policies to address bycatch and discards;
8. that the FC give further consideration to improving bycatch and discards data availability and quality, including options already identified in other NAFO bodies. This would be made available to the Secretariat, SC and the WGs of the FC and SC for the purpose of undertaking bycatch and discard analysis;
9. that the FC work jointly with SC to task appropriate NAFO bodies to develop a draft definition of bycatch and to compile a draft list of bycatch species per GC Action Plan (GC Doc 12/1).

## 9. Other Matters

No other matter was discussed.

## 10. Adoption of the Report

This report was adopted through correspondence after the meeting.

## 11. Adjournment

The meeting was adjourned at 1600 hrs, Tuesday 8 July. The Chair thanked the meeting participants for their cooperation and input and the Secretariat for the support. The participants likewise expressed their thanks and appreciation to the presiding Chair for her leadership.

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

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## **Annex 2. Agenda**

1. Opening
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Review of Terms of Reference (FC Doc 13/25)
5. Discussion on the document *FAO International Guidelines on Bycatch Management and Reduction of Discards*
6. Discussion on flag State practices concerning bycatch, discards and selectivity
7. Review and Discussion of NAFO Conservation and Enforcement Measures (NCEM) provisions governing bycatch, discards and selectivity
8. Recommendations to forward to FC
9. Other Matters
10. Adoption of Report
11. Adjournment



### Annex 3. FAO Guidelines



**International Guidelines on Bycatch Management and Reduction of Discards**

- Developed and adopted by the FAO Technical Consultation, Rome 2010
- Purpose: assist States and RFMO/As in implementing ecosystem approach to fisheries (EAF) and UNGA Resolution 64/72
- Endorsed by COFI at its meeting in February 2011

**Sections of the Guidelines relevant to NAFO as a RFMO**

- Management Framework
- Bycatch Management Planning
- Data Collection and Bycatch Assessment
- Research and Development
- Measures to Manage Bycatch and Reduce Discards, and
- Monitoring, Control and Surveillance (MCS)

**Management Framework**

3.2.4 States and RFMO/As should:

- develop/amend management plans
- promote incentives to encourage compliance

3.2.5 States should

- strengthen and build the capacity of RFMO/As.

3.2.6 *Compatibility of measures in EEZ and ABNJ.*

**Bycatch Management Planning**

3.1. States and RFMO/As should

- ensure all significant sources of fishing mortality are addressed in the planning.
- identify and assess fisheries where bycatch/discards occurs and specify requirements for management actions.
- ensure bycatch management planning are incorporated into broader fisheries management plans.
- ensure best practices in cooperation with relevant stakeholders.

**Data Collection and Bycatch Assessments**

3.1.1 RFMO/As should

- establish monitoring and assessment techniques.
- implement data collection procedures including use of observers, standardized logbooks and VMS.
- strive to achieve a level of observer programs sufficient to provide quantitative estimates.

Item 1: Regional Framework, Regional Management Planning, Data Coll. & Assessment, M & D, Research Measures, BMC

## Research and Development

RFCMOs should

6.1 conduct and promote research — biology, fishing gears, economic consequences.

Item 1: Regional Framework, Regional Management Planning, Data Coll. & Assessment, M & D, Bycatch Measures, BMC

## Measures to Manage Bycatch and Reduce Discards

7. RFCMOs should

- ensure that measures are binding, measurable, science-based, enforceable, fully implemented.
- utilize a range of tools
  - input/output controls,
  - bycatch limits,
  - ban on discards,
  - fishing gear improvements,
  - spatial and temporal measures,
  - incentives for fisheries for compliance.

Item 1: Regional Framework, Regional Management Planning, Data Coll. & Assessment, M & D, Bycatch Measures, BMC

## Monitoring, Control and Surveillance (MCS)

8. RFCMOs should *where appropriate and to the extent possible*

- require reporting of all relevant information related to bycatch and discards,
- undertake MCS of all relevant fishing operations, including handling on board and landings at ports
- may include inspections of fishing vessels and gear
- encourage participation of fishers in policy development.

*FAO International Guidelines on Bycatch Management and Reduction of Discards*

Thank you!

10/10/14, 10:00 AM, 10/10/14, 10:00 AM, 10/10/14, 10:00 AM



## Annex 4. CP presentations on domestic bycatch and discards policies

### Canada:

**Management of Bycatch and Nonretained Catch in Canada**

Northwest Atlantic Fisheries Organization  
July 7-8, 2014  
Halifax, Nova Scotia

1

Fisheries and Oceans Canada / Pêches et Océans Canada / Canada

**Management of Bycatch and Discards in Canada**

**Increased International Attention on Bycatch and Discards**

- Effective accounting for all catch including bycatch and non-retained catch is a key to sustainable fisheries and an ecosystem approach.
- Concerns persist that levels of fishing mortality on bycatch in some of the world's fisheries is threatening fish stocks and biodiversity.
  - In 2004, FAO estimated that discarded global catch was 7 million tonnes
- This has led the FAO to develop International Guidelines for Bycatch Management and Reduction of Discards (2011). Canada endorsed the guidelines.

2

Fisheries and Oceans Canada / Pêches et Océans Canada / Canada

**Management of Bycatch and Discards in Canada**

**Bycatch Management is Part of Canada's Sustainable Fisheries Framework**

- Canada is committed domestically and internationally to implementing conservation and management measures to address bycatch and discards.
- Canada is implementing an overarching policy framework – the Sustainable Fisheries Framework – to manage the impacts of fishing on:
  - Target catches
  - Bycatch and discards
  - Seafloor habitats
- In 2013, Canada introduced a policy on managing bycatch, which builds on the successes and best practices in Canadian fisheries and elsewhere.

3

Fisheries and Oceans Canada / Pêches et Océans Canada / Canada

**Management of Bycatch and Discards in Canada**

**Bycatch Management: Best Use of a Range of Measures and Tools (1)**

- Bycatch and discard issues, where they occur, are generally fishery-specific, and require fishery-specific solutions.
- Experience shows that the most durable and effective solutions are those developed with harvesters.
- Canada works with harvesters to tailor solutions to the specific problem, with the aim of managing the fishery so that the total catch and any discards are within conservation limits.
- Measures include avoiding bycatch, and managing bycatch when unavoidable. At-sea monitoring helps ensure measures are achieving the desired results.

4

Fisheries and Oceans Canada / Pêches et Océans Canada / Canada

**Management of Bycatch and Discards in Canada**

**Bycatch Management: Best Use of a Range of Measures and Tools (2)**

Measures to avoid bycatch:

- time and area closures to limit bycatch of small fish and species or stocks of concern
- gear and fishery modifications to improve selectivity, such as:
  - the *Nordmore* grate in the shrimp trawl fishery significantly reduce bycatch of groundfish
  - Minimum mesh size to avoid high catches of juvenile fish
  - Gear restrictions on midwater trawl (e.g., attachments)
  - Limits on bycatch amounts including move-away rules
- transferable quotas to access non-target catch and reduce discards

5

Fisheries and Oceans Canada / Pêches et Océans Canada / Canada

**Management of Bycatch and Discards in Canada**

**Bycatch Management: Best Use of a Range of Measures and Tools (3)**

Where bycatch is unavoidable:

- Required release of species at risk and others for conservation reasons:
  - Fish are returned to the sea for various reasons; not all discards are the same
    - Required live release of fish less than minimum size (e.g., Atlantic cod)
    - Live release of species at risk
- Limits to keep bycatch within conservation
- Discard bans
- Practices to maximize post-release survival
- Accurate reporting of total catch (retained and unretained)

6

Fisheries and Oceans Canada / Pêches et Océans Canada / Canada

Management of Bycatch and Discards in Canada

### Case Examples: Canada's Atlantic Groundfish Fishery

- Temporal / spatial closure in response to high levels of American plaice bycatch in Greenland halibut fishery (30 day closure of Management area 3Ld)
- Seasonal spawning closure for yellowtail flounder developed in consultation with industry and science

7  Fisheries and Oceans Canada / Pêches et Océans Canada 

Management of Bycatch and Discards in Canada

# Thank you

8  Fisheries and Oceans Canada / Pêches et Océans Canada 

### European Union:



**New Common Fisheries Policy of the EU: the landing obligation**

- gradual introduction: start in 2015, end 2019
- cover all commercially managed catches
- implementation through multiannual or discard plans

**scope**

- landing obligation for all catches under TAC – management
- respect international obligations

**gradual introduction**

- 2015: pelagic & industrial fisheries,
- 2015-17: Baltic Sea
- 2016-2019: North Sea and EU-Atlantic waters
- 2017-2019: Mediterranean, Black Sea, other waters/species

**Exemptions: allowance to return to the sea**

- prohibited and surviving species (scientific evidence)
- limited % of catches allowed to be discarded under *de minimis* (7%)
  - where no further selectivity is feasible
  - where handling costs are excessive

**Quota management / flexibility**

- max 9 % catches of non-target species counted against quota of target species
- max 10 % inter-annual banking & borrowing

**Undersized fish**

- to be landed,
- marketed for non-human consumption only

**Exemptions: allowance to return to the sea**

- prohibited and surviving species (scientific evidence)
- limited % of catches allowed to be discarded under *de minimis* (7%)
  - where no further selectivity is feasible
  - where handling costs are excessive

**Quota management / flexibility**

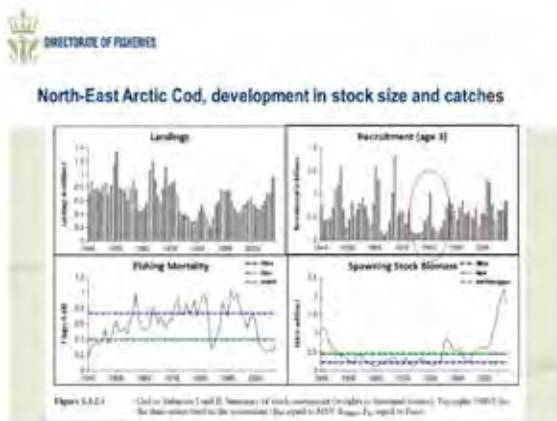
- max 9 % catches of non-target species counted against quota of target species
- max 10 % inter-annual banking & borrowing

**Undersized fish**

- to be landed,
- marketed for non-human consumption only



Norway:





### Discard regime

**Discard ban**  
+  
**Technical and regulatory measures**  
=  
**Discard regime**

The Norwegian point of departure is that we try to prevent, or help the fishermen to avoid or reduce, the catching of illegal fish in the first place.

### The toolbox to implement a comprehensive policy packet

- Adequate quota for the intended fishery
- Special regulatory measures
- Closed Area policy
- Requirement to change fishing grounds
- Systems handling unwanted bycatch
- Bycatch and immature regulations
- Gear selectivity
- Control, Enforcement and Sanctions



### Summary

The practical management challenge is to examine each fishery in regard to all possible sources to unwanted fishing mortality – and then try to reduce it to a minimum

Discard ban is a crucial part of the solution

Supportive measures must be introduced

Monitoring and control is important

No universal solution to the problem of discard

Flexibility and creativity needed when seeking solutions



Thank you

**USA:**

The following represents a list of the primary measures to help minimize by-catch and discards in domestic fisheries.

- Effort controls in some fisheries (number of access area trips and days-at-sea controls)
- Minimum fish sizes
- Minimum mesh/gear sizes
- Quotas for target and by-catch species
  - Accountability measures (closures, quota adjustment, gear requirements, possession limit restrictions) once exceeded
  - Quota trades to account for overages
  - Carry-over provisions for unharvested catch
  - Set-aside quotas for bycatch
- Net dumping prohibitions (herring), with trips terminated if nets are dumped
- Gear modifications (species/fishery-specific and area based)
  - Nordmore grate
  - Weak link, neutral buoyant line, fewer vertical lines, etc. for whales
  - Raised footrope trawl, separator trawls, extended headrope trawls
- Gear restricted areas in which only selective gear can be used
- Area closures
  - Seasonal
  - Area-specific, including habitat and high-bycatch areas
  - Spawning
  - Rotational areas to periodically reduce fishing impact on benthic species
- Electronic monitoring (video cameras) to address 2 primary objectives:
  - Document compliance with discard and net dumping prohibitions
  - Quantify discards in particular fisheries (bottom longline groundfish)
- Full retention of legal-sized fish
- Specific handling practices to improve survivability of bycatch and discards
  - Resuscitation
  - Prioritization of species returned to sea to maximize survival

## Annex 5. NAFO Secretariat Presentation: Groundfish bycatch in the NAFO Regulatory Area

NCEM provisions / Species Association / GHL / COD / RED / YEL / SKA / Retention / Discards / Concepts / Concluding Remarks

### Groundfish Bycatch in the NAFO Regulatory Area

(by the Secretariat)  
Agenda item 7

NCEM does not provide exact definition of *bycatch*.

**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 considered *bycatch*?



NCEM provisions / Species Association / GHL / COD / RED / YEL / SKA / Retention / Discards / Concepts / Concluding Remarks


Art. 6.1 – *to the extent possible, each CP shall ensure its vessels minimize by-catch of species from stocks identified in the Quota Table .*

Species/Stocks in the Quota Table\*: COD, RED, PLA, YEL, WIT, HKW, CAP, SKA, GHL, SQI, PRA.

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.

**Does this situation apply?** Quota had been allocated and fully utilized by CPs. Date after notification of closure when quota uptake reached 100%.



NCEM provisions · Species Association · GHJ · COD · RED · YEL · SKA · Retention · Discards · Concepts · Concluding Rem.

### By-catch limits (Art. 6.3.a – 6.3.e)

- For 3M Cod and 3LN Red: 1250 kg or 5%, whichever is the greater.
- For 3NO Cod: 1000 kg or 4%, whichever is the greater.
- For all other QT stocks where no quota has been allocated to flag States: 2500 kg or 10%, whichever is the greater.
- Stocks under moratoria and fully utilized "Others": 1250 kg or 5%, whichever is the greater.

Additionally,

- For 3LNO PLA in YEL fishery: 15% (Footnote 21 of QT)

Method of % percentage is prescribed in Art. 6.4.

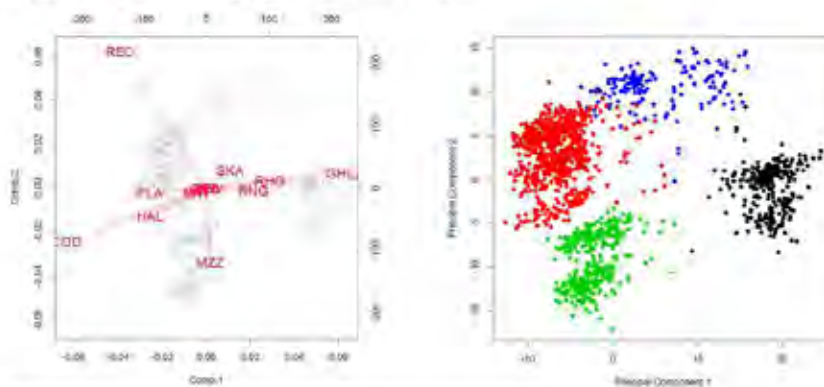
Percentages and limits apply to both **move-away** and **retention** provision.



NCEM provisions · **Species Association** · GHJ · COD · RED · YEL · SKA · Retention · Discards · Concepts · Concluding Rem.

### Species Association in Division 3M – The Cap.

*Principal Component Analysis.* Material: 2013 CAT reports



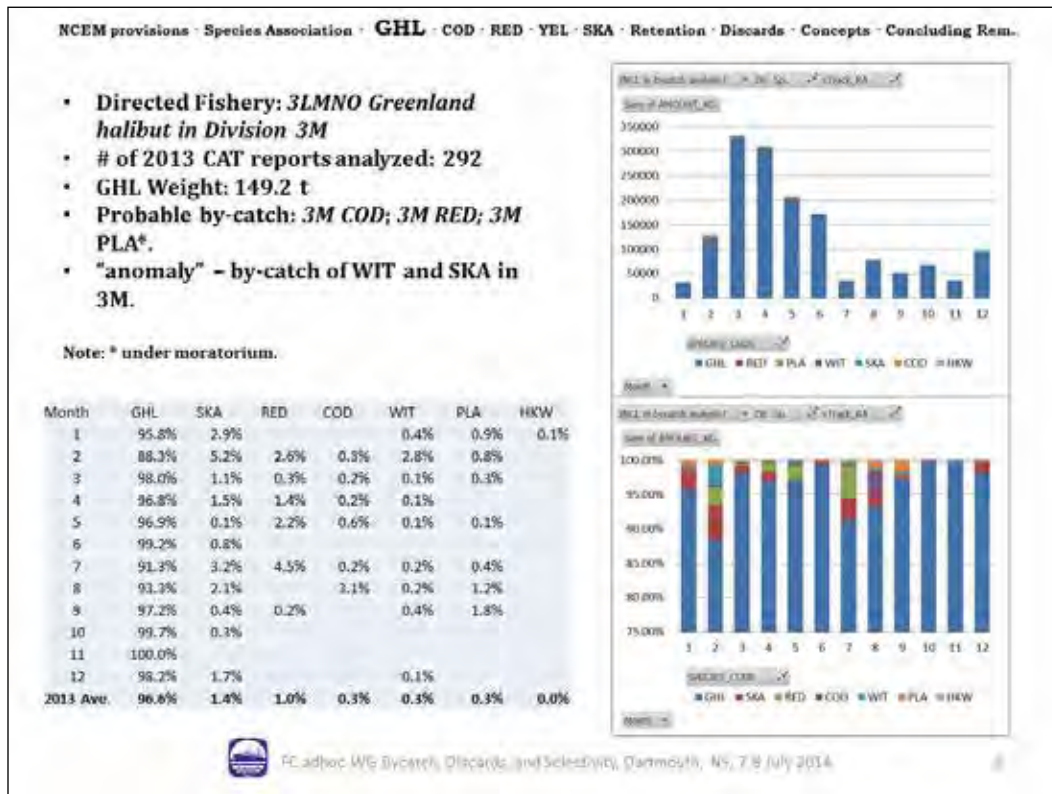
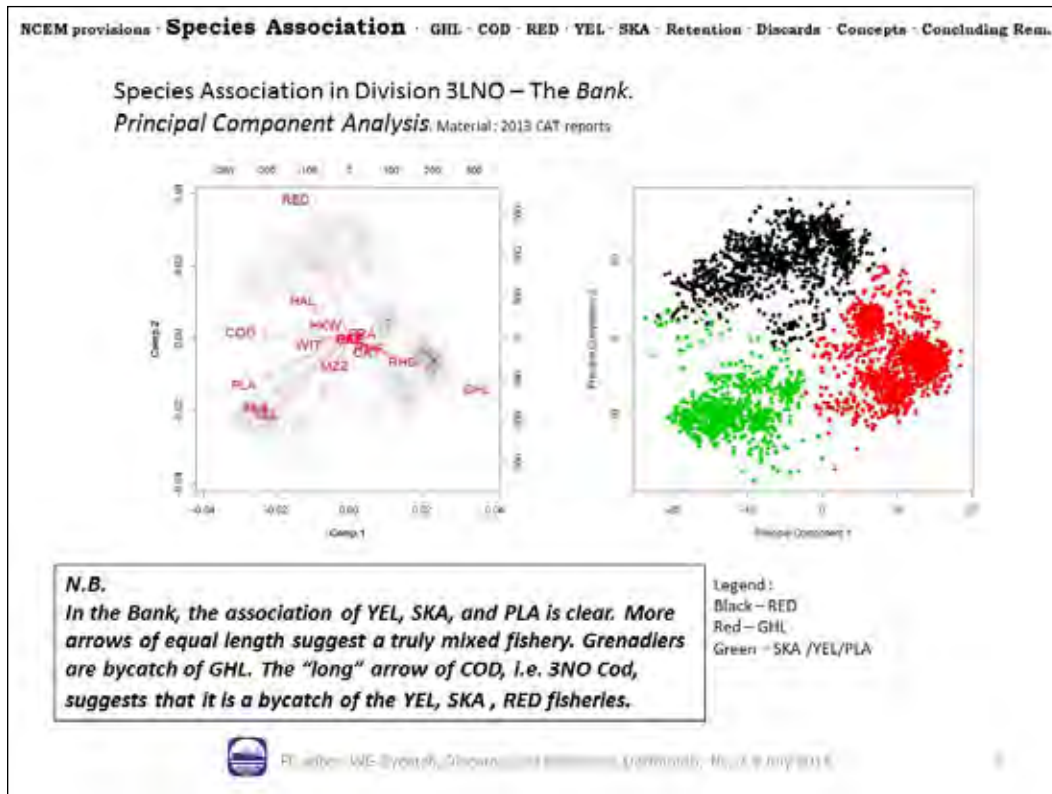
**N.B.**  
In Flemish Cap, GHJ is identified as "clean" fishery,  
although grenadiers as occasional bycatch.

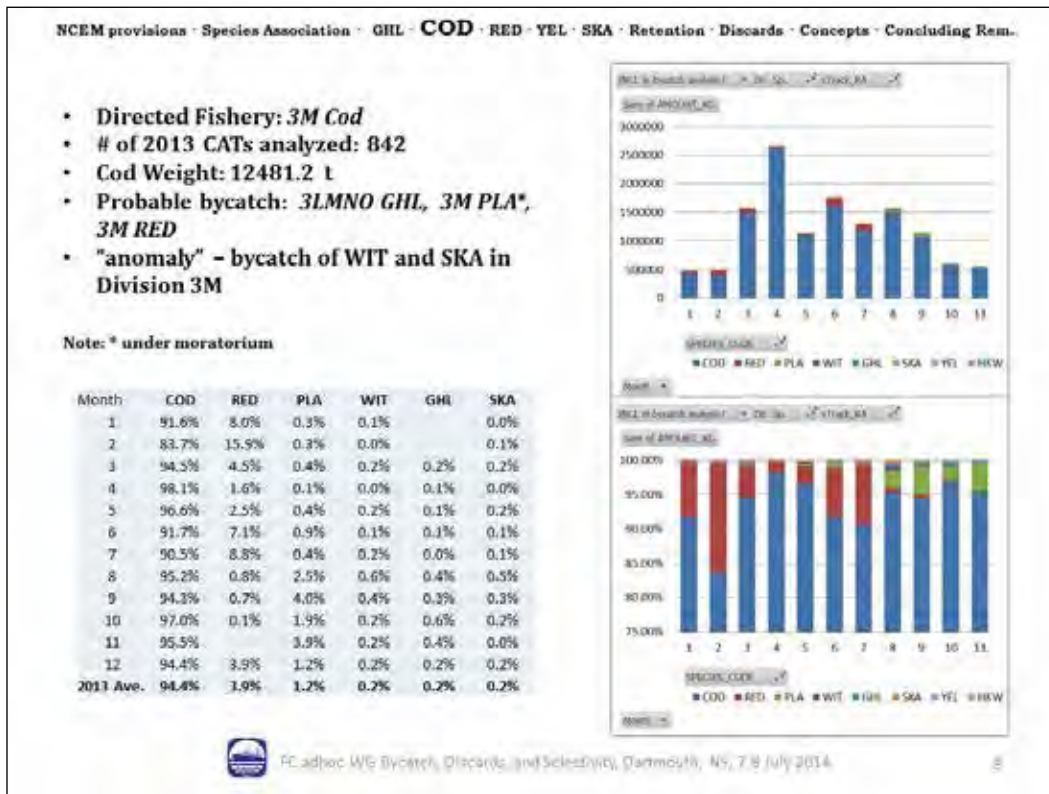
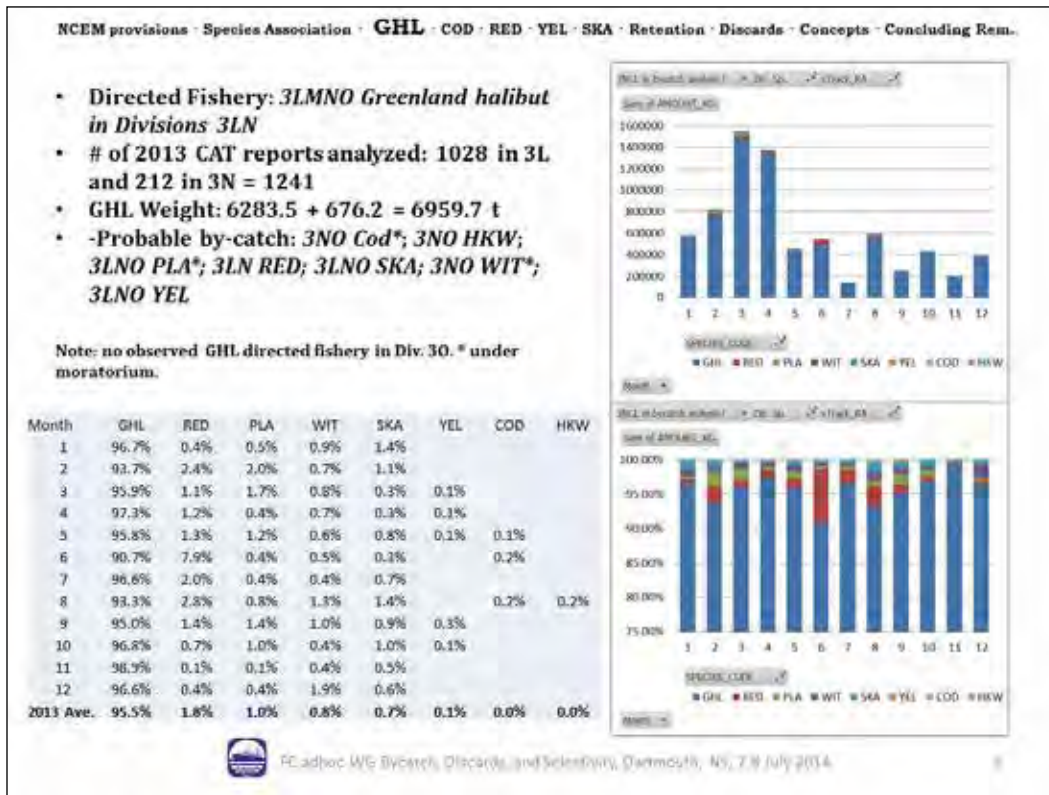
Legend:  
Black – GHJ  
Blue – RED/GHJ  
Red – RED/COD  
Green – COD/MZZ



FC WG-BDS, Discards and Retention, 7-8 July 2014





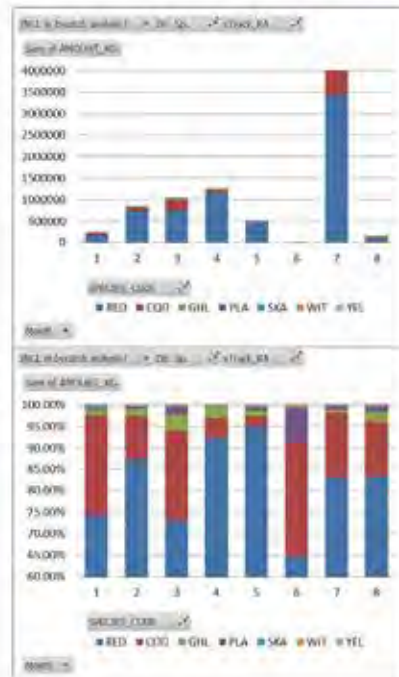


NCEM provisions · Species Association · GHL · COD · **RED** · YEL · SKA · Retention · Discards · Concepts · Concluding Rem.

- **Directed Fishery: 3M Redfish**
- **# of 2013 CATs analyzed: 458**
- **Redfish Weight: 6839.3 t**
- **Bycatch: 3M Cod, 31MNO GHL, 3M PLA\***
- **"anomaly" – bycatch of WIT and SKA in Division 3M**

Note: \* under moratorium

Month	RED	COD	GHL	PLA	SKA	WIT
1	74.3%	23.3%	1.3%	0.2%	0.6%	0.3%
2	87.4%	9.9%	1.6%	0.5%	0.3%	0.2%
3	72.8%	21.2%	3.8%	1.9%	0.1%	0.1%
4	92.4%	4.5%	2.5%	0.2%	0.2%	0.3%
5	94.9%	2.3%	1.4%	0.8%	0.2%	0.3%
6	64.6%	27.1%		7.7%		0.6%
7	83.1%	15.1%	0.5%	1.1%	0.2%	0.1%
8	81.4%	12.8%	2.1%	1.6%	0.1%	0.0%
<b>2013 Ave.</b>	<b>84.1%</b>	<b>13.1%</b>	<b>1.5%</b>	<b>0.9%</b>	<b>0.2%</b>	<b>0.2%</b>



FC adhoc WG Bycatch, Discards, and Selectivity, Dartmouth, NS, 7-8 July 2014

NCEM provisions · Species Association · GHL · COD · **RED** · YEL · SKA · Retention · Discards · Concepts · Concluding Rem.

- **Directed Fishery: 3LN Redfish**
- **# of 2013 CATs analyzed: 563**
- **Redfish Weight: 3773.1 t**
- **Probable Bycatch: 3NO COD\*, 3LMNO GHL, 3LNO SKA, 3LNO PLA\*, 3NO WIT\***

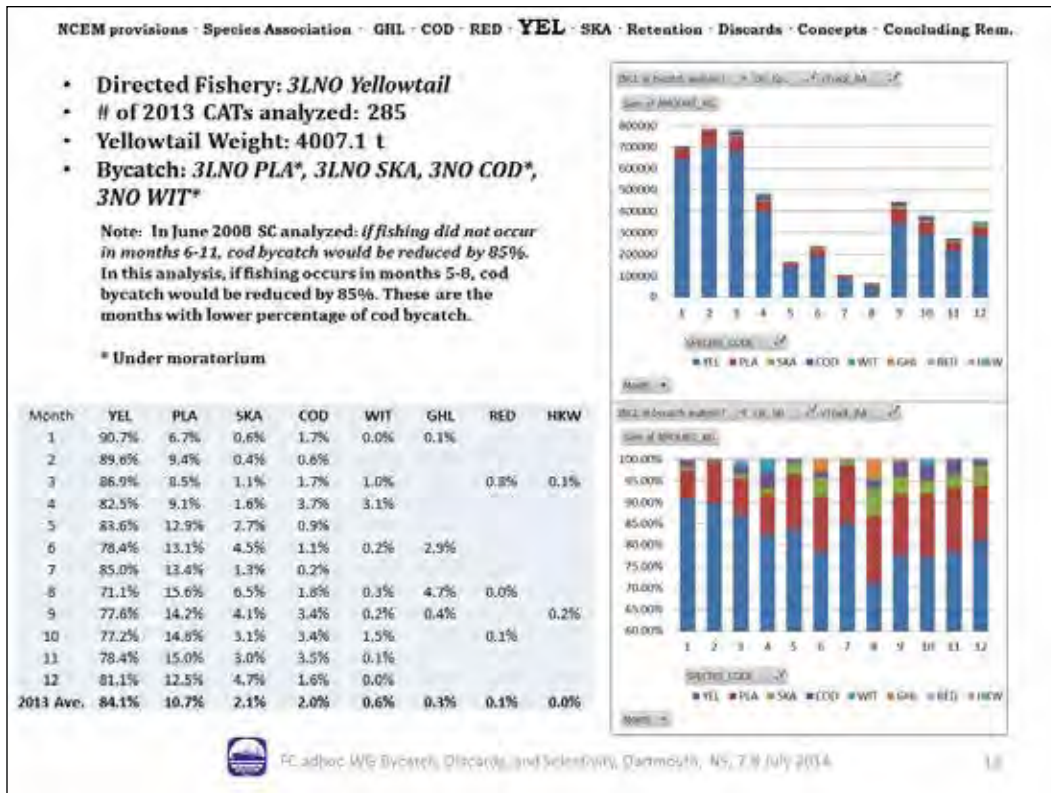
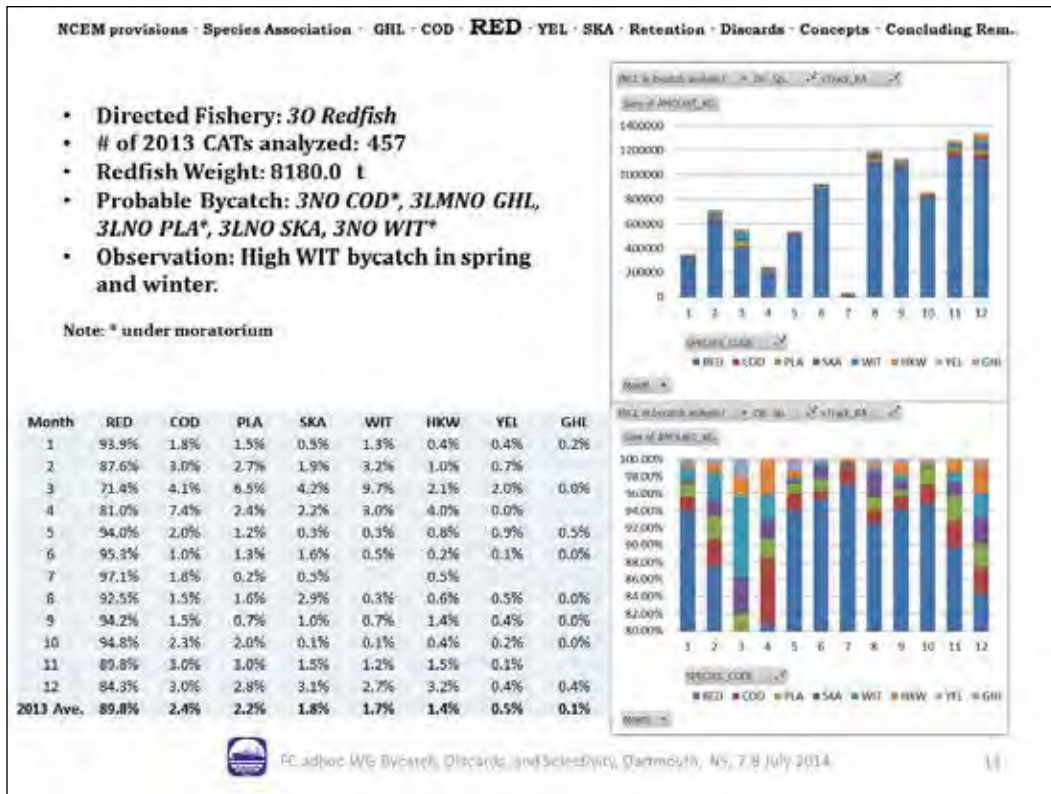
Note: \* under moratorium

Month	RED	COD	GHL	SKA	PLA	WIT	YEL	HKW
1	92.6%	3.0%	1.9%	0.3%	1.8%	0.1%	0.3%	
2	93.4%	2.3%	2.7%	0.2%	1.2%	0.3%	0.0%	
3	82.1%	8.4%		0.7%	8.4%	0.4%	0.1%	0.0%
4	89.3%	5.8%	3.6%	0.1%	0.1%	1.0%		
5	87.9%	3.9%	5.8%	1.0%	0.6%	0.6%	0.2%	0.0%
6	97.4%	0.7%	1.7%	0.1%	0.1%	0.0%		
7	85.3%	3.5%	6.0%	0.6%	0.6%			
8	84.9%	4.9%	3.3%	5.0%	1.2%	0.6%	0.1%	0.0%
9	91.7%	2.7%	1.9%	1.7%	1.1%	0.2%	0.6%	
10	93.4%	3.5%	0.5%	0.7%	1.1%	0.2%	0.6%	0.0%
11	88.9%	5.7%	1.2%	1.0%	1.8%	1.5%	0.0%	
12	87.1%	3.5%	1.3%	4.4%	2.2%	1.4%	0.1%	
<b>2013 Ave.</b>	<b>90.5%</b>	<b>3.6%</b>	<b>2.1%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>0.6%</b>	<b>0.1%</b>	<b>0.0%</b>



FC adhoc WG Bycatch, Discards, and Selectivity, Dartmouth, NS, 7-8 July 2014

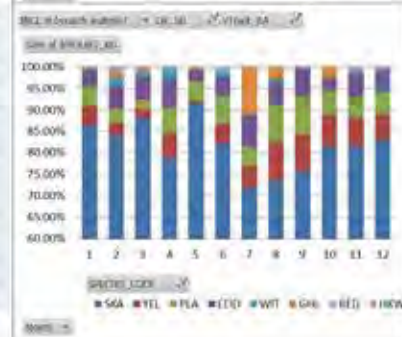




- Directed Fishery: 3LNO Skates
- # of 2013 CATs analyzed: 472
- Skates Weight: 4200.0 t
- Bycatch: 3LNO YEL, 3LNO PLA\*, 3NO COD\*, 3NO WIT\*, 3LN RED, 3O RED



Month	SKA	YEL	PLA	COD	WIT	GHL	RED	HKW
1	86.2%	4.6%	4.5%	3.9%	0.4%	0.4%	0.0%	0.0%
2	83.8%	3.0%	3.4%	5.3%	2.0%	1.2%	0.8%	0.5%
3	88.1%	1.9%	2.4%	5.1%	1.2%	0.7%	0.2%	0.4%
4	78.9%	5.6%	5.9%	6.3%	2.7%	0.0%	0.1%	0.2%
5	91.6%	0.6%	4.4%	2.5%	0.1%	0.5%	0.3%	0.0%
6	82.2%	4.0%	6.5%	4.3%	1.1%	1.3%	0.1%	0.1%
7	72.0%	5.0%	4.3%	7.6%	0.3%	10.9%	0.0%	0.0%
8	73.6%	8.9%	8.6%	5.2%	0.9%	2.6%	0.0%	0.0%
9	75.8%	8.5%	8.9%	6.5%	0.2%	0.0%	0.1%	0.1%
10	81.4%	7.5%	5.6%	2.7%	0.3%	2.5%	0.1%	0.0%
11	81.5%	6.6%	4.9%	5.1%	0.6%	0.3%	1.0%	0.0%
12	82.7%	6.2%	5.3%	4.6%	0.6%	0.3%	0.2%	0.1%
2013 Ave.	82.3%	5.4%	5.3%	4.8%	0.9%	0.8%	0.4%	0.1%



### Bycatch Retention Frequency Analysis

Art. 6. 4. The limits and percentages<sup>1</sup> are calculated by Division as percentage, by weight, for each stock of the total catch of stocks listed in Annex IA<sup>2</sup> retained on board for that Division at the time of inspections<sup>3</sup>, on the basis of the fishing logbook figures<sup>4</sup>.

<sup>1</sup> e.g. 1250 kg or %, whichever is greater, for 3M Cod and 3LN Redfish, etc. See Art. 6.3

<sup>2</sup> Note: it is not % of grand total catch. RNG, RHG, CAT, HAL, etc excluded in the calculations

<sup>3</sup> In this analysis, it is assumed no at-sea inspection took place. Inspection was conducted at the port. Analysis based on fishing during every single trip, not between inspections. Only trips with single Division included.

<sup>4</sup> In this analysis, CAT (daily catch reports) were used in the absence of logbook data. It is assumed that CAT figures realistically reflect logbook figures.





NCEM provisions · Species Association · GHL · COD · RED · YEL · SKA · **Retention** · Discards · Concepts · Concluding Rem.

### Retention Bycatch frequency analysis

# trips = 59; fishing days = 658 [160 trips; 4779 days grand total]  
 Total weight of total of species in Annex 1= 10, 926 t [57 087 t grand total]  
 Fishing trips occurring in single Divisions (Relevant Areas): 3L, 3M, 3N  
 Directed Species: COD, GHL, RED, YEL

D.S.	Div.	Stock	# trips	Comments
COD	3M	3M Cod	30	One case of 3M Red at 13%, but 3M red fishery was still open. So, no indication of bycatch retention infringement.
GHL	3M	3LMNO GHL	1	No indication of bycatch retention infringement.
GHL	3L	3LMNO GHL	6	"
RED	3M	3M Redfish	1	"
RED	3L	3LN Redfish	1	One case 26% YEL. Flag State has no YEL quota. Art. 6.2.a applies. Therefore possible infringement.
YEL	3N	3LNO Yellowtail	20	No indication of bycatch retention infringement.

**Note: in 2013, 1 case of bycatch (move-away) AI issued at-sea.**

FC ad hoc WG Bycatch, Discards, and Selectivity, Dartmouth, NS, 7-8 July 2014

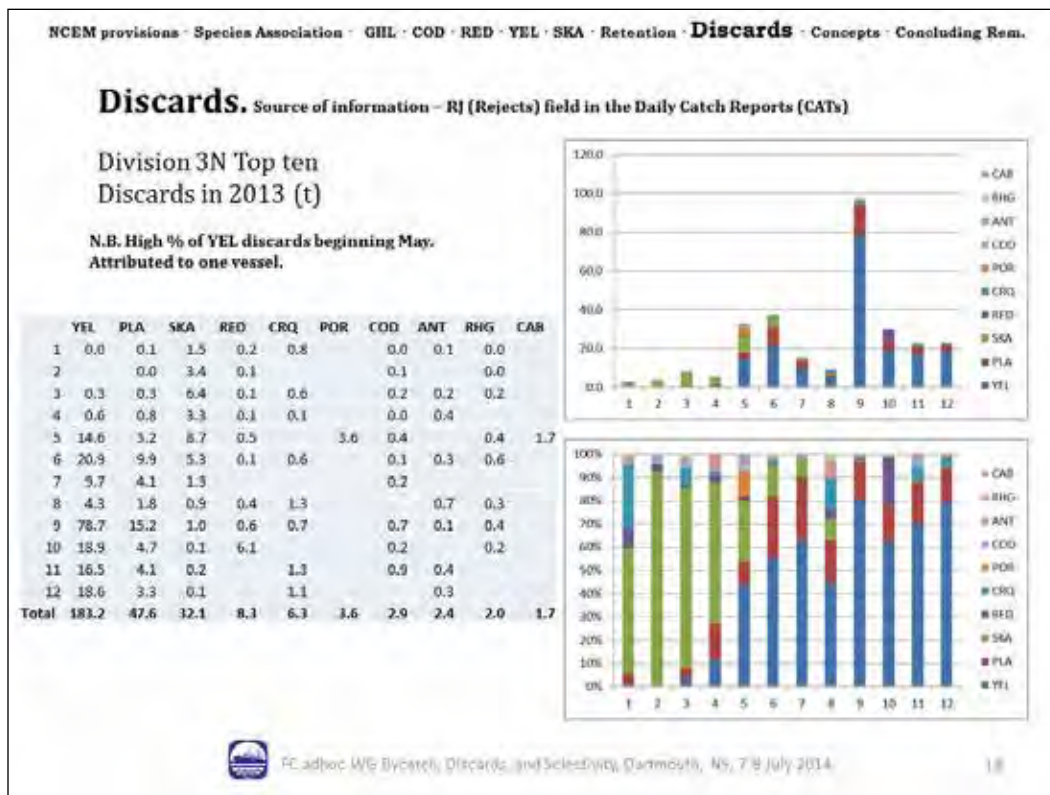
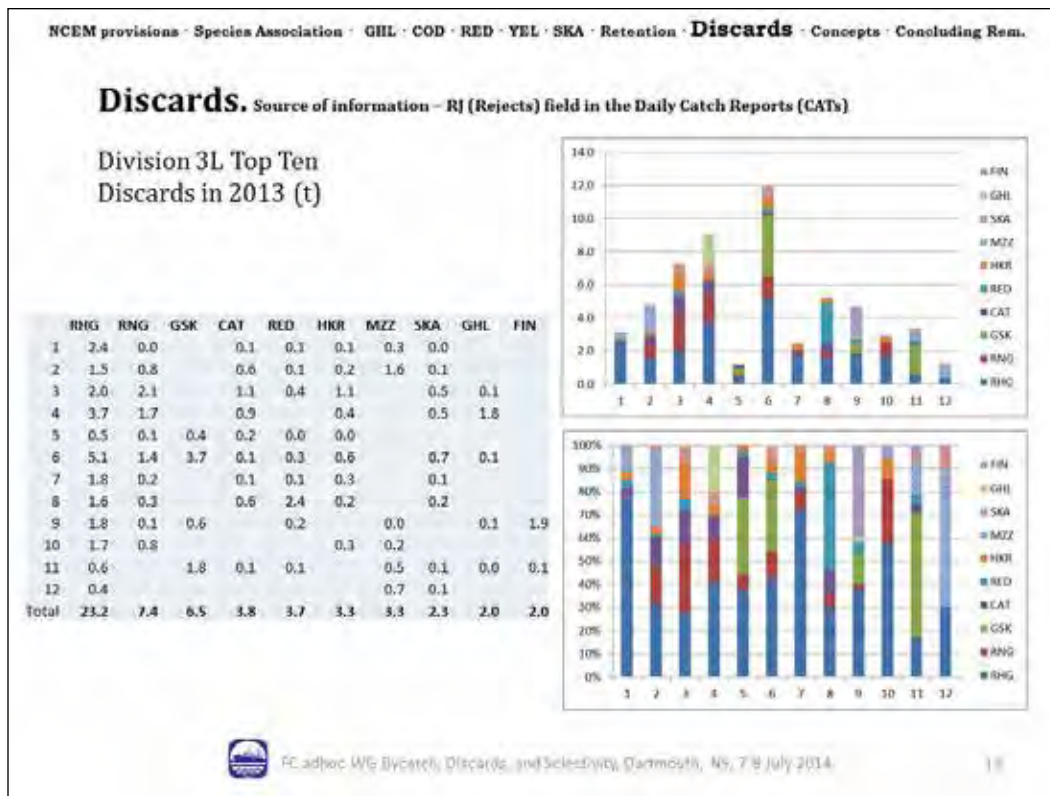
NCEM provisions · Species Association · GHL · COD · RED · YEL · SKA · Retention · **Discards** · Concepts · Concluding Rem.

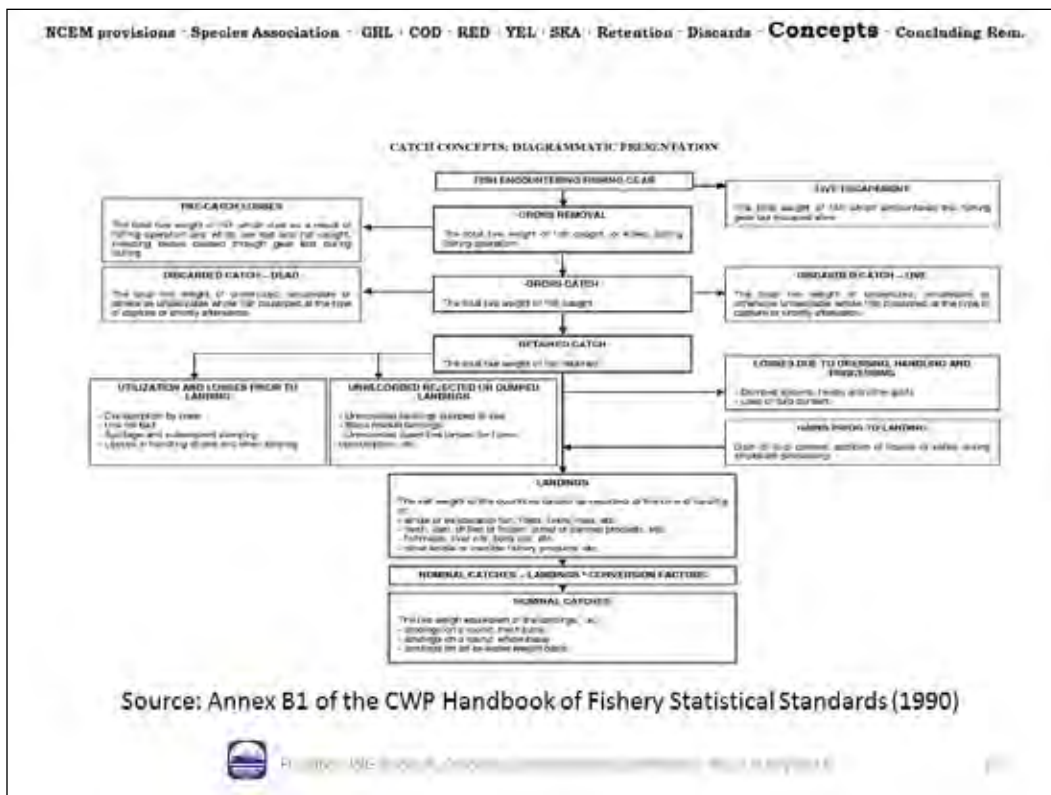
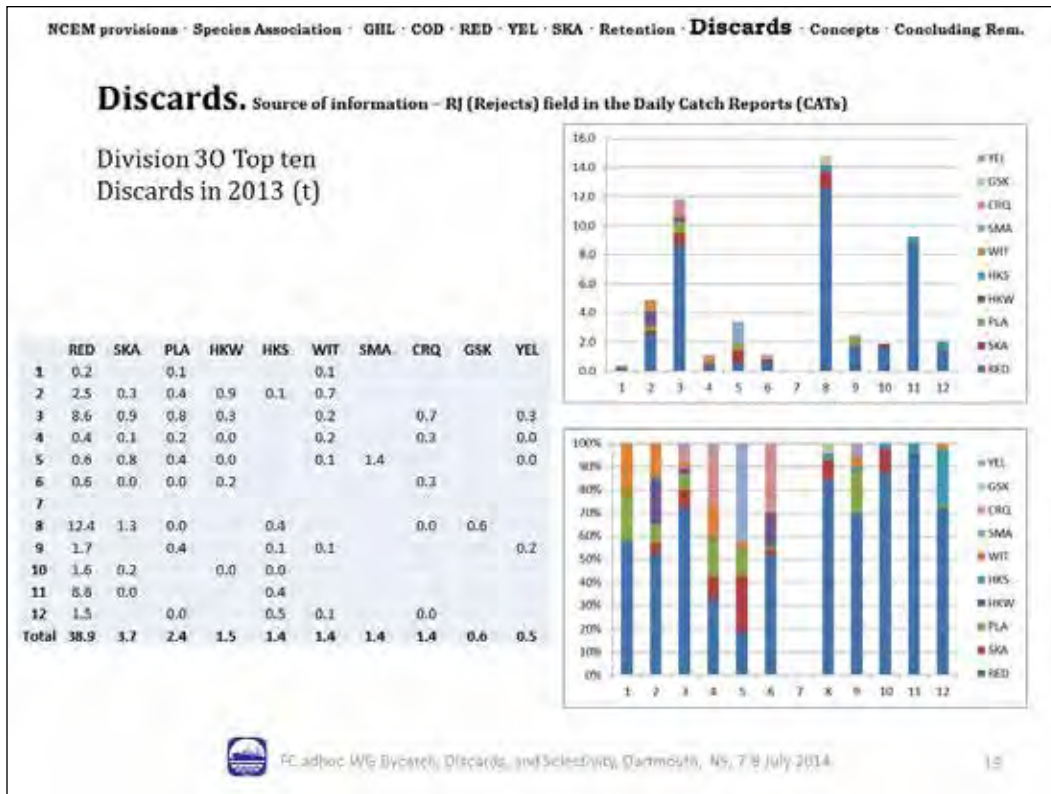
### Discards. Source of information – RJ (Rejects) field in the Daily Catch Reports (CATs)

Division 3M Top Ten Discards in 2013 (t)

	RED	GSK	COD	CAT	RHG	SKA	MZZ	RNG	PLA	WIT
1	0.3	0.6		0.1	0.3	0.1				0.2
2	1.5	0.5	0.1	0.8	0.4	0.2		0.2		0.2
3	1.7	1.0	1.0	0.2	0.7	0.4	0.2	0.8	0.2	0.3
4	1.1	2.1	1.9	0.4	1.3	0.8		0.5	0.1	0.1
5	2.3	0.6	2.1	0.3	0.2	0.2	0.5	0.6		
6	4.3	1.4	0.6	0.2	0.8	1.2	2.1	0.3	0.1	
7	8.9	8.0	0.1	3.7	0.6	2.4	2.1	0.3	0.4	0.1
8	11.9		0.8	3.0	0.4	1.0	0.6	0.1	1.0	
9	7.5		1.4	0.5	0.3	0.2		0.3	0.1	
10	0.8		0.7	1.2	0.6	0.8		0.7		
11			1.4	0.3	2.2					
12										0.1
<b>Total</b>	<b>40.3</b>	<b>14.2</b>	<b>10.2</b>	<b>10.1</b>	<b>7.9</b>	<b>7.4</b>	<b>5.5</b>	<b>3.8</b>	<b>1.9</b>	<b>1.1</b>

FC ad hoc WG Bycatch, Discards, and Selectivity, Dartmouth, NS, 7-8 July 2014







NCEM provisions · Species Association · GHL · COD · RED · YEL · SRA · Retention · Discards · **Concepts** · Concluding Rem.


**FAO Catch Concepts: From Fish Encountering Gear to Nominal Catch**

- Gross removal
- Gross catch
- Discarded Catch
- Retained Catch
- Unrecorded Rejects
- Dumped Landings
- Landings
- Nominal Catch

**Not retained on board = Discards = Rejects = Dumped off-board back to sea??**  
**What is *Selectivity*? Gear-related? Temporal? Spatial? All of the above?**

**Appearance in the NCEM**

- By-catch - 34 times
- Retained-on-board - 24
- Discards - 18
- Directed Fishery - 15
- Incidental catch - 1
- Target species - 1
- Kept - 0



NCEM provisions · Species Association · GHL · COD · RED · YEL · SRA · Retention · Discards · Concepts · **Concluding Rem.**

**Concluding Remarks**

- *Bycatch* implies the non-highest percentage in a single haul.
- Same bycatch limits apply to both move-away and retention rules.
- Species Association
- Temporal and Spatial Analysis of bycatch incidence
- Discards = Rejects = must be dumped at sea = opposite of retained on board?
- NAFO uses same catch concepts/definitions of FAO?


**Lastly,**

**PRP Recommendations 4.2.3.5, 4.2.3.3, and 4.2.4.1:**

*“A consolidated list of bycatch species...should be included in the NCEM to assist monitoring of bycatch during directed fishing”*

**Way forward as adopted by GC (GC Doc 12/1):**

*“FC and SC jointly develop the definition of bycatch, compile a consolidated list of the main relevant bycatch species (commercial, targeted, non-targeted, VMES, ...) and consider the issue of bycatches in the framework of CPRS, management plans and other management measures.”*



**SECTION IX**  
(317–355)

**Report of the Fisheries Commission and Scientific Council  
Working Group on the Ecosystem Approach Framework to Fisheries Management**

**9–11 July 2014  
Halifax, Nova Scotia, Canada**

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**Report of Fisheries Commission and Scientific Council**  
**Working Group on the Ecosystem Approach Framework to Fisheries Management**  
 (FC/SC Doc. 14/03)

**9–11 July 2014**  
**Halifax, NS, Canada**

### 1. Opening

The working group (WG) met at the Lord Nelson, Halifax, Canada, during 9–11 July 2014. The meeting was attended by representatives from Canada, EU, Iceland, Japan, Norway, the Russian Federation and the United States of America. The NAFO Executive Secretary, Fisheries Commission (FC) Coordinator and Scientific Council (SC) Coordinator were in attendance. An observer from World Wildlife Fund was present. The meeting was co-chaired by Robert Day (Canada) and Andrew Kenny (EU) representing FC and SC, respectively (Annex 1).

The chairs opened the meeting at 0900 hrs on Wednesday, 9 July.

### 2. Appointment of Rapporteur

With the agreement of the WG, the FC Coordinator Ricardo Federizon and the SC Coordinator Neil Campbell were appointed as joint rapporteurs.

### 3. Adoption of Agenda

The previously circulated agenda was adopted with slight modification on the sequence of items: the old item 6.a.ii and 6.a.iii were reversed and item 8 was moved ahead of item 7. Russian Federation requested the opportunity to make a presentation on the splendid alfonsino fishery at the Corner Seamount. It was agreed it would be discussed under item 10. The adopted agenda is presented in Annex 2.

### 4. Review of Terms of Reference

The terms of reference of the WG as documented in FC Doc 13/19 were reviewed. The WG considered membership, work format, reporting procedures, observers and future meetings. Proposed revisions to the Terms of Reference (ToR) are presented in Annex 3. It incorporates the comments from SC during its June 2014 meeting and the recommendation recognizes the need to consider the Risk Based Management Strategies WG ToR to ensure coherence.

### 5. Engagement with Canada-Newfoundland and Labrador Offshore Petroleum Board

The FC co-chair provided an update on the NAFO submission (submission agreed to at the 2013 Annual Meeting) to the development of the Eastern Newfoundland Strategic Environment Assessment (SEA) which is being conducted by the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB). NAFO comments on the draft SEA were submitted in April 2014. The comments were drafted by the co-Chairs and endorsed by the General Council (GC).

The Secretariat informed participants that after the submission of the comments, additional fisheries information (previously published) were provided to C-NLOPB at their request.

The European Union noted that communication between their research vessel and C-NLOPB's seismic research company has occurred by exchanging details of planned surveys.

Japan noted the interaction between the seismic and fisheries surveys might have occurred in 2013, i.e. large

noises by seismic surveys may have caused disruptions in the Greenland halibut surveys resulting in very low CPUE. Due to this low CPUE, SC in 2014 had declared “occurrence of exceptional circumstances” by following the Management Strategy Evaluation (MSE) protocol. Japan further noted that such potential detrimental influences should be monitored carefully.

The SEA is expected to be released in July and August. The WG will track the development of the SEA but will not itself engage directly in any future processes without direction from GC.

## 6. Consideration of Scientific Advice

### a) Review of Vulnerable Marine Ecosystems (VMEs) and fishery closures

At the 2013 Annual Meeting, FC requested SC for scientific advice on VMEs. SC formulated the advice during its 2014 June Meeting (SCS Doc. 14/17). The advice draws on the work of the SC WG on Ecosystem Science and Assessment which met in November 2013 (SCS Doc. 13/24).

The SC co-chair presented the advice on behalf of SC.

#### i. Summary of data available for identification of VMEs (Request 13a)

The SC co-Chair presented the method of *kernel density analysis* and noted that currently the best approach in identifying VMEs is the application of this method on the data (the detailed metadata can be found in pages 36–38 of SCS Doc. 14/17). This analysis identifies “hotspots” in the biomass distribution derived from research vessel trawl survey data, by looking at natural breaks in the spatial distribution associated with changes in local density. These natural breaks allow defining of significant area polygons. The method identifies potential areas of VMEs according to the definition, however has limited spatial resolution, in particular, the delineation of borders for the VME areas are uncertain. If to be used as a basis for making management decisions, e.g. on the closing or opening of areas, these results are to be regarded as a first step. It would be expected that depth contours, type of substrate, current and temperature fields, etc. will shape the fine scale boundary.

Significant discussion ensued on clarifying how the kernel density approach was used to identify hotspots within which it was probable that VMEs would occur but did not actually delineate the boundaries of VMEs.

#### ii. Occurrence of sea pens around Areas 13 and 14 (Request 15)

*SC advice: The available data, including information from the 2013 EU-Spain and Portugal Flemish Cap survey, indicates that areas 13 and 14 are located within the easternmost seapen VME unit of the seapen VME system. Within this unit, three high concentration locations have been identified, two corresponding to the candidate closures, and a third one located in between them, as well as several seapen observations of lower density. This seapen VME unit also encompasses locations of other VME indicator species (crinoids), as well as black corals.*

Details of this advice can be found in pages 52–53 of the SCS Doc. 14/17.

The WG noted that discussions on the candidate Areas 13 and 14 were initiated in the FC WG of Fishery Managers and Scientists on Vulnerable Marine Ecosystems (WGFMS-VME), the predecessor of this WG. The debate – whether the latest survey information and scientific advice warrant some VME protection management measures, e.g. closure, applied to candidate Areas 13 and 14 – remains unresolved. In this regard, the WG would recommend that FC and SC support the continuing analysis by this WG and that this does not preclude FC from considering possible closure if proposals are made at the Annual Meeting (see item 9).

#### iii. Extent of current closures and areas for prioritization (Request 13b)

The SC review of the current closures including seamounts is contained in pages 38–53 of SCS Doc. 14/17. In the review new polygons were drawn indicating where the evidence of VMEs was located. It was emphasized that the polygons were not necessarily proposed closure boundaries but rather hot spots where VMEs could be located, as noted in 6.a.i.

Within the list comprising the current closures, a new area (Tail of the Grand Bank) and two candidate areas (Area 13 and 14), SC identified some high priority (Areas 3 and 4, candidate Areas 13 and 14,

and the new area). The details of the existing closed area designation are described in Chapter II of the NAFO Conservation and Enforcement Measures (NCEM). Prioritization was based on multiple VME presence, approximate proportion of the VME that is protected, proximity to an existing area, proximity to high fishing activity, and areas with no current protection (page 50–51 of SCS Doc. 14/17).

The WG noted significant protection of the identified VMEs has been achieved. Yet, some further work can be considered. The WG considered the SC priority list and took note of the presence of VME indicator species adjacent to the existing 30 closure. It was acknowledged area 30 and new area “Tail of the Grand Bank” in the list would entail considerable further work. As short term priorities, Areas 3 (Beothuk Knoll) and 4 (Eastern Flemish Cap) were recommended (see item 9).

Regarding the management recommendations on revised and new areas (Recommendation 6) and encounter thresholds (Recommendation 8), Japan noted: *Japan has some reservations and different views on these two issues (additional closed areas and threshold values), although Japan does not wish to block these recommendations. Japan basically prefers to apply “move-on rules with encounter thresholds” to protect SAI to VME for the following three reasons: (a) In NAFO Convention Area, there have been a number of sporadic and patchy closed areas, which make operations difficult. From recent meeting of the WG Bycatch, Discards and Selectivity, it was also anticipated that more fine scale time-area closed areas will be established to mitigate bycatch and discards in the near future. This may create further difficulty to conduct operations as vessels might mistakenly make operations in closed area. (b) At present, CCAMLR, SEAFO, NEAFC and NPFC (near future) effectively apply “move-on rules with encounter thresholds”, in addition to existing closed areas. Move-on rules are simple, i.e., vessels just keep away 2 nautical miles (NM) from the points where VME exceeding threshold values and then closed areas are instantaneously established and (c) Similar exercise has been also effectively in place in NAFO and Canada, i.e. 10 NM move-away-rule to avoid exploiting excess bycatch and discards.*

Regarding the seamount closures, it was noted the management regimes governing unfished bottom areas (as defined in Chapter II of the NCEM, outside of the fishing footprint) and fisheries in seamount areas are identical, i.e. both are subject to the exploratory bottom fishing protocol. As the fisheries associated with these areas might be different, consideration for different management regimes might be warranted.

In noting the SC advice on seamounts (see page 49-50 of SCS Doc. 14/17), some debate has ensued as to whether management measures concerning fisheries stocks associated with seamounts may be warranted. The WG indicated that FC be mindful of the following points when considering the management of seamount fisheries:

- a. Some CPs proposed that all ongoing fisheries taking place on seamounts should require 100% observer coverage in light of the knowledge and information gaps of the use of midwater trawl on seamount. Some CPs noted that in practice this is currently the case,
- b. Some CPs proposed that any proposed new or expanded midwater trawl fishing activity on the NAFO seamounts outlined in Article 16.1, be subject to the exploratory fisheries protocol outlined in Article 18,
- c. Some CPs expressed a view that the splendid alfonsino fishery be subject to NAFO management.

#### **iv. Consideration of removing candidate VME closures from survey design (Request 14)**

SC reported limited progress on this issue. However, it has recognized the issue of scientific surveys potentially impacting VMEs. SC suggested some points for consideration in minimizing the risk of impacts (see page 52 of SCS Doc. 14/17).

The WG noted that the pros and cons must be balanced: whereas repeated surveys might impact VMEs, the benefits of having long time-series scientific data should not be ignored. The WG encouraged SC to continue to explore measures to mitigate the risk of significant adverse impacts on VMEs from research surveys.

### **b) Significant Adverse Impact (SAI) on VME elements**

#### **i. Risk assessment for SAI on VME elements and species (Request 12)**



The WG noted the following SC response to the FC request: *Scientific Council notes that work on significant adverse impacts on VME is on-going and that final results are not due until 2016, and indicates that good progress is been made. These analyses involved the production of fishery pressure layers based on VMS data, and VME biomass layers from RV surveys. Preliminary results indicated the important fractions of the recent effort are exerted in relatively small regions within the fishing footprint, and at least for some areas, this fishing effort seems to be concentrated in the near neighborhood of VMEs, suggesting a potential functional connection between some VMEs and commercially exploited fish species. This and other issues will continue to be explored as part of the process of developing the assessment of bottom fishing activities due in 2016. Specifically, the adopted approach has to be refined to take account of known and predicted VME habitat evaluated as part of the review of fishery closures* (see page 33 of the SCS Doc. 14/17).

## ii. Workplan towards the assessment of NAFO bottom fisheries by 2016

The WG noted the SC-developed workplan which can be found in page 32 of the SCS Doc. 14/17. In the workplan, specific tasks, the relevant FAO criteria (the six factors to be addressed when determining the scale and SAI, as enumerated in paragraph 18 of the FAO *International Guidelines for the Management of Deep-Sea Fisheries in the High Seas*), approach, and the lead body (e.g. SC and its standing committees and working groups) are identified. This WG was identified as the lead in task 8 – proposed mitigation and management measures to be used to prevent SAI on VMEs.

The workplan was noted as being ambitious. SC clarified that many of the tasks identified in the table are in the various stages of accomplishment and that it can be considered that four or five criteria have already been fulfilled. The focus of SC work has been the review of VMEs and it is now moving into the SAI phase. The WG requested that SC continue to provide annual updates on progress of this review including the methods it is employing.

## 7. Review of the provisions of Chapter II: – Bottom Fisheries in the NAFO Regulatory Area — of the NAFO Conservation and Enforcement Measures (NCEM) for the implementation of Article 24; and recommendations to the Fisheries Commission

The precursor of this WG, the FC WGFMS-VME, conducted a review and update on Chapter II provisions of the NCEM in 2012. STACTIC is also undertaking an editorial review of the provisions. The UN General Assembly will conduct a review of the implementations of Resolution 61/105 in 2015. In view of these, it was agreed that it would not be necessary at this time to conduct an in-depth review of the provisions that would entail substantive changes. Instead, the WG could focus on the time-sensitive provisions and determine whether they need to be updated accordingly. It was noted that the NCEM are updated on an annual basis to reflect decisions taken by FC at the annual meeting to update management measures. It was also noted that references in Chapter II of the NCEM to the precursor WG should be replaced with this WG.

Regarding STACTIC's editorial review of the provisions, Japan commented that the STACTIC proposed revision of Article 22.1.b and Article 22.2.b – concerning the SC's advice on the need for action, using the FAO *International Guidelines for the Management of Deep-Sea Fisheries in the High Seas* as a basis – weakens the role of the FAO Guidelines. NAFO should follow the FAO Guidelines in defining and identifying VMEs as described in page 39 of the June 2014 SC Report. Japan suggested that this should be discussed in the forthcoming Annual Meeting at FC.

Recommendations 1–4 and 13–14 in item 9 relate to the considerations mentioned above.

## 8. Input and guidance on the development and application of Ecosystems Approach to Fisheries (EAF) Roadmap

### a) Overview of the EAF Roadmap: purpose and goals

The FC Co-Chair highlighted sections in the amended NAFO convention, the FAO *Technical Guidelines for Responsible Fisheries: Fisheries Management-2. The Ecosystem Approach* and *2011 NAFO Performance*



*Review Recommendations* which relate to EAF as a prelude to the SC's presentation of the EAF Roadmap.

A representative from SC presented the EAF Road Map (Annex 4).

#### **b) Operational expectations**

This sub-item was discussed together with sub-item a).

#### **c) Consideration of workplan and prioritization**

The WG noted the comprehensive coverage of the EAF Roadmap and of the workplan (see slides 8–17 in Annex 4). As a way forward, the WG noted that priorities need to be established to allow allocation of scarce resources. The intention was not to revise the road map but to identify areas for priority work to occur. In Annex 5, the recommended priority areas and their associated tasks were grouped into four headings and timelines were identified:

- External impacts on ecosystem productivity (medium term)
- VMEs and impacts of bottom fishing (ongoing to short term for VMEs, short term for SAI)
- Multispecies interactions (medium term)
- Bycatch and discards (short term, ongoing).

### **9. Recommendations to forward to Fisheries Commission and Scientific Council**

Recognizing the ground-breaking work, significant achievements and ongoing efforts made by NAFO on the identification of VMEs and development of the ecosystem approach to fisheries management, the WG **recommends**:

1. **That the FC maintains the delineated seamounts areas identified in Chapter II, Article 16.1 of the NCEM (Delete or amend "Until 31 December 2014").**
2. **That the FC maintains the Div. 30 closure identified in Chapter II, Article 16.4 of the NCEM (Delete or amend "Until 31 December 2014").**
3. **That the FC maintains the closures identified in Chapter II, Article 16.5 of the NCEM (Delete or amend "Until 31 December 2014").**
4. **That the FC considers deleting Article 16.6 recognizing that the NCEM are regularly updated and the ongoing review envisioned by Article 23.**
5. **That the FC considers deleting or amending Article 24 (Review) considering the ongoing review and update of the NCEMs in general.**
6. **Recognizing that the scientific advice also noted some gaps in the protection of VMEs, that the FC considers adjustments to Area 4 (Southeastern Flemish Cap – sponge and large gorgonians), and new area 15 (Beothuk Knoll - large gorgonians) (see Annex 6 for maps).**
7. **That the FC and SC support continuing analysis by the WG of areas on the Tail of the Grand Bank (Div. 30 closure and related areas) (See Annex 6 for maps).**
8. **That the FC and SC support continuing analysis by the WG of areas 13 and 14 (Eastern Flemish Cap), and FC consider possible closed areas, if proposals are made at the Annual Meeting (see Annex 6 for maps).**
9. **That the FC further considers whether to withdraw the encounter thresholds within the fishing footprint, taking into account the scientific advice, the review of VME closures and the review of UNGA 61/105 in 2015.**
10. **That priority attention by FC and SC and their constituent bodies be given to the areas identified in Annex 5 that include external factors (e.g. climate change and oil and gas development), bycatch and discards, multispecies interactions, and VMEs including concluding the assessment of bottom fisheries for 2016.**
11. **That FC and SC consider the revised Terms of Reference at their September 2014 joint session and have**

**FC and SC adopt the revisions in their respective meetings (see Annex 3). Consideration could also be given to making terms of reference consistent across all joint FC-SC working groups.**

12. **Request that the SC provide annual updates to the FC-SC Working Group on Ecosystem Approach Framework to Fisheries Management pertaining to the 2016 review of significant adverse impacts of NAFO bottom fisheries on VMEs in the NRA.**
13. **That the FC amend the text of the NCEM to reflect the replacement of the FC WG-VME with the Joint FC-SC WG-EAFFM,**
14. **Article 23.1 of the NCEM be rephrased such that the “*Fisheries Commission will request Scientific Council...*”.**

## **10. Other Matters**

### **a) Corner Rise Seamount and the Alfonsino fisheries**

The Russian Federation made a presentation on Corner Rise Seamount and the alfonsino fisheries (Annex 7). The summary of the discussion arising from the presentation is also captured in item 6.a.iii.

### **b) Convention on Biological Diversity**

At the request of WG participants, for information purposes, a Canadian representative presented the report of the Convention on Biological Diversity - Northwest Atlantic Regional Workshop to Facilitate the Description of Ecologically or Biologically Significant Marine Areas which was held in Montreal Canada in March 2014 (Annex 8).

### **c) Dr Enrique de Cardenas (Quique) Retirement**

It came to the attention of the WG that a colleague in the SC and in the NEREIDA project, Dr. Enrique de Cardenas, is about to retire. On behalf of the WG, Ricardo Alpoim, as well as the SC WG co-Chair and Ellen Kenchington, delivered the best wishes greetings with the recognition of his significant contributions to the SC and the NEREIDA project (Annex 9).

## **11. Adoption of Report**

This meeting report was adopted by correspondence.

## **12. Adjournment**

The meeting adjourned at 1500 hrs on 11 July. The chairs thanked the participants for their cooperation and input and the Secretariat for its support. The participants in turn expressed their thanks to the Chairs for their leadership.

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## Annex 2. Agenda

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3. Adoption of Agenda
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5. Engagement with Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB): Update and possible next steps
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11. Adoption of Report
12. Adjournment

### **Annex 3. Proposed Revised Terms of Reference – Joint Fisheries Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management** (FC/SC EAFFM WP 14/03)

#### **Structure:**

The Working Group on Ecosystem Approach Framework to Fisheries Management reports to both the Fisheries Commission and Scientific Council; considers the advice of Scientific Council; and provides recommendations to Fisheries Commission.

The Working Group shall be comprised of fishery managers and scientists from Contracting Parties supported by experts and advisors. The work form **shall be** an open forum/dialogue, unless the contracting parties, under the guidance of the co-chairs, decide to conduct sessions in a delegation format.

Recommendations to Fisheries Commission be developed through formal sessions of official delegations. If the Working Group breaks from plenary session and reverts to delegation for the purpose of drafting recommendations, individual scientists would remain as part of their delegations and SC as a whole would be represented by the SC Chair or a designated alternate.

The Co-Chairs shall be selected from participating fishery managers and scientists with both a fishery manager and a scientist represented in the two positions.

Accredited observers may attend meetings of the working group. Participation will be subject to the *NAFO Rules of Procedure*.

If a Contracting Party so requests, particular agenda items of the meeting, or parts thereof, shall be restricted to delegates representing Contracting Parties and Scientific Council. A total of up to two persons per non-governmental organizations that have been given the right to participate as observers shall be permitted.

#### **Objective:**

The main objective of the Working Group is to make recommendations to the Fisheries Commission and feedback to Scientific Council on the development and effective implementation of ecosystems approaches to fisheries management.

#### **Specific Duties:**

In responding to requests for advice and recommendations from the Fisheries Commission, considering the associated advice of Scientific Council, the Working Group shall:

- Provide input/ guidance on the development and application of the Ecosystems Approach to Fisheries (EAF) Roadmap, including defining objectives and establishing priorities.
  - Recommending appropriate ecosystem-based management areas,
  - Considering ecosystem status, functioning and dynamics of NAFO marine ecosystems, including species interactions,
  - Considering the effect of activities other than fishing that may impact the stocks and fisheries in the NAFO Area,
  - Analyzing the way other RFMOs address the need to conserve biodiversity and advise on a possible strategy for biodiversity.
- Make recommendations on mitigation strategies and measures to avoid significant adverse impacts on vulnerable marine ecosystems, including the evaluation of associated risks.
- Review area closures and other measures outlined in the NAFO Conservation and Enforcement Measures (NCEMs) with specific timelines.
- Collaborate with Scientific Council on the assessment/ reassessment of NAFO bottom fisheries.

- Provide recommendations to Fisheries Commission in relation to requests to conduct exploratory bottom fishing and/ or evaluation of previously authorized exploratory fishing activities.
- Provide recommendations for updating the NCEMs in relation to EAF including the text in Chapter II (Bottom Fisheries in the NAFO Regulatory Area) and any associated Annexes (e.g. the Exploratory Protocol - Annex I.E), as necessary.

**Meetings:**

Meetings may be held at the request of the Chairs of Fisheries Commission and/or the Scientific Council, in consultation with Contracting Parties and the NAFO Secretariat.

Whenever possible, meetings of the Working Group should occur after the June Scientific Council meeting and prior to the NAFO annual meeting.

The working group shall communicate regularly through teleconferences and electronically, as required.

**Reporting out**

The Working Group will issue a written report (advice and any necessary follow-up such as areas for further advice from SC) to the Fisheries Commission and the Scientific Council.

An oral update can be provided to both SC and FC during their annual meetings.

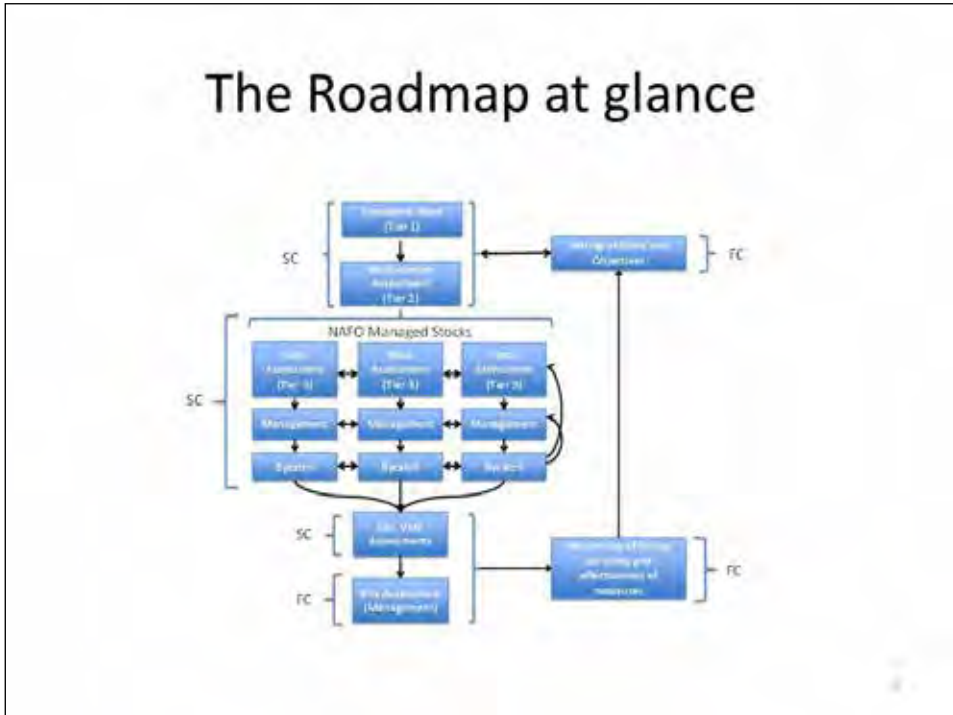


### Annex 4. SC Presentation: The SC EAF Roadmap

**Roadmap to EAF**

FC-SC WG EAFFM  
July 9-11, 2014

1

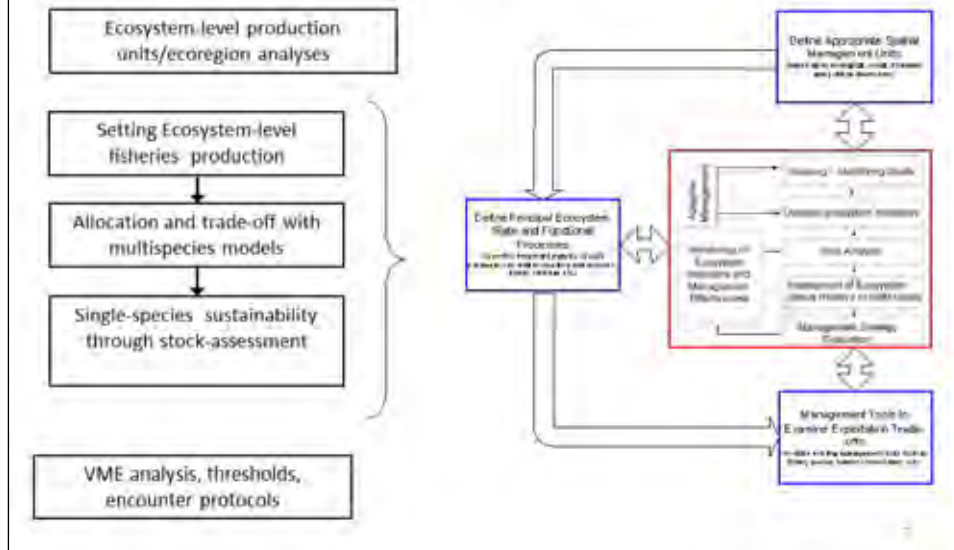


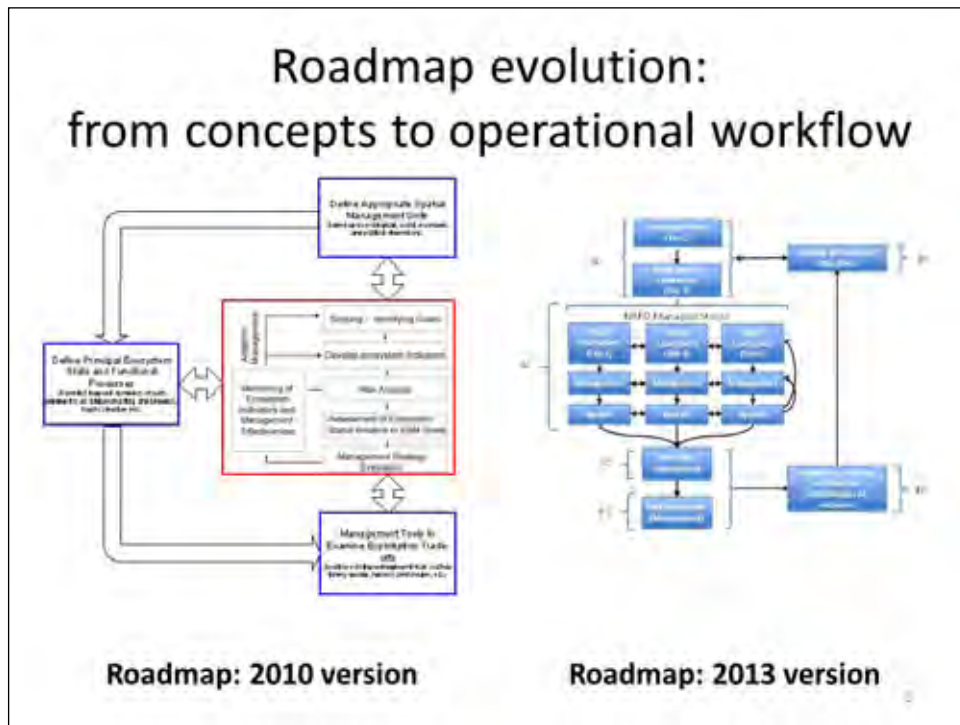
## A bit of history

- Creation of SC WGEAFM in 2007
  - New convention and Ecosystem Approach
- First SC WGEAFM meeting in 2008
  - Original agenda replaced by VMEs as a priority
- VMEs took a focal role for SC WGEAFM, but EAF continues to be developed
- 2010 SC WGEAFM meeting in Vigo
  - First incarnation of the Roadmap
  - Endorsed by SC in June 2010
  - Based on the concept of Integrated Ecosystem Assessment (Levin et al. 2009)
- Work on Roadmap components is ongoing
- 2013 SC June meeting
  - Most recent incarnation of the Roadmap (described in the response to FC Request #13 in the SC June 2013 Report)

3

## Roadmap: 1<sup>st</sup> Iteration





## Roadmap: what is and what is not

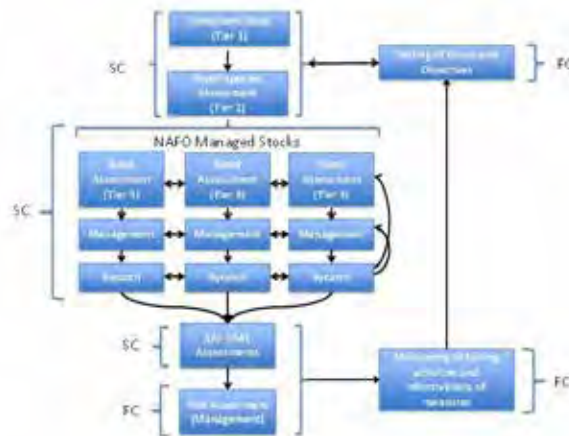
- The “Roadmap” lays out the organizing framework to develop an EAF for NAFO. It is not a fixed plan; as its name indicates, it is a guiding set of ideas whose details evolve as it is developed and implemented.
- It is a framework that includes **both** Scientific Council and Fisheries Commission.
- Scientific Council has made progress on many aspects of the Roadmap, although there are still gaps that need to be addressed (see Table 2 in 2013 SC June Report for details). Limited human resources and funding support impose limits to the pace at which many of the studies required to support the roadmap can be carried out.
- Required inputs from Fisheries Commission include, among others, ‘**goal setting**’ (e.g. defining explicit ecosystem objectives, developing governance mechanisms to discuss/set multispecies objectives), and ‘**monitoring**’ (e.g. developing mechanisms to ensure the availability of catch information for both commercial and non-commercial species); ‘**risk assessment**’ would also require important input from Fisheries Commission.

## Main Roadmap features

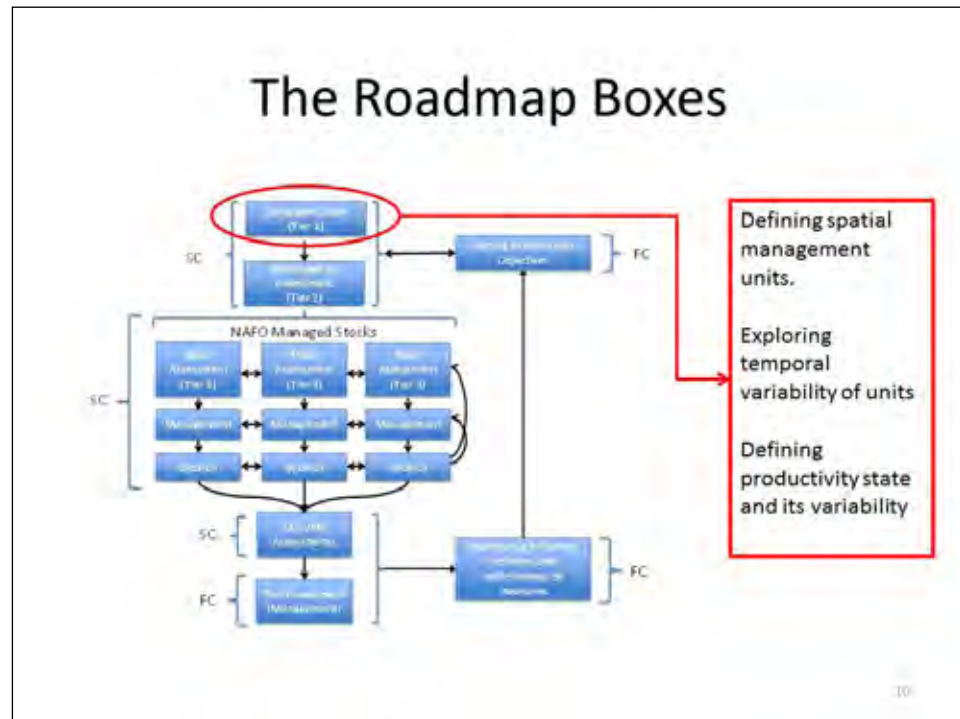
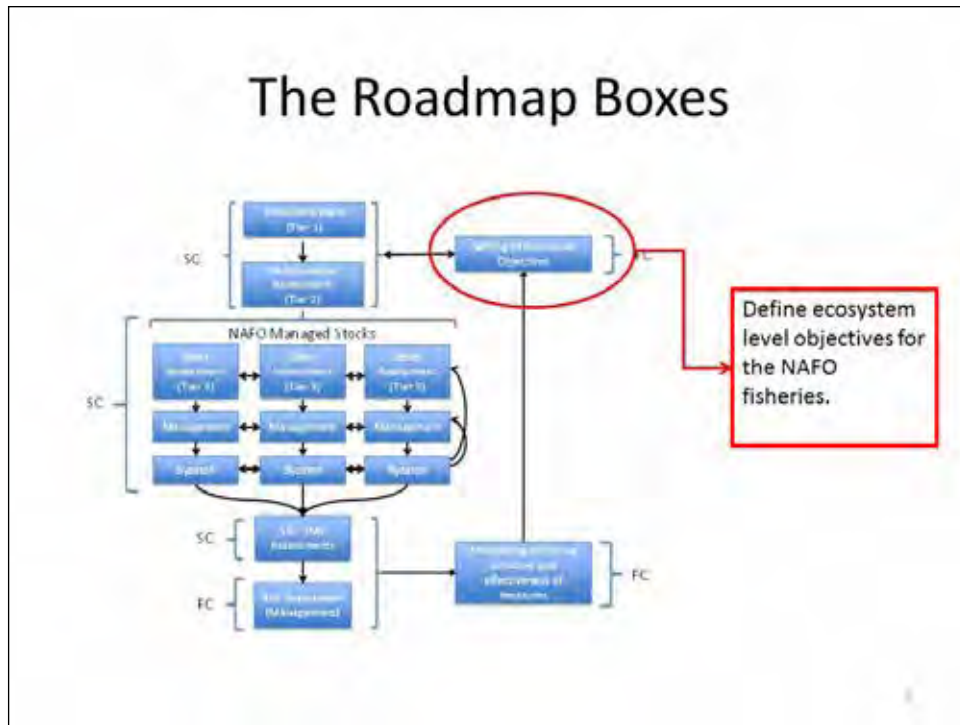
- Core Roadmap premises are:
  - a) the approach is objective-driven,
  - b) it considers long-term ecosystem sustainability,
  - c) it is a place-based framework, and
  - d) trade-offs are explicitly addressed.
- Sustainability of exploitation is achieved through a 3-tier hierarchy:
  - Tier 1- ecosystem sustainability (total fisheries production; “TAC” at ecosystem level)
  - Tier 2- multispecies sustainability (multispecies assessments; trade-offs among fisheries)
  - Tier 3- stock sustainability (single species stock assessments; ensures that exploitation rates derived from Tiers 1 and 2 are consistent with stock characteristics).
- Integration of impacts of fisheries on benthic communities (e.g. VMEs)
  - Assessment of Significant Adverse Impact (SAIs) on VMEs by bottom fishing activities.
  - Analysis of fishing impacts on benthic ecosystems.

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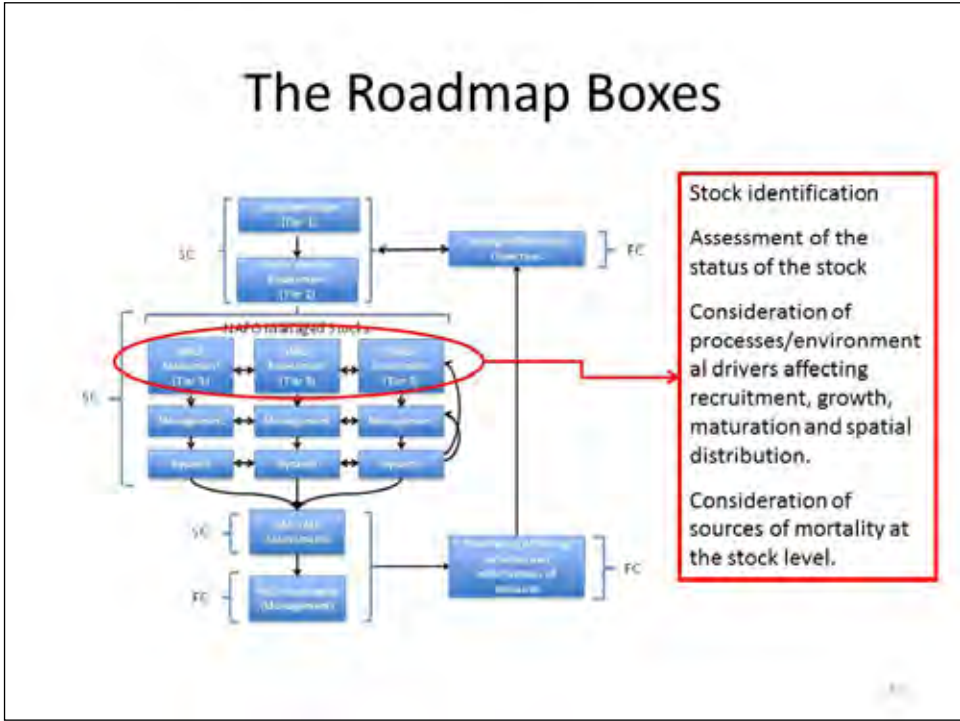
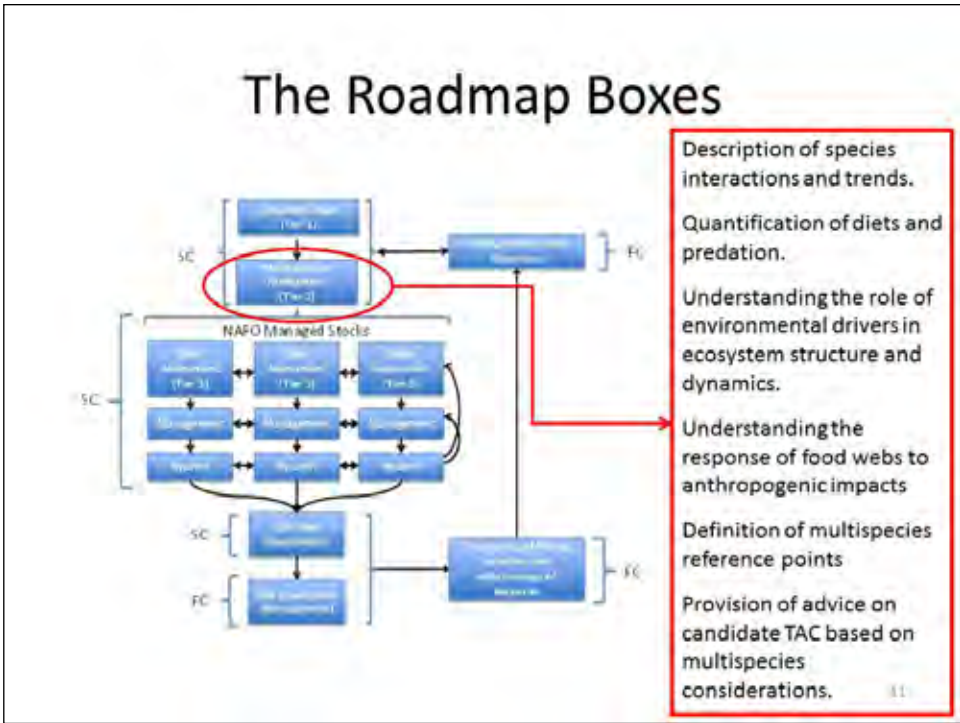
## The Roadmap Boxes

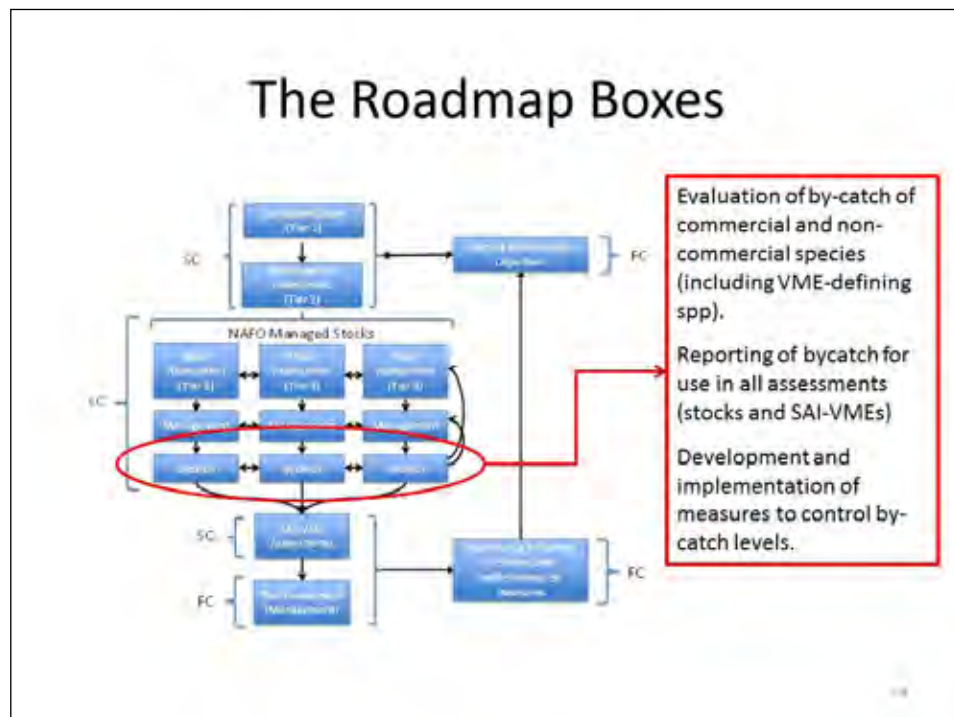
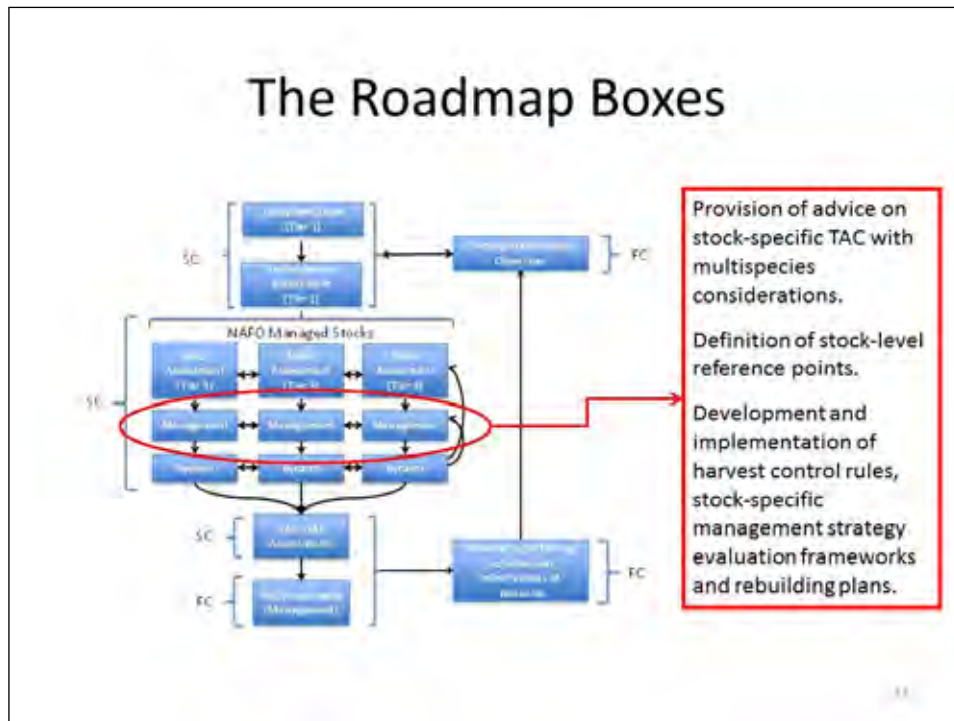


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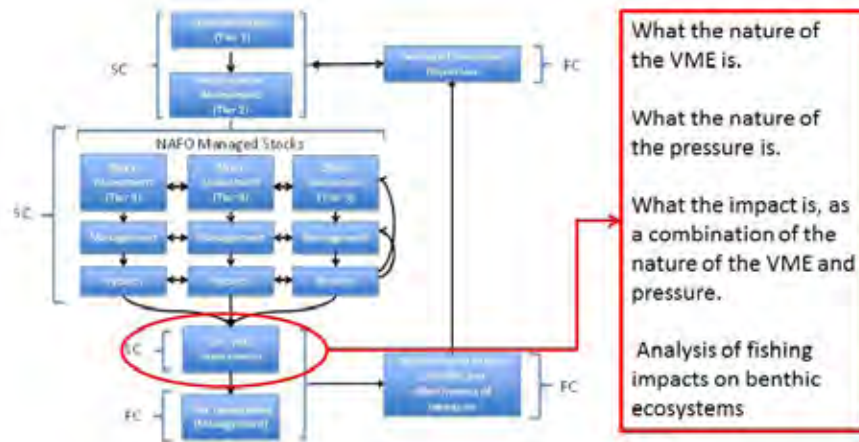






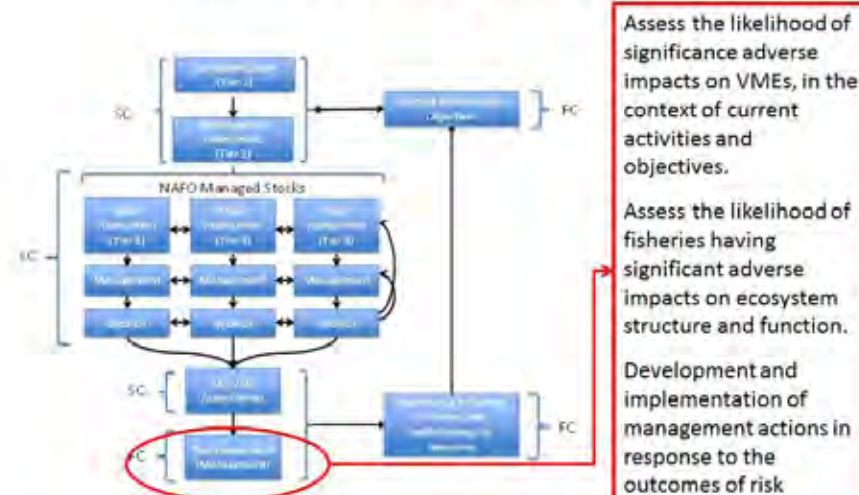


## The Roadmap Boxes

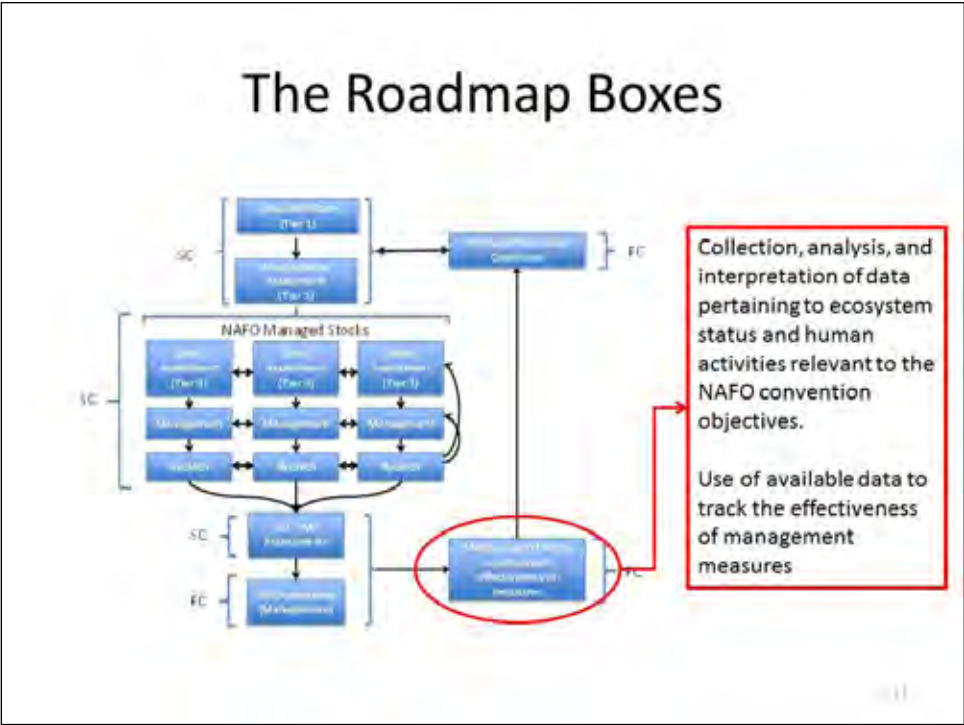


TS

## The Roadmap Boxes



TS



### Roadmap Progress

Box	Done	To Be Done	Critical Gaps
<b>Goal setting</b>			
Define ecosystem level objectives for the NAFO fisheries.	Initial discussions on the implications of species interactions in setting TAC for species in the Flemish Cap.  Acknowledgement of the role of trophic interactions in the context of management of fisheries directed to these spp.	Development of governance mechanisms to discuss and set multispecies objectives.	Lack of explicit objectives.
	[more to be added by FC, and SC-FC WGs]	[more to be added by FC, and SC-FC WGs]	[more to be added by FC, and SC-FC WGs]

## Roadmap Progress

Box	Done	To Be Done	Critical Gaps
<b>Ecosystem State</b>			
Defining spatial management units.	Ecoregion analyses for Newfoundland and Labrador, Flemish Cap, Atlantic US, and partially on Scotian shelf.	Integrate ecoregion analysis across NAFO convention area.	Consideration of the broader set of climate change impacts
Exploring temporal variability of units	Some candidate ecosystem-level management units identified.	Correspondence between stock boundaries and candidate ecosystem management units.	Better integration of environmental and oceanographic information (e.g. STACFEN work).
Defining productivity state and its variability	Preliminary Fisheries Production Potential models for Newfoundland and Labrador, Flemish Cap, and Scotian Shelf; studies on this topic are also available for the Atlantic US.	Consideration of different scales and how to integrate them	Incorporation of northern NAFO divisions (0 and 1)

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## Roadmap Progress

Box	Done	To Be Done	Critical Gaps
<b>Ecosystem State (continuation)</b>			
	Preliminary Aggregate Biomass Production models for Newfoundland and Labrador, Flemish Cap; studies on this topic are also available for Scotian Shelf and Atlantic US.	Identification of ranges of variability in the past compared to present.	Incorporation of oceanic waters (i.e. open ocean ecosystems)
	Initial studies linking elements of productivity and environmental drivers in Newfoundland and Labrador, and Flemish Cap; studies on this topic are also available for Scotian Shelf and Atlantic US.	Improved Fisheries Production Potential and Aggregate Biomass models.	More comprehensive consideration of top predators (seabirds, sharks, seals, and cetaceans).
		Integrate environmental drivers into models of ecosystem productivity.	Developing more specific/functional connections and collaborations with ICES Working Group on the Northwest Atlantic Regional Sea (WGNARS)

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## Roadmap Progress

Box	Done	To Be Done	Critical Gaps
<b>Multispecies assessment</b>			
Description of species interactions and trends.	Studies of food habits in Flemish Cap and Newfoundland and Labrador; studies on this topic are also available for Scotian Shelf and Atlantic US.	Improving multispecies modelling for Flemish Cap.	Considerations of environmental drivers and species interactions on reproductive potential (e.g. integration of the NAFO SC WGRP work)
Quantification of diets and predation.	Preliminary modelling of key species in the Flemish Cap.	Developing preliminary multispecies models for Newfoundland and Labrador.	Enhanced participation and incorporation of information from Scotian Shelf and US
Understanding the role of environmental drivers in ecosystem structure and dynamics	Testing specific hypothesis of bottom-up and top-down regulation in Newfoundland and Labrador	Improved characterization of diets and its variability in space and time	Developing more specific/functional connections and collaborations with ICES Working Group on the Northwest Atlantic Regional Sea (WGNARS)

## Roadmap Progress

Box	Done	To Be Done	Critical Gaps
<b>Multispecies assessment (continuation)</b>			
Understanding the response of food webs to anthropogenic impacts	Studies of common trends among multiple stocks in Flemish Cap, and Newfoundland and Labrador; studies on this topic are also available for Scotian Shelf and Atlantic US	Improved/additional estimation of consumption/predation for key stocks	
Definition of multispecies reference points	Estimation of consumption/predation for some stocks	Improved understanding of the linkage between lower trophic level characteristics and dynamics and fish production.	
Provision of advice on candidate TAC based on multispecies considerations.		Study the role of environmental drivers in the regulation and structure of food webs.	

## Roadmap Progress

Box	Done	To Be Done	Critical Gaps
<b>Stock Assessment</b>			
Stock identification	Current single-species assessments	Development and/or improvement of assessment models.	Reliable estimates of fishery catches and stock indicators for their use in stock and ecosystem assessments.
Assessment of the status of the stock	Some shrimp assessments include predation	Inclusion of predation in more assessments	Improve integration between stock-assessments and ecosystem analyses.
Consideration of processes/environmental drivers affecting recruitment, growth, maturation and spatial distribution.	Redfish assessment has considered the impact of predation in setting natural mortality.		
Consideration of sources of mortality at the stock level			

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## Roadmap Progress

Box	Done	To Be Done	Critical Gaps
<b>Management</b>			
Provision of advice on stock-specific TAC with multispecies considerations.	Provision of current TAC advice on NAFO stocks	Development of rebuilding plans for more stocks.	Definition of explicit management objectives for each stock.
Definition of stock-level reference points.	Precautionary Approach framework and reference points for some stocks	-Further development of reference points. Revision of the precautionary approach framework.	Consideration of stock-specific management objectives in the context of ecosystem objectives
Development and implementation of harvest control rules, stock-specific management strategy evaluation frameworks and rebuilding plans	Management strategy evaluation approach for Greenland halibut. Rebuilding plans for some stocks are under development.	Complete rebuilding plans (including harvest control rules) Develop mechanisms to link and evaluate TAC from multispecies candidates.	
	[more to be added by FC, and SC-FC wgs]	[more to be added by FC, and SC-FC wgs]	[more to be added by FC, and SC-FC wgs]



## Roadmap Progress (a): general description of progress to date

Box	Done	To Be Done	Critical Gaps
<b>By-catch</b>			
Evaluation of by-catch of commercial and non-commercial species (including VME-defining spp).	Compilation of available information of bycatch by fishery for commercial spp.	Incorporation of non-commercial spp (including VME-defining spp)	Lack of full catch information for both commercial and non-commercial spp, including VME-defining spp, on a tow-by-tow basis
Reporting of bycatch for use in all assessments (stocks and SAI-VMEs)	Suite of management measures associated with by-catch (e.g. limits of spp under moratoria in directed fisheries)	Improve reliability of catch information.	
Development and implementation of measures to control by-catch levels.	Adoption of the catch reporting tow-by-tow	Link tow position with catch information (e.g. full use of VMS data for scientific analysis)	
		Develop comprehensive approach to report bycatch across fisheries and make available to NAFO bodies for their inclusion in analyses.	
	(more to be added by FC, and SC-FC wgs)	(more to be added by FC, and SC-FC wgs)	(more to be added by FC, and SC-FC wgs)

## Roadmap Progress

Box	Done	To Be Done	Critical Gaps
<b>Assessment of Significant Adverse Impacts (SAI) on VMEs</b>	Identification and mapping of VME elements and indicator species.	Assess VME resilience	Lack of full catch information for both commercial and non-commercial spp, including VME-defining spp, on a tow-by-tow basis
What the nature of the VME is.	Identification and review of impacts on seabed.	Integration of macro and megafauna data layers	
What the nature of the pressure is.	Assessment of distribution and intensity of fishing activity (including initial evaluation of cumulative pressure from fishing), taking into account the type of fishery, gear employed, etc.	Determine the status of VMEs as essential fish habitats.	Understanding the functional relationships between VMEs and fisheries yields.
What the impact is, as a combination of the nature of the VME and pressure.		Assessment of current closures for the protection of high concentrations of VME-indicator spp by 2014.	Determining what proportion of VMEs is optimal in a given fishery (i.e. how much VME we need to protect)
Analysis of fishing impacts on benthic ecosystems	Modelling VME indicator sp by-catch. Modelling VME presence.	Fisheries assessments regarding their impacts on VMEs (i.e. first assessments by 2016)	How VME closures relate to other human activities, and how these interactions may affect fisheries and fisheries resources. 26
	Evaluating criteria for VME indicator spp.		

## Roadmap Progress

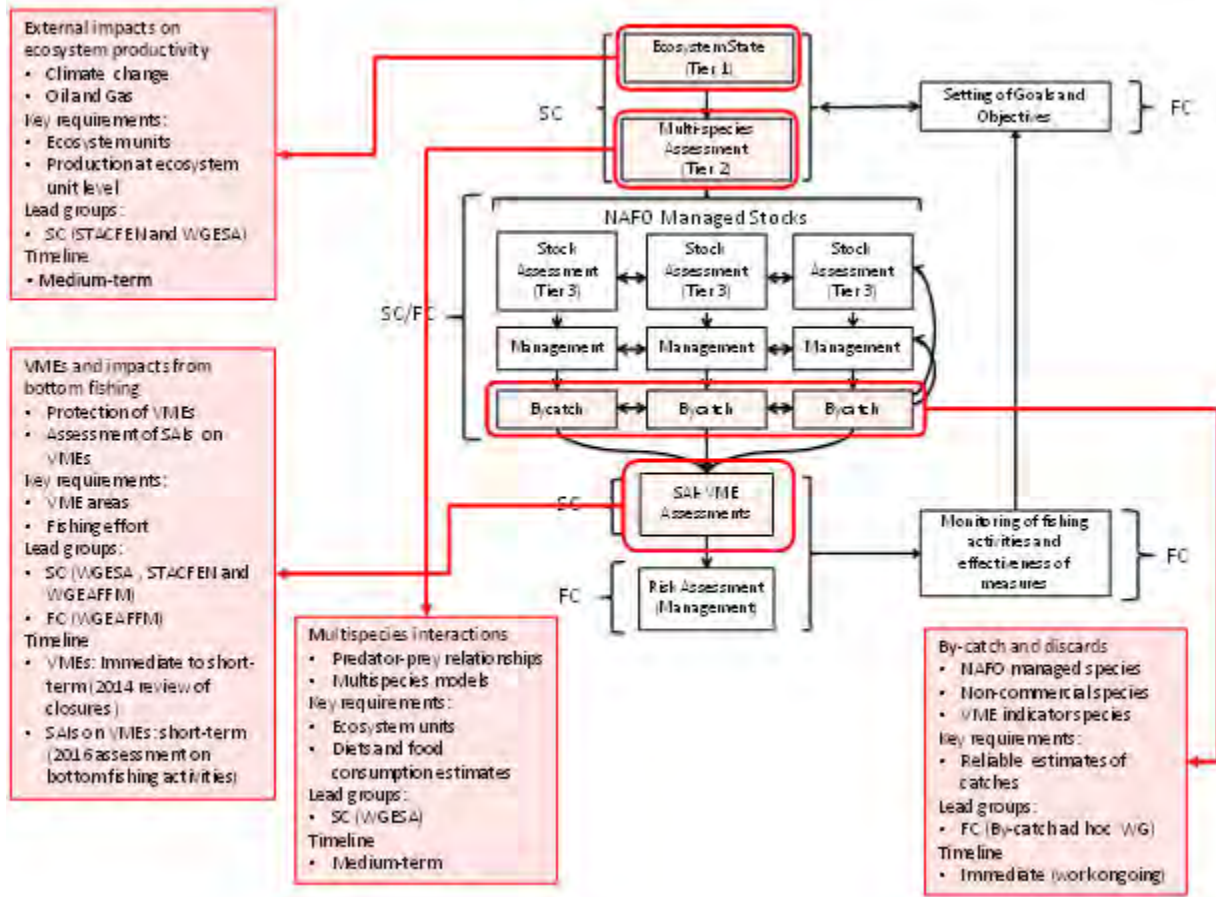
Box	Done	To Be Done	Critical Gaps
<b>Risk Assessment</b>			
Assess the likelihood of significance adverse impacts on VMEs, in the context of current activities and objectives	Development of selected VME-indicator spp maps, showing the risk of bottom fishing impacts.	Continue the development and implementation of management measures to minimize or prevent SAI on VMEs	Develop, design, and implement a strategy to assess risk at the ecosystem level.
Assess the likelihood of fisheries having significant adverse impacts on ecosystem structure and function.	Implementation of closed areas for the protection of high concentration of selected VME-indicator spp.	Develop guideline to ensure consistent application of risk assessment criteria in the context of current activities and objectives.	Ensure full interaction between all NAFO bodies to define risks in a manner that is acceptable and properly understood by all.
Development and implementation of management actions in response to the outcomes of risk assessments	Implementation of closed areas for the protection of physical VME elements. Implementation of encounter protocols for selected VME-indicator spp		
	[more to be added by FC, and SC-FC wgs]	[more to be added by FC, and SC-FC wgs]	[more to be added by FC, and SC-FC wgs]

## Roadmap Progress

Box	Done	To Be Done	Critical Gaps
<b>Monitoring</b>			
Collection, analysis, and interpretation of data pertaining to ecosystem status and human activities relevant to the NAFO convention objectives.	RV surveys (stock status, ecosystem interactions, etc)	Improve/enhance collection of scientific information on non-commercial spp in RV surveys	Lack of full catch information for both commercial and non-commercial spp, including VME-defining spp, on a tow-by-tow basis
Use of available data to track the effectiveness of management measures	VMS (fishing footprint, intensity of fishing, compliance of management regulations) NAFO and scientific observer programs	Improve reliability of catch information from commercial fleets Link tow position with catch information (e.g. full use of VMS data for scientific analysis) Develop and integrated way to summarize and track fleet composition and activities.	Basic scientific information lacking in some areas (e.g. seamounts, northern areas) Basic scientific data are very limited for some ecosystem components (e.g. epipelagic and bathypelagic zones).
	[more to be added by FC, and SC-FC wgs]	[more to be added by FC, and SC-FC wgs]	[more to be added by FC, and SC-FC wgs]



### Annex 5. Workplan and Prioritization of the EAF Roadmap





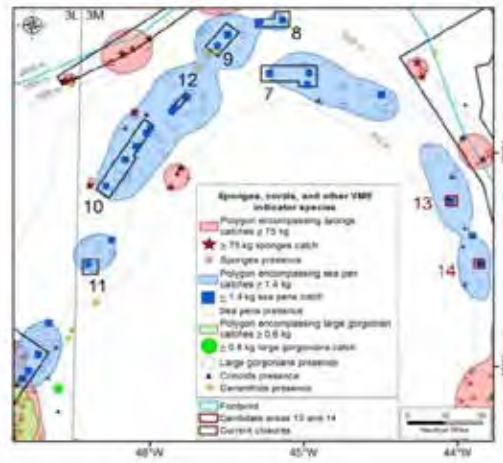


Fig. 3. Areas 7–12 and candidate 13 and 14 Northern and Northwestern Flemish Cap Including Candidate Areas 13, 14. VMEs and VME indicator species from kernel analysis

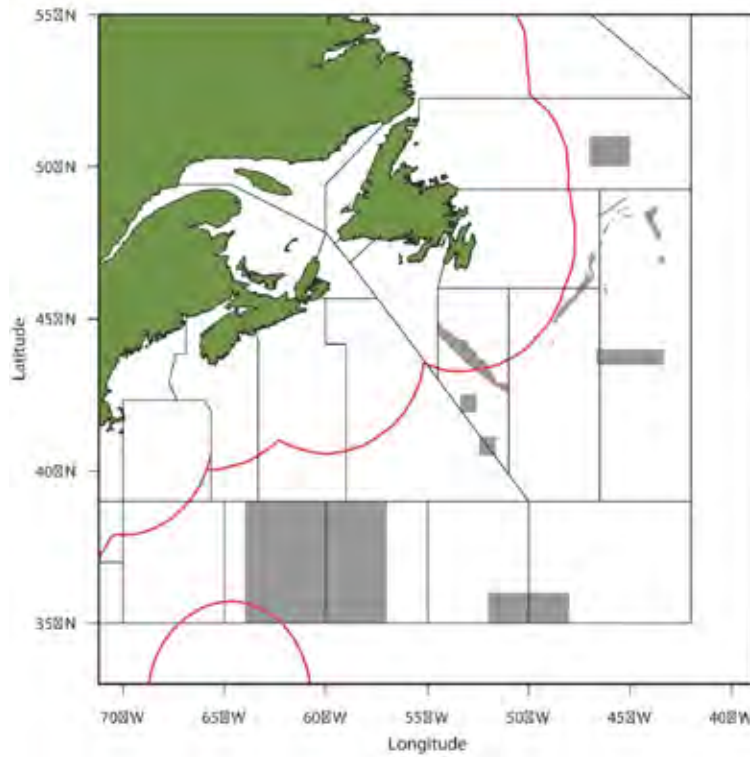


Fig. 4 Existing closed areas in the NRA.

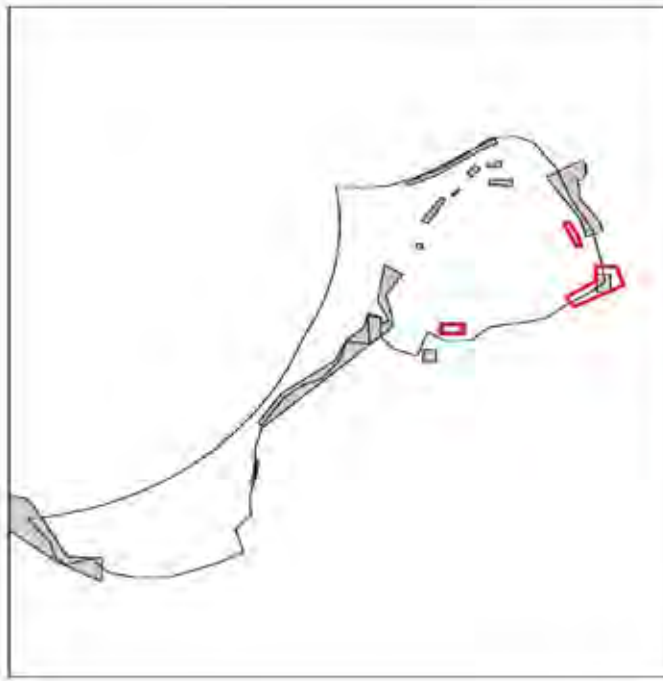


Fig. 5. Three new areas for consideration.

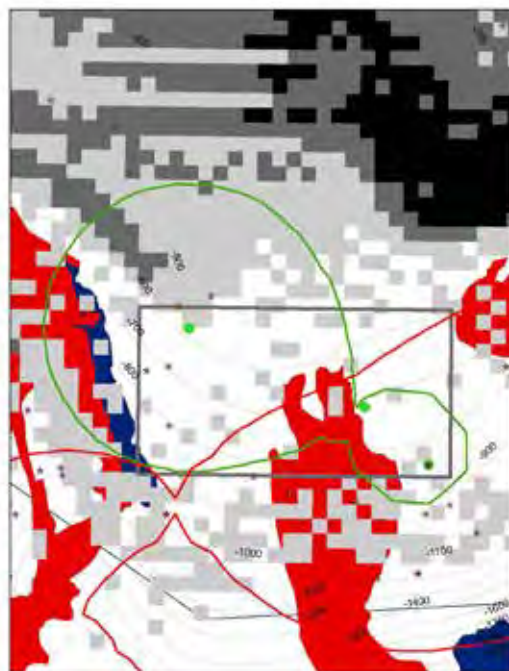


Fig. 6. Beothuk Grid

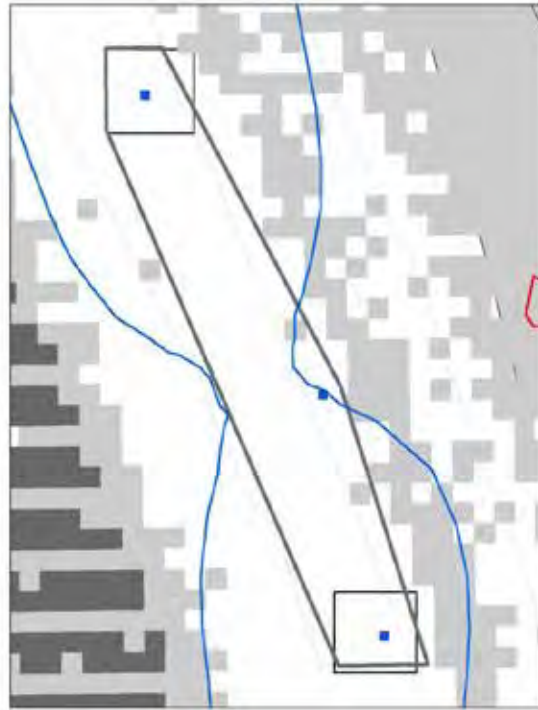


Fig. 7. Candidate Areas 13 and 14 (area of seapen concentration)

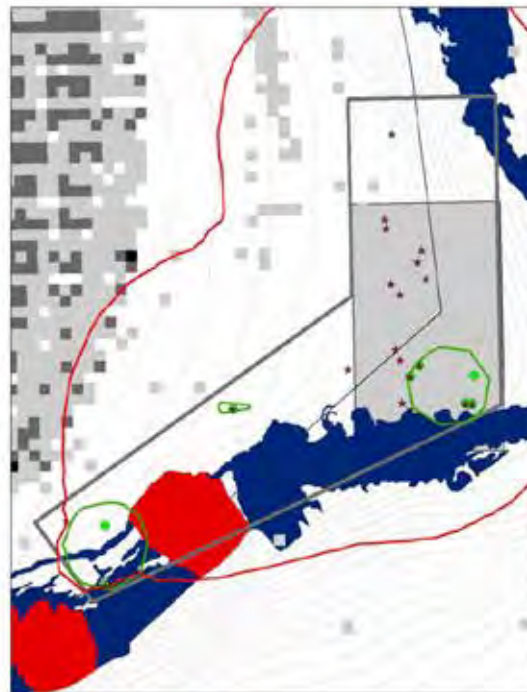


Fig 8. Tail of the Grand Bank



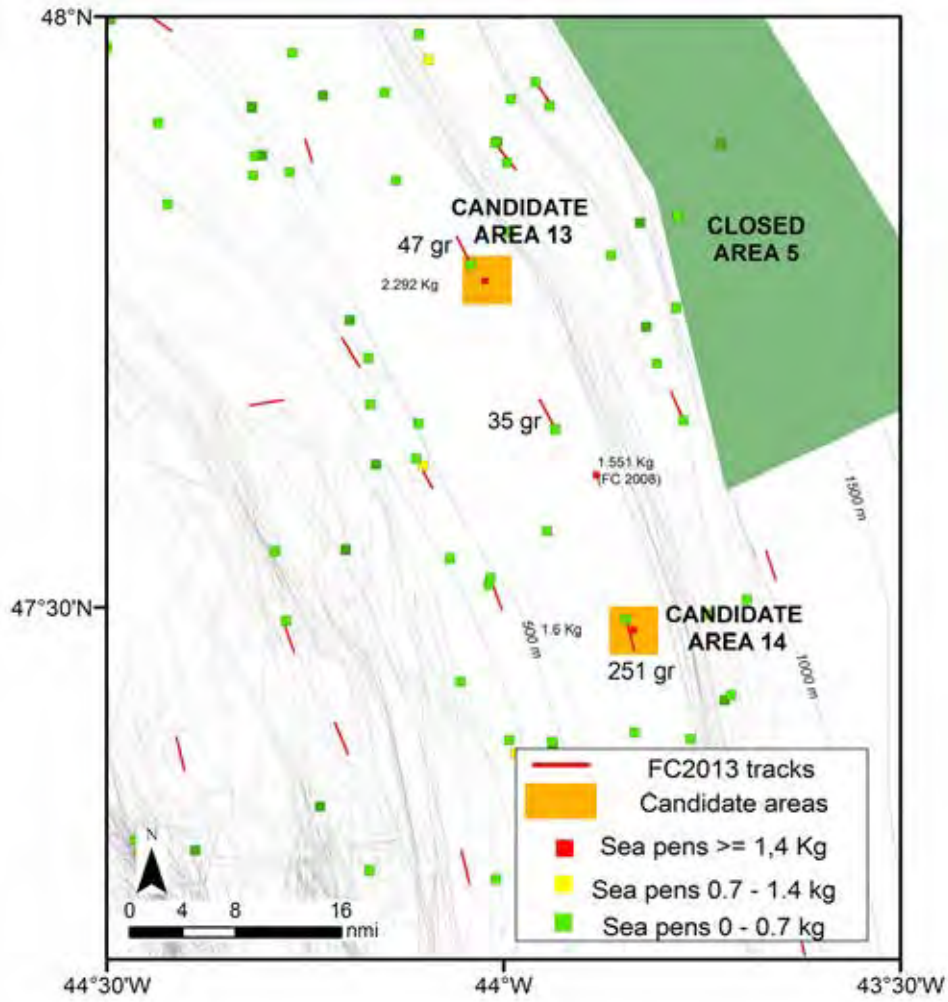


Fig. 9. Candidate Areas 13 and 14

## Annex 7. Presentation by the Russian Federation: Corner Rise Seamount Splendid Alfonsino Fisheries

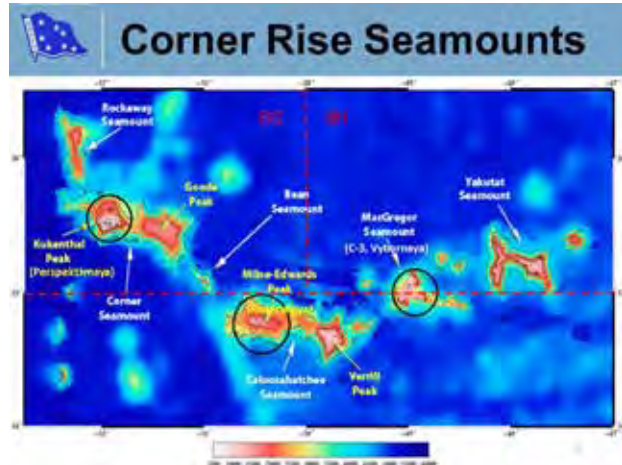
NAFO FC-SC Working Group  
on Ecosystem Approaches to Fisheries Management

**On the stock size and fishery management  
of splendid alfonsino *Beryx splendens*  
on the Corner Rise Seamounts**



V. MANINICHENKO

PINRO  
Kripovich Federal Scientific Center of Marine Fisheries and Aquaculture



### Materials and Methods

- Cruise reports of Russian EVs, RVs and FVs in 1976-2009
- Russian and other countries' publications
- Personal communications of masters of fishing vessels and scientists
- SC response to the FC's request for advice on the Corner Rise.

### Historical Review of Fishery

Russian fishery

- 1976 – over 10,000 t
- 1977 – about 800 t
- 1978-1986 – 2,000 t by EVs and RVs
- 1987 – about 2,800 t (with EVs)
- 1994-2000 – varied from 600 to 4,700 t
- 2003 – unsuccessful attempt at fishery
- 50-70% of catch was taken at “Perspektivnaya” bank
- Main gear – pelagic trawl

### Historical Review of Fishery

Spanish fishery

- Performed since 2004
- Peak catch in 2005 – about 1,200 t
- In subsequent years, catch varied between 52-479 t
- Most catch probably taken at “Perspektivnaya” bank
- Main gear – pelagic trawl, sometimes bottom trawl

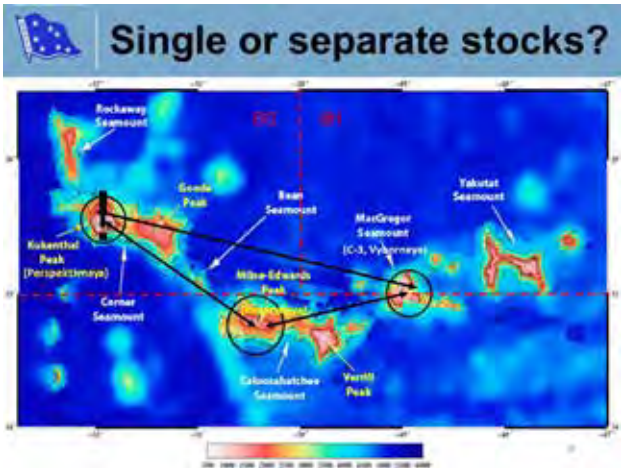
### Biological characteristics

- $L_{min} = 17$  cm
- $L_{max} = 60$  cm
- $L_{avg} = 34-43$  cm
- $W_{avg} = 1.2-1.7$  kg
- $L_{matmin} = 18$  cm
- $Age_{matmin} = 2$  years
- $Age_{matfull} = 6$  years
- $L_{matfull} = 25-30$  cm
- Spawning in 10-12 portions
- Fecundity - up to 2 mil. eggs



### Alfonsino distribution

Fry: 0-600 m  
 Juveniles: uncertain, hypothetic: 250-400 m  
 Matures: 300-950 m  
 Fishery: 600-1000 m

### Biomass by surveys

Seamount	Year	Period		Vessel	Biomass, thousand t
		Month			
"Perspektivnaya"	1980	September		EV "Pavel Nalukov"	0,8 (22,0)
	1981	March		EV "Kapitan Denisov"	0,6
	1987	May		RV "Kapitan Shekharov"	0,2
	2001	January		RV "Atlantida"	0 (no concentrations)
	2000	June		RV "Atlantida"	1,5
"Vybornaya"	2009	December		RV "Atlantida"	0 (no concentrations)
	1981	March		EV "Kapitan Denisov"	0,7
	1984	September		EV "Mikolay Kumpatkin"	4,1 (13,8)
	1987	May		RV "Kapitan Shekharov"	0,13
	1998	June		EV "Petr Petrov"	1,7 (8,3)
"Razarnaya"	2001	January		RV "Atlantida"	0 (no concentrations)
	1981	March		EV "Kapitan Denisov"	0,7
	1985	May		EV "Menzelinsk"	4,4 (14,6)
	1997	May		RV "Kapitan Shekharov"	0,12
	2000	December		RV "Atlantida"	0 (no concentrations)

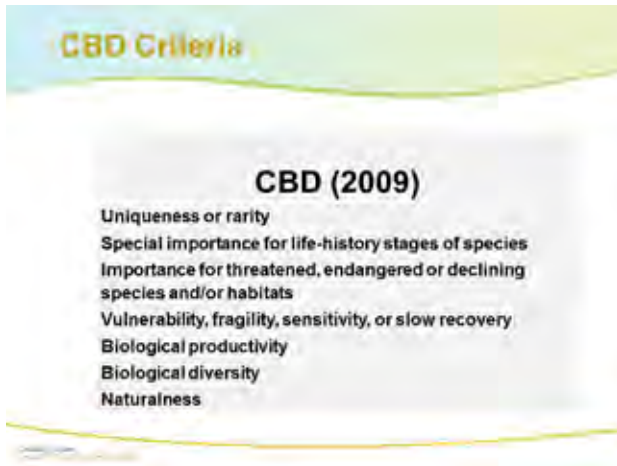
*Note: the biomass values calculated using the catchability coefficient of 0.3 are given in brackets*  
**In 1970s-1990s, stock biomass reached 11000-12000 t**

- ### Complications in fishery
- Variability in alfonsino distribution and density
  - Hard ground conditions
  - Partitioned bottom topography of the banks
  - Small parameters of alfonsino schools
  - Unsteady water circulation above the seamounts

- ### Suggestions
- $F = 0,1$
  - Reliable statistical data on fishery
  - Integrated researches including the studies of biology, intraspecific structure and habitat
  - Stock assessments on the regular basis
  - Development of scientifically grounded measures for fishery management

- ### Suggestions
- Temporary management measures:
- TAC of 400 t for each fishable bank
  - No bottom gear usage
  - No pelagic trawling at the depths less than 600 m
  - Presence of observers at all the fishing vessels
  - Limitation of fishing efforts as an additional measure if required

## Annex 8. Presentation by Canada: CBD and EBSA in the Northwest Atlantic





### CBD Template

**Template for Submission of Scientific Information to Describe Least Viable Mappable Criteria for Ecologically or Biologically Significant Marine Areas**

**Title/Name of the area:**

**Proposed by (person, institution, city, country details):**

**Address:** (to not less than 10 words)

**Justification:**  
(To include: *Biota types, primary/secondary distribution, depth, climate, bathymetry, geomorphology, hydrography, etc. as applicable*)

**Location:**  
(To include: *Geographic coordinates (if available). The study area is located west of (east) east of (west) north of (south) south of (north) east of (west) of the (sea) ocean or (river) (ocean, or (ocean) (sea).*)

**Feature description of the proposed area:**

**Feature condition and future outlook of the proposed area:**  
(Description of the current condition of the area in 2014 (2010), including: *depth, what are the particular vulnerabilities? any general (biotic, or abiotic, characteristics?)*)

### CBD Template

**Assessment of the area against CBD EBSA Criteria**  
(Discuss the area in relation to each of the CBD criteria and utilize the best available science. Note that a proposed area for EBSA description may qualify on the basis of one or more of the criteria, and that the polygons of the EBSA need not be defined with exact precision. And modeling may be used to estimate the presence of EBSA attributes. Please note where there are significant information gaps.)

CBD EBSA Criteria (Annex I to decision IX/20)	Description (Annex I to decision IX/20)	Ranking of criterion relevance (please check one column with an X)		
		No Information	Low	Medium
Uniqueness or rarity				
Special importance for life-history stages of species				

*Explanation for ranking:*

### Labrador Sea Deep Convection Area

**Labrador Sea Deep Convection Area**  
Area: 42512 km<sup>2</sup>

### Seabird Foraging Zone in the Southern Labrador Sea

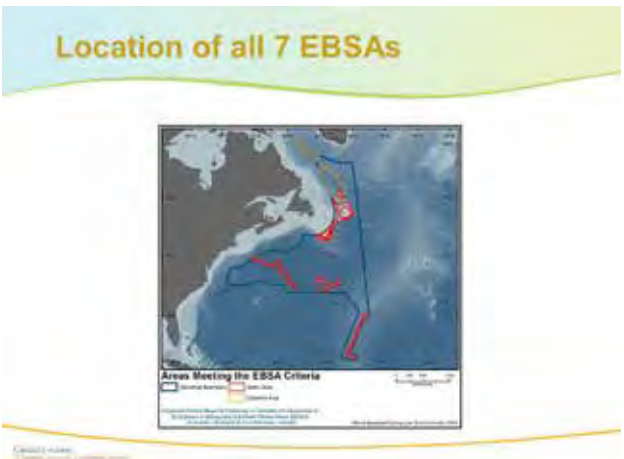
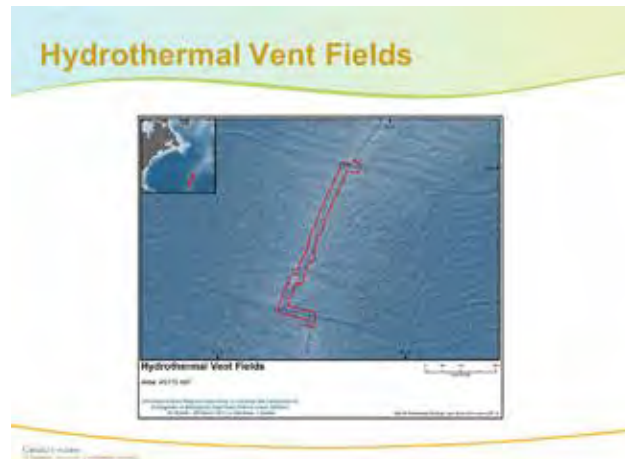
**Seabird Foraging Zone in the Southern Labrador Sea**  
Area: 12246 km<sup>2</sup>

### Orphan Knoll

**Orphan Knoll**  
Area: 10312 km<sup>2</sup>

### Slopes of the Flemish Cap and Grand Bank

**Slopes of the Flemish Cap and Grand Bank**  
Area: 27112 km<sup>2</sup>



- ### Next Steps
- Results were included in the information documents provided to SBSTTA 18 in Montreal, June 23-28
  - Approved EBSA proforma will go forward to the **COP 12** -Twelfth meeting of the Conference of the Parties to the Convention on Biological Diversity Pyeongchang, Republic of Korea, 6 - 17 October 2014
  - Voted on individually

- ### How EBSAs may be used
- EBSAs may be considered in a broad range of oceans management and planning processes
    - Environmental assessment,
    - Environmental emergency response,
    - Integrated ecosystem based management,
    - MPA network planning
  - "Profile" and risk assessment to be completed for each EBSA to identify potential management needs



## **Annex 9. Dr. Enrique de Cardenas (Quique) Retirement**



*Dr Enrique de Cardenas (Quique) started to work in the NAFO Scientific Council in 1989, where he was a member for 25 years. During that time, Quique produced several Scientific Documents, was stock coordinator and leader or co-leader of several scientific projects (such as The Flemish Cap Survey). Even after he left the NAFO SC for the Spanish Administration, Quique never stopped pursuing the best science for NAFO, and for example was one of the leaders, if not the responsible person behind the genesis of the NEREIDA project.*

*Personally, and I think I can speak on behalf of Scientific Council, we would like to thank Quique for the quality of all his work (a life time work) that was extremely important to improve the scientific knowledge of the NAFO area.*

*We will miss your friendship and we all desire the best wishes in your retirement.*

*Thank you Quique.*

