Northwest Atlantic Fisheries Organization



**Report of the Fisheries Commission** 35<sup>th</sup> Annual Meeting, 23-27 September 2013 Halifax, NS, Canada

> NAFO Dartmouth, N.S., Canada 2013

## Report of the Fisheries Commission and its Subsidiary Body (STACTIC)

## 35th Annual Meeting, 23-27 September 2013 Halifax, Nova Scotia, Canada

## Contents

Report of the Fisheries Commission 35 <sup>th</sup> Annual Meeting, 23-27 September 2013 Halifax, NS, Canada	4
I. Opening Procedure (Agenda items 1-5)	4
II. Implementation Review of Performance Review Panel (PRP) and Peer Review Expert Panel (PREP) (Agenda items 6-8)	
III. Scientific Advice (Agenda items 9-10)	6
IV. Conservation of Fish Stocks in the Regulatory Area (Agenda items 11-15)	7
V. Ecosystem Considerations (Agenda items 16-19)	
VI. Conservation and Enforcement Measures (Agenda items 20-23)	
VII. Closing Procedure (Agenda items 24-27)	12
Annex 1. List of Participants	13
Annex 2. Record of Decisions and Actions by the Fisheries Commission	24
Annex 3. Agenda	27
Annex 4. Ad hoc Working Group on Catch Reporting	29
Annex 5. Scientific Council Responses to Questions from the Fisheries Commission	30
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	
Annex 7. 2013 Recommendations from the WGFMS-CPRS to the Fisheries Commission	39
Annex 8. Terms of Reference of the Joint Fisheries Commission-Scientific Council Working Group on Risk-Based Management Strategies	43
Annex 9. Quota Table 2014 and Effort Allocation Scheme 2014	45
Annex 10. Decrease in Mesh Size for Redfish in Div. 3LN	49
Annex 11. White Hake in Division 3NO	50
Annex 12. Greenland Halibut Management Strategy – Review and Evaluation	51
Annex 13. 2013 Recommendations from the WGFMS-VME to the Fisheries Commission	52
Annex 14. Terms of Reference of the Joint Fisheries Commission-Scientific Council Working Group on Ecosystem Approach Framework to Fisheries Management	
Annex 15. Proposed Changes to NAFO's Conservation and Enforcement Measures	59
Annex 16. Standardization of Observer Program Data and Reporting Requirements in the NRA	68
Annex 17. Proposed revisions to Article 3, 5 and 6 of the NCEM (Phase II)	74
Annex 18. Fishing Operations under a Charter Arrangement	83
Annex 19. Observer Reporting	84
Annex 20. Directed Species DS in Authorization Message fir Transhipment	85
Annex 21. Annual Compliance Review 2013( Compliance Report for fishing year 2012)	86

Annex 22. Terms of Reference and Rules of Procedure for the proposed joint NEAFC/NAFO Advisory Group on Data Management	
Annex 23. Conservation Measure on the Management of Redfish in Division 3M	113
Annex 24. Provision of Catch Reporting Data to the NAFO Scientific Council and SC/FC Working Groups	115
Annex 25. Ad hoc Working Group to Reflect on Rules Governing By-catches, Discards and Selectivity in the NAFO Regulatory Area	
Report of the Standing Committee on International Control (STACTIC) 35 <sup>th</sup> Annual Meeting, September 23-27, 2013 Halifax, Canada	117
1. Opening by the Chair, Gene Martin (USA)	117
2. Appointment of Rapporteur	117
3. Adoption of Agenda	117
4 a. Follow-up on Peer Review Expert Panel (PREP) recommendations	117
4 b. Examining the reliability of STATLANT 21 data:	118
5. Editorial Drafting Group (EDG) of the NAFO CEM	118
6. Compliance review 2012 including review of reports of Apparent Infringements	
7. Review and evaluation of Practices and Procedures	119
8. Review of current IUU list pursuant to NAFO CEM Article 54.3	
9. Inspectors Website	120
10. Possible revisions of the NAFO CEM	120
11. Standardization of observer program data and reporting requirements	
12. Standard conversion factors in the NRA	
13. Possible items to be forwarded to the Advisory Group on Data Communication (AGDC)	123
14. Other Matters	123
15. Time and Place of next meeting	123
16. Adoption of Report	123
17. Adjournment	123
Annex 1. Agenda	124
Annex 2. Powerpoint presentation on Methods to compare catch estimates: STATLANT 21 versus STACTIC data	125

### PART I

## Report of the Fisheries Commission 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<sup>rd</sup> 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

- Shrimp in 3M. No directed fishery.
- Shrimp in 3LNO. No directed fishery.
- Capelin in 3NO. No directed fishery for 2014-2015.
- Cod in 3M. In the short term the stock can sustain values of F up to  $F_{max}$ .
- **Redfish in 3M.** Scientific Council recommends not increasing the current TAC (6 500 t)
- 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
- Yellowtail in 3LNO. Fishing mortality up to 85% *Fmsy* 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  $B_{msy}$
- Cod in 3NO. Recommendation for 2014-2016: No directed fishery.
- **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 advice on a more specific TAC level.
- Northern Squid in SA 3+4. Recommendation for 2014-2016: TAC of no more than 34 000 t/yr
- Witch flounder in 2J3KL. Recommendation for 2014-2016. No directed fishery.
- American plaice in 3M. Re-iterated 2011advice: No directed fishery in 2014
- Witch flounder in 3NO. Re-iterated 2011advice: No directed fishery in 2014
- **Redfish in 3LN**. Re-iterated 2012 advice: Fishing mortality in 2014 should be kept around the current level.
- 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.
- American plaice in 3LNO. Re-iterated 2012 advice: No directed fishing in 2014
- **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 squarebracketed 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 NAFOs 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 transhipment (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

Sylvie 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 930 hrs on Friday 27 September 2013.

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

#### NAFO President/GC Chair:

Veits, Veronika, Head of Unit, International Affairs, Law of the Sea and Regional Fisheries Organisations, European Commission, Directorate-General for Maritime Affairs and Fisheries, Rue Joseph II, 99, B-1049 Brussels, Belgium

Phone: +32 2 296 3320 - Fax: +32 2 295 5700 - Email: veronika.veits@ec.europa.eu

#### FC Chair:

Lapointe, Sylvie, Associate Director General, International Affairs Directorate, Fisheries and Oceans Canada, 200 Kent Street, Ottawa, ON K1A 0E6

Phone: +613 993 6853 - Fax: +613 993 5995 - Email: sylvie.lapointe@dfo-mpo.gc.ca

#### CANADA

### **Head of Delegation**

Pegéot, France, Senior Assistant Deputy Minister, Strategic Policy, Fisheries and Oceans Canada, 200 Kent St., Ottawa, Ontario K1A 0E6

Phone: +613 - Fax: +613 - Email: france.pegeot@dfo-mpo.gc.ca

#### Advisers

Alexander, Michael, Regional Director General, NL, 126 Cromarty Drive, PO Box 1350, Dartmouth, B2Y 4B9, Nova Scotia

Phone: +902 426 2988 - Fax: +902 426 4724

Anderson, Kevin, A/Regional Director, Fish Management, Fisheries and Oceans Canada, P. O. Box 5667, St. John's, NL A1C 5X1

Phone: +709 772 4543 - Fax: +709 772 2046 - Email: kevin.anderson@dfo-mpo.gc.ca

Broderick, William, P.O. Box81, St. Brendans, NL, A0G 3V0 Phone: +709 743 6160 – Email: b.broderick@ffaw.net

Brodie, Bill, Senior Science Coordinator/Advisor on NAFO, Science Br., NL Region, Fisheries and Oceans Canada, 80 East White Hills Rd., P. O. Box 5667, St. John's, NL A1C 5X1
Phone: +709 772 3288 - Fax: +709 772 4105 - Email: bill.brodie@dfo-mpo.gc.ca

Chapman, Bruce, Executive Director, Groundfish Enterprise Allocation Council, 1362 Revell Dr., Manotick, ON K4M 1K8
 Phone: +613 692 8249 – Fax: +613 692 8250 – Email: bchapman@sympatico.ca

Couture, Estelle, Senior Science Adviser, Fish Population Science, Fisheries and Oceans Canada, 200 Kent Street (Stn. 12S45), Ottawa, ON K1A 0E6 Phone: +613 990 0259 – Fax: +613 954 0807 – Email: couturee@dfo-mpo.gc.ca

Dale, Aaron, 46 Johnny Hill Dr., Happy Valley - Goose Bay, NL, A0P 1E0, PO Box 2149 Phone: +709 897 4676 – Email: jamie.snook@torngatsecretariat.ca

Day, Robert, Director, IAD, Strategic Policy, Atlantic and Americas Regional Affairs Bureau, International Affairs Directorate, Fisheries and Oceans Canada, 200 Kent St., Ottawa, ON K1A 0E6 Phone: +613 991 6135 – Fax: +613 990 9574 – Email: robert.day@dfo-mpo.gc.ca

- Dooley, Tom, Director, Resource Policy, Dept. of Fisheries and Aquaculture, P. O. Box 8700, St. John's, NL A1B 4J6 Phone: +709 729 0335 - Fax: +709 729 6082 - Email: tdooley@gov.nl.ca
- Dwyer, Shelley, Newfoundland and Labrador, 30 Strawberry Marsh Road, St. John's, NL, A1B 4J6 Email: shelleydwyer@gov.nl.ca
- Fagan, Robert, Fisheries Management, Fisheries and Oceans Canada, P.O. Box 5667, St. John's, NL A1C 5X1 Phone: +709 772 2920 – Email: robert.fagan@dfo-mpo.gc.ca
- Gilchrist, Brett, Senior International Fisheries Officer, Atlantic and Americas Regional Affairs Bureau, International Affairs Directorate, Fisheries and Oceans Canada, 200 Kent St., Ottawa, ON K1A

0E6

Phone: +1 613 991 0218 - Fax: +1 613 990 9574 - Email: brett.gilchrist@dfo-mpo.gc.ca

- Jenkins, Randy, Director, Enforcement Programs, Conservation and Protection (C&P), Fisheries and Oceans Canada, 200 Kent Street, Ottawa, ON K1A 0E6 Phone: +613 990 0108 – Fax: +613 941 2718 – Email: randy.jenkins@dfo-mpo.gc.ca
- Kenchington, Ellen, Research Scientist, Fisheries and Oceans Canada, Bedford Institute of Oceanography, P. O. Box 1006, Dartmouth, NS B2Y 4A2 Phone: + 902 426 2030 – Email: ellen.kenchington@dfo-mpo.gc.ca
- Koen-Alonso, Mariano, Science Br., NL Region, Fisheries and Oceans Canada, P. O. Box 5667, St. John's, NL A1C 5X1 Phone: +709 772 2047 – Fax: +709 772 4105 – Email: mariano.koen-alonso@dfo-mpo.gc.ca
- Lambert, Robert, Chief, Enforcement Operations, Conservation and Protection (C&P) NCR, NL Region, Fisheries and Oceans Canada, P. O. Box 5667, St. John's, NL A1X 5X1 Phone: +709 772 5482 – Fax: +709 772 3628 – Email: robert.lambert@dfo-mpo.gc.ca
- Lavigne, Elise, Atlantic and Americas Regional Affairs Bureau, International Affairs Bureau, International Affairs Directorate, Fisheries and Oceans Canada, 200 Kent St., Ottawa, ON K1A 0E6 Phone: +1 613 990 5374 – Email: elise.lavigne@dfo-mpo.gc.ca
- McCurdy, Earle, President, Fishermen, Food and Allied Workers Union/CAW, P. O. Box 10, St. John's, NL A1C 5H5 Phone: +709 576 7276 – Fax: +709 576 1962 – Email: emccurdy@ffaw.nfld.net
- McNamara, Brian, President, Newfound Resources Ltd, 7 Victory Lane, Mount Pearl, NL Phone: +709 685 1110 – Email: nrl@nfld.com
- Morgan, Joanne, Science Br., NL Region, Fisheries and Oceans Canada, P. O. Box 5667, St. John's, NL A1C 5X1 Phone: +709 772 2261 – Email: joanne.morgan@dfo-mpo.gc.ca
- Napier, Brent, Chief, Enforcement Programs, Conservation & Protection, 200 Kent St., Ottawa, ON K1A 0E6 Phone: +613 998 9537 – Fax: +613 941 2718 – Email: brent.napier@dfo-mpo.gc.ca
- Sheppard, Beverley, Manager, Harbour Grace Shrimp Co. Ltd., P. O. Box 580, Harbour Grace, NL A0A 2M0 Phone: +709 589 6415 Fax: +709 596 8002 Email: bsheppard@hgsc.ca
- Stansbury, Don, Science Br., NL Region, Fisheries and Oceans Canada, P. O. Box 5667, St. John's, NL A1C 5X1 Phone: +709 772 0559 – Email: don.stansbury@dfo-mpo.gc.ca
- Sullivan, Loyola, Ocean Choice International, 1315 Topsail Rd., P. O. Box 8274, Stn. A, St. John's, NL A1B 3N4 Phone: +709 782 6244 – Fax: +709 368 2260 – Email: lsullivan@oceanchoice.com
- Sullivan, Martin, CEO, Ocean Choice International L.P., 1315 Topsail Rd., P. O. Box 8274, Stn. A, St. John's, NL A1B 3N4 Phone: +709 782 6244 – Fax: +709 368 2260 – Email: msullivan@oceanchoice.com
- Sweet, Marilyn, Senior Advisor, 200 Kent Street, Ottawa, ON K1A 0E6 Phone: + 613 991 4365 – Email: Marilyn.sweet@dfo-mpo.gc.ca
- Walsh, Rosalind, Executive Director, Northern Coalition, P. O. Box 6421, 189 Water St., Suite 301, St. John's, NL Phone: +709 722 4404 Fax: +709 722 4454 Email: rwalsh@nfld.net
- Walsh, Ray, Regional Manager, Fisheries Management, Fisheries and Oceans Canada, P.O. Box 5667, St. John's, NL A1C 5X1
   Phone: +709 772 4472 Fax: +709 772 3628 Email: ray.walsh@dfo-mpo.gc.ca
- Ward, Jerry, Baffin Fisheries Coalition Phone: 708 726 6328 0- Fax: +708 726 6374 – Email: jward@bfcoalition.ca
- Ward, Chad, Detachment Supervisor, Offshore Detachment, Fisheries & Aquaculture, Management Branch, P. O. Box 5667, St. John's, NL A1C 5X1 Phone: +709 772 4412 –Fax: +709 772-0008 - Email: chad.ward@dfo-mpo.gc.ca
- Wareham, Alberto, Managing Director, Icewater Seafoods Inc., P. O. Box 89, Arnold's Cove, NL A0B 1A0 Phone: +709 463 2445 - Fax: +709 463 2300 - Email: awareham@icewaterseafoods.com

#### CUBA

#### **Head of Delegation**

Yong Mena, Nora, Head of the International Relations Office, Ministry of the Food Industry, Municipio Playa, Havana Phone: +53 7 207 9484 – Fax: +53 7 204 9168 – Email: nora.yong@minal.cu

#### Alternate

Torres Soroa, Martha, International Relations Specialist, Ministry of the Food Industry, Municipio Playa, Havana Phone: +53 7 207 9484 – Fax: +53 7 204 9168 – Email: martha.torres@minal.cu

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

#### Head of Delegation (GC)

Trolle Nedergaard, Mads, Fiskerilicensinspektor, Head of Department, Gronlands Fiskerilicenskontrol, Postbox 501, DK-3900 Nuuk, Greenland

Phone: +299 553347 - Fax: +299 323235 - Email: mads@nanoq.gl

#### Head of Delegation (FC)

Wang, Ulla Svarrer, Special Adviser, Ministry of Fisheries, Yviri við Strond 15, P. O. Box 347, FO-110 Torshavn, Faroe Islands

Phone: + 298 35 30 30 / +298 55 32 42 - Fax: +298 35 30 35 - Email: ulla.svarrer.wang@fisk.fo

#### Advisers

- Djurhuus, Hákun Jógvanson, Head of Representation, Austurstræti 12 3<sup>rd</sup> Floor, 101 Reykjavik, Iceland Phone: +354 511 3200 Fax: +354 511 3209 Email: hakund@mfa.fo
- Ehlers, Esben, Head of Section, Aalisarnermut, Piniarnermut Nunalerinermullu Naalakkersuisoqarfik. Departementet for Fiskeri, Fangst og Landbrug. Ministry for Fisheries, Hunting and Agriculture, Greenland Phone: +299 345314 – Email: eseh@nanoq.gl

Gaardlykke, Meinhard, Adviser, Faroe Islands Fisheries Inspection, Yviri við Strond 3, P. O. Box 1238, FO-110 Torshavn, Faroe Islands Phone: +298 311065 – Fax: +298 313981 – Email: meinhardg@fve.fo

- Jacobsen, Petur M., Head of Section, Grønlands Fiskerilicenskontrol, Postbox 501, DK-3900 Nuuk, Greenland Phone: +299 345393 – Fax: +299 323235 – Email: pmja@nanoq.gl
- Joensen, Jóhan, Director, P/F Líðin, P.O. Box 79, FO-410 Kollafjørður, Faroe Islands Phone: +298 213448 – Fax : + 298 421584 – Email: lidin@olivant.fo
- Joensen, Jogvan Martin F., Project Development Manager, P/F Thor, Bryggjan 5, FO 420 Hosvik, Faroe Islands Phone: +298 42 25 03 – Fax: +298 42 23 83 – Email: jm@thor.fo

#### **EUROPEAN UNION**

#### Head of Delegation (FC)

Veits, Veronika, Head of Unit, International Affairs, Law of the Sea and Regional Fisheries Organisations, European Commission, Directorate-General for Maritime Affairs and Fisheries, Rue Joseph II, 99, B-1049 Brussels, Belgium

Phone: +32 2 296 7224 - Fax: +32 2 295 5700 - Email: veronika.veits@ec.europa.eu

#### Head of Delegation (GC)

Dross, Nicolas, International Relations Officer, International Affairs, Law of the Sea and Regional Fisheries Organizations, European Commission, Directorate General for Fisheries and Maritime Affairs (DG MARE.B.1), Rue Joseph II, 99, 1000 Brussels, Belgium Phone: +32 2 298 0855 – Fax: +32 2 295 5700 – Email: nicolas.dross@ec.europa.eu

#### Alternates

- Duarte, Rafael, European Commission, Directorate General for Fisheries and Maritime Affairs, Rue Joseph II, 79 (02/217), B-1049, Brussels, Belgium Phone: +32 2 299 0955 – Email: rafael.duarte@ec.europa.eu
- Pagliarani, Giuliano, Administration Officer-NAFO Coordinator, Fisheries Control in International Waters, European Commission, Directorate-General for Maritime Affairs and Fisheries, Rue Joseph II, 99 (01/062), B-1049, Brussels, Belgium

Phone: +32 2 296 3834 - Fax: +32 2 296 2338 - Email: giuliano.pagliarani@ec.europa.eu

Schuller, Herbert, European Commission, International Relations Officer, International Affairs, Law of the Sea and Regional Fisheries Organisations Directorate General for Fisheries and Maritime Affairs Rue Joseph II, 99, 1049 Brussels, Belgium

Phone: +32 2 229 53892 - Fax: +32 2 229 55700 - Email: herbert.schuller@ec.europa.eu

Spezzani, Aronne, European Commission, Directorate-General for Maritime Affairs and Fisheries, 99 Rue Joseph II, B-1049, Brussels, Belgium Phone: +32 2 295 9629 - Fax: +32 2 296 2338 - Email: aronne.spezzani@ec.europa.eu

#### Advisers

- Addison, James, Sea Fisheries Conservation (International Team), Dept. for Environment, Food and Rural Affairs, 18Smith Square, London, SW1P 3JR, United Kingdom Phone: +44 (0) 7779 012038 – Email: james.addison@defra.gsi.gov.uk
- Alpoim, Ricardo, Instituto Portugues do Mar e da Atmosfera, I.P., Av. de Brasilia, 1449-006 Lisbon, Portugal Phone: +351 21 302 7000 - Fax: +351 21 301 5948 - Email: ralpoim@ipma.pt
- Alvarez, Alejandro, Avda. Camelias 52, 4ºA, 36210 Vigo, Spain Phone: +34 986 291100 - Fax: +34 986 209505 - Email: albri@albri.com
- Babcionis, Genadijus, Desk Manager, European Fisheries Control Agency (EFCA), Apartado de Correos 771 E-36200 - Vigo, Spain Phone: +34 986 12 06 40 – Email: genadijus.babcionis@efca.europa.eu
- Batista, Emilia, Direcao-Geral de Recursos Naturais, Seguranca, Servicos Maritimos, Avenida da Brasilia, 1449-030 Lisbon, Portugal

Phone: +351 742 3629 - Fax: +351 21 303 5922 - Email: ebatista@dgrm.mamaot.pt

- Blanco, Lino, AV Garcia Barbon G2, ENTW, 36201 Vigo, Spain/Ravala Nº4, 10193 Tallin, Estonia Phone: + 34 986 447384 - Email: lblanco@profenit.com
- Bulauskis, Alenas, Fisheries Department of the Ministry of Agriculture, Gedimino av. 19, LT-01103, Lithuania Phone: +370 678 1079 - Email: alenas@zum.lt
- Cabral Schiappa Antonio, Secretario-Geral, A.D.A.P.I., Rua General Gomes d'Araijo, Edificio Vasco da Gama, 1399-005 Lisbon, Portugal

Phone: +351 21 397 2094 - Fax: +351 21 397 2090 - Email: adapi.pescas@mail.telepac.pt

#### Casas, José Miguel

Instituto Español de Oceanografía, P.O. Box 1552, Vigo, Spain E-mail: mikel.casas@vi.ieo.es

Chamizo Catalan, Carlos, Head of Fisheries Inspection Division, Secretariat General de Pesca Maritima, Subdireccion de Control Inspecion, Ministerio de Medio Ambiente, y Medio Rural y Marino, Velázquez, 144, 28006 Madrid, Spain

Phone: +34 347 1949 - Fax: +34 347 1512 - Email: cchamizo@magrama.es

#### Davidsson, Gudjon

Phone: +354 896 0494 Email: gudjon@simnet.is

De Cardenas, Enrique, Secretariat General del Mar, Ministerio de Medio Ambiente y Medio Rural y Marino, Velázquez, 144, 28006 Madrid, Spain Phone: +34 91 347 6110 - Fax: +34 91 347 6037 - Email: edecarde@magrama.es

- Dybiec, Leszek, Counsellor to the Minister, Fisheries Dept., Ministry of Agriculture and Rural Development, 30,Wspolna St., 00-930 Warsaw, Poland Phone: +48 22 623 2214 – Fax: +48 22 623 2204 – Email: leszek.dybiec@minrol.gov.pl
- Escobar Guerrero, Ignacio, Director General de Recursos Pesqueros y Acuicultura, Secretaria General de Pesca, C/Velazquez, 144, 28006 Madrid, Spain Phone: +91 347 60 30/31 – Fax: +91 347 60 32 – Email: iescobr@magrama.es
- Franca, Pedro, CEO, Pedro Franca, Av Pedro Alvares Cabral 188, 3830-786 Gafanha da Nazare, Portugal Phone: +351 234 390 250 Fax +351 234 390 251 Email: pedrofranca@pedrofranca.pt
- Friedrichsen, Lutz, BMELV, Rochusstraße, 53123, Bonn, Germany Email: Lutz.Friedrichsen@bmelv.bund.de
- Gonzalez-Costas, Fernando, Instituto Espanol de Oceanografia, Aptdo 1552, E-36280 Vigo (Pontevedra), Spain Phone: +34 9 8649 2239 – Email: fernando.gonzalez@vi.ieo.es
- Gonzalez-Troncoso, Diana, Instituto Español de Oceanografia, Aptdo 1552, E-36280 Vigo (Pontevedra), Spain Phone: +34 9 86 49 2111 – Email: diana.gonzalez@vi.ieo.es
- Gretarsson, Haraldur, Geschaftsfuhrer, Deutsche Fischfang-Union GmbH & Co. KG, Bei der Alten Liebe 5, 27472 Cuxhaven, Germany Phone: +47 21 7079 20 – Fax: +47 21 7079 29 – Email: hg@dffu.de
- Ivanescu, Raluca, Council of the European Union, General Secretariat, DG-BIII-Fisheries, Rue de la Loi 175, B-1040 Brussels, Belgium Phone: +32 2 497 299582 – Email: raluca.ivanescu@consilium.europa.eu
- Kazlauskas, Tomas, Head of Division, Fisheries Control and Monitoring Division, J. Lelevelio Str. 6, LT-0110 Vilnius, Lithuania Phone: +370 5 239 8485 Email: tomas.kazlauskas@zuv.it

- Kingston, Fred, Senior Adviser, Economic and Commercial Affairs Section, Delegation of the European Union to Canada, 1900-150 Metcalfe St., Ottawa, Ontario, Canada K2P 1P1 Phone: +613 563 6358 – Fax: +613 238 5191 – Email: fred.kingston@eeas.europa.eu
- Labanauskas, Aivaras, Fisheries Department of the Ministry of Agriculture, Gedimino av. 19, LT-01103, Lithuania Phone: +370 670 19116 - Email: aivaras@zum.lt
- Liria Franch, Juan Manuel, Vice Presidente, Confederación Española de Pesca, C/Velázquez, 41, 4° C, 28001 Madrid, Spain

Phone: +34 91 432 34 89 - Fax: + 34 91 435 52 01 - Email: jmliria@iies.es

- Mancebo Robledo, C. Margarita, Jefa de Area de Relaciones Pesqueras Internacionales, Ministerio de Agricultura, Alimentacion y Medio Ambiente, S. G. de Acuerdos y Organizaciones Regionales de Pesca, Direccion General de Recursos Pesueros y Acuicultura, Secretaria General del Mar, C/Velázquez, 144, 28006 Madrid, Spain Phone: +34 91 347 61 29 – Fax: +34 91 347 60 42 – Email: cmancebo@magrama.es
- Mandado Alonso, Mónica, Instituto de Investigaciones Marinas, Eduardo Cabello 6, 36208, Vigo, Spain Phone: +34 986 23 19 30 – Email: mandado@iim.csic.es
- Meremaa, Epp, Chief Specialist, Department of Fishery, Economics Ministry of Agriculture Tallinn, Estonia Phone: +372 6256 204 - Fax +372 6256 200 - Email: epp.meremaa@agri.ee
- Molares Montenergro, Jose Carlos, Valiela Buques de Pesca, C/. Paulino Freire, Nº 9-2, 36200 Vigo, Spain Phone: +34 986 20 83 78 – Fax: +86 986 20 04 25 – Email: jose.molares@xunta.es
- Molares Vila, Jose, Subdirector General de Investigación y Apoyo Científico-Técnico, Xunta de Galicia, Conselleria do Medio Rural e do Mar, Rua dos Irmandiños s/n, 15701 Santiago de Compostela. España Phone: +34 881 996057 Fax: +34 981 546138 E-mail: jose.molares.vila@xunta.es
- Moreno Blanco, Carlos, Subdirector General de Acuerdos y Organizaciones, Regionales de Pesca, Direccion General de Recursos Pesqueros y Acuicultura, Velázquez, 144, 28006 Madrid, Spain Phone: +34 91 347 60 40 Fax: +34 91 347 60 42 Email: cmorenob@magrama.es

- Paião, Anibal, Director, A.D.A.P.I.-Associacao dos Armadores das Pescas Industriais, Docapesca, Edificio da Gama, Bloco-C, Piso 1, Rua General Gomes d'Araujo, Alcantara-Mar, 1399-005 Lisbon, Portugal Phone: +351 21397 2094 – Fax: +351 21397 2090 – Email: adapi.pescas@mail.telepac.pt
- Paião, Jorge, Director, A.D.A.P.I.-Associacao dos Armadores das Pescas Industriais, Docapesca, Edificio da Gama, Bloco-C, Piso 1, Rua General Gomes d'Araujo, Alcantara-Mar, 1399-005 Lisbon, Portugal Phone: +351 21397 2094 – Fax: +351 21397 2090 – Email: adapi.pescas@mail.telepac.pt
- Rafael, Teresa, Director-General, Direccao-Geral das Pescas e Aquicultura, Avenida da Brasilia, 1449-030 Lisbon, Portugal

Phone: +351 213 035 889 - Fax: +351 21 303 5965 - Email: trafael@dgrm.min-agricultura.pt

Riekstins, Normunds, Director of Fisheries Department, Ministry of Agriculture, Republikas laukums 2, LV-1981 Riga, Latvia

Phone: +371 6732 3877 - Fax: +371 6733 4892 - Email: normunds.riekstins@zm.gov.lv

- Ramón Fuertes Gamundi, José, Director Gerente, Cooperativa de Armadores de Pesca del Puerto de Vigo, S. Coop. Galleag, Apartado 1.078, 36200 Vigo, Spain Phone: +34 986 43 38 44 – Fax: +34 986 43 92 18 – Email: direccion@arvi.org
- Sacau-Cuadrado, Mar, Instituto Español de Oceanografía (IEO), E-36200 Vigo (Pontevedra) Phone: +34 98 649 2111 – Fax: +34 98 649 86 26 – Email: mar.sacau@vi.ieo.es
- Sarevet, Mati, Managing Director, Estonian Long Distance Fishing Association, 39 Veerenni Street, 10138 Tallinn, Estonia Phone: +372 627 6545 - Fax: +372 627 6555 – Email: mati@revktal.ee
- Sirp, Silver, Head of Observers Working Group, Estonian Marine Institute, University of Tartu, 10A Maealuse St., 12618, Tallinn, Estonia Phone: +372 529 5396 – Email: silver.sirp@ut.ee
- Soe, Indrek, The Environmental Inspectorate, Kopli 76, 10416 Tallinn, Estonia Phone: +372 696 2261 – Email: indrek.soe@kki.ee
- Szemioth, Bogslaw, North Atlantic Producers Organization, ul. Parkowa 13/17/123, 00-759 Warsaw, Poland Phone: +48 601 209 318 Email: szemioth@atlantex.pl
- Taveira da Mota, Jose, Antonio, Edificio Vasco da Gama, 1399-005, Lisbon, Portugal Phone: +351 21 397 2094 – Fax: +351 21 397 2090 – Email: adapi.pescas@mail.telepac.pt
- Tuvi, Aare, Senior Officer, Fishery Resources Dept. Ministry of the Environment Ravala 8, 10143 Tallinn, Estonia Phone: + (372) 6604 544 – Email: aare.tuvi@envir.ee
- Vaz Pais, Tiago, A.D.A.P.I.-Associacao dos Armadores das Pescas Industriais, Docapesca, Edificioda Gama, Bloco-C, Piso 1, Rua General Gomes d'Araujo, Alcantara-Mar, 1399-005 Lisbon, Portugal Phone: +351 21397 2094 – Fax: +351 21397 2090 – Email: adapi.pescas@mail.telepac.pt

Vilhjalmsson, Hjalmar, Veerenni 39, 10138 Tallinn, Estonia Phone: +354 588 7663 – Fax: +354 588 7610 - Email: hjalmar@reyktal.is

#### FRANCE (in respect of Saint-Pierre et Miquelon)

#### **Head of Delegation**

Artano, Stéphane, President du Conseil Territorial de Saint-Pierre-et-Miquelon, B.P. 4208, Place Monseigneur-Maurer 97500 Saint-Pierre et Miquelon

Phone: + 06 32 384378 - Fax: + 508 41 04 79 - Email: president@ct975.fr

#### Alternate

Philippeau, Jean-Marc, Ministère de l'écologie, Directorate for Sea Fisheries and Aquaculture, Subdirectorate for Fisheries Resources, International Unit, Tour Voltaire, 1 place des Degrés, 92055, Cedex, La Defense, France Phone: +33(1) 4081 8986 – Email: jean-marc.philippeau@developpement-durable.gouv.fr

#### Advisers

- Bigorgne, Matthias, Deputy Head of Unit, Directorate for Sea Fisheries and Aquaculture, Subdirectorate for Fisheries Resources, Fisheries Control Unit, Tour Voltaire 1 place des Degrés, 92055 La Defense, Cedex, France Phone: +33 6 66 48 29 76 Fax: +33 1 40 81 86 56 Email: matthias.bigorgne@developpement-durable.gouv.fr
- de Guillebon, Amaury, Head of the Maritime Division, 1 Rue Gloanec, BP4206, 97500 Saint-Pierre et Miquelon Phone: +508 41 15 36 - Fax: +508 41 48 34 - Email: amaury.de-guillebon@equipement-agriculture.gouv.fr
- Goraguer, Herle, IFREMER, Station de St. Pierre, BP 4240, 97500 Saint-Pierre et Miquelon Email: hgorague@ifremer.fr

Detcheverry, Bruno, Directeur, SNPM Seafood Processing, 11, rue Georges Daguerre, BP 4262, 97500 Saint-Pierre et Miquelon

Phone: +05 08 41 08 90 - Fax: + 05 08 41 08 89 - Email: bruno.detcheverry@edcmiquelon.com

#### ICELAND

#### **Head of Delegation**

Karlsdóttir, Hrefna, Special Adviser, Ministry of Industry and Innovation, Skúlagata 4, 150 Reykjavík Phone: + 354 5892 8674 – Fax: +354 862 1853 – Email: hrefna.karlsdottir@anr.is

#### Advisers

Benediktsdóttir, Brynhildur, Special Adviser, Department of International Affairs, Ministry of Industry and Innovation, Skulagata 4, 150 Reykjavik Phone: +354 545 8300 – Fax: +354 552 1160 – Email: brynhildur.benediktsdottir@anr.is

Ingason, Bjorgolfur H, Icelandic Coast Guard, Skogarhlid 14, 105 Reykjavik Phone: +354 545 2100 – Fax: +354 545 2001 – Email: bjorgolfur@lhg.is

Thormar, Anna, Quota Allocations Department, Directorate of Fisheries, Dalshrauni 1, 220 Hafnarfjordur Phone: +354 569 7900 – Fax: +354 569 7991 – Email: annatho@fiskistofa.is

#### JAPAN

#### **Head of Delegation**

Iino, Kenro, Special Adviser to the Minister of Agriculture, Forestry and Fisheries, 1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8907

Phone: +81 3 3388 4038 - Fax: +81 3 3388 4038 - Email: keniino@hotmail.com

#### Advisers

- Matsuura, Hiroshi, Technical Officer, Fisheries Management Division, Fisheries Agency Government of Japan, 1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8907 Phone: +81 3 6744 2363 – Fax: +81 3 3501 1019 – Email: hiroshi matsuura2@nm.maff.go.jp
- Motooka, Tsunehiko, Officer, International Affairs Division, Fisheries Agency Government of Japan, 1-2-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8907 Phone: +81 3 3502 8460 – Fax: +81 3 3502 0571 – Email: tsunehiko motooka@nm.maff.go.jp
- Nishida, Tsutomu (Tom), Assistant Researcher, National Research Institute of Far Seas Fisheries, Fisheries Research Agency, 5-7-1, Orido, Shimizu-Ward, Shizuoka-City, Shizuoka 424-8633 Phone/Fax : +81 54 336 6052 – Email : tnishida@affrc.go.jp

Okamoto, Junichiro, Councilor, Japan Overseas Fishing Association, NK-Bldg., 6F, 3-6 Kanda Ogawa-Machi, Chiyoka-Ku, Tokyo, 101-0052 Phone: +03 3291 8508 – Fax: + 03 3233 3267 – Email: jokamoto@jdsta.or.jp

Onodera, Akiko, Officer, Fishery Division, Economic Affairs Bureau, Ministry of Foreign Affairs, 2-2-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8919 Phone: +81 3 5501 8000 ext. 3666 - Fax: +81 3 5501 8332 - email: akiko.onodera@mofa.go.jp Sakino, Tomonori, General Manager, Overseas Operation Department, Taiyo A & F Co., Ltd, Toyomishinko Bldg., 4-5 Toyomi-cho, Chuo Ku, Tokyo, 104-0055 Phone : + 81 3 622 1260 - Fax: +81 3 6220 1460 - kani@maruha-nichiro.co.jp

Tanabe, Takahisa, Technical Advisor, Japan Overseas Fishing Association, NK-Bldg, 6F, 3-6 Kanda Ogawa-Machi, Chiyoda-ku, Tokyo, 101-0052, Japan Phone : + 03 3291 8508 – Fax : +03 3233 3267 – Email: nittoro@jdsta.or.jp / tanabe@jdsta.or.jp

#### **REPUBLIC OF KOREA**

#### **Head of Delegation**

Jung, Chung Mo, Deputy Director, Ministry of Oceans and Fisheries, Distant-Water Fisheries Division, Government Complex Sejong, 94, Dasom 2-Ro, Sejong Special Self-governing City, 339-012, Korea Phone: +82 44 200 5371 – Fax: +82 44 200 5379 – Email: jamesjung@korea.kr

#### Advisers

Yoon, Jiwon, Advisor-International Affairs & International Fisheries, Institute for International Fisheries Cooperation Phone: + 82 42 484 8405 - Fax: +82 2 484 8406 - Email: jiwon.yoon@ififc.org

Cho Yang-Sik, Managers, International Affairs Dept 2, 6<sup>th</sup> Fl. Samho Center Bldg. "A", 275-1, Yangjae-Dong, SeoCho-Ku, Seoul, Korea Phone: +92 2 589 1617, Fax: +85 2 589 1630-1 – Email: mild@kosfa.org

#### NORWAY

#### **Head of Delegation**

Holst, Sigrun M., Deputy Director General, Ministry of Fisheries and Coastal Affairs, Dept. for Fisheries and Aquaculture, P. O. Box 8118 Dep. NO-0032 Oslo Phone: +47 22 24 65 76 – Fax: +47 22 24 95 85 – Email: sigrun.holst@fkd.dep.no

#### Advisers

- Bergstad, Odd Aksel, Principal Research Scientist, Institute of Marine Research Flødevigen, N-4817 His Phone: +47 37 05 90 19 Fax: +47 37 05 90 01 Email: oddaksel@imr.no
- Breigutu, Guri Mæle, Senior Adviser, Royal Ministry of Fisheries and Coastal Affairs, Department of Marine Resources and Coastal Management, P. O. Box 8118 Dep. NO-0032, Oslo Phone: +47 22 24 64 66 – Fax: +47 22 24 95 85 – Email; gmb@fkd.dep.no
- Hvingel, Carsten, Institute of Marine Research, P. O. Box 6404, N-9294 Tromsø Phone: +47 77 60 97 50 – Fax: +47 77 60 9701 – Email: carsten.hvingel@imr.no
- Østgård, Hanne, Senior Adviser, Directorate of Fisheries, P. O. Box 185, Sentrum, 5804 Bergen Phone: +47 46 80 52 05 – Fax: +47 55 23 80 90 – Email: hanne.ostgard@fiskeridir.no
- Palmason, Snorri, Senior Adviser, Directorate of Fisheries, P. O. Box 2009 Nordnes, NO-5817 Bergen Phone: +47 55 23 80 00 / 8394 – Fax: +47 55 23 80 90 – Email: snorri.palmason@fiskeridir.no
- Skagestad, Odd Gunnar, Specialist Director (Marine Resources), Norwegian Ministry of Foreign Affairs, Section for the High North Project, Polar Affairs, Energy and Resources, Postboks 8114 Dep, NO-0032, Oslo Phone: +47 23 95 06 56 – Email: ogs@mfa.no

Vaskinn, Tor-Are, Head of Department, Norwegian Fishermen's Association, Fiskebatredernes Forbund, Strandveien 106, 9006 Tromsø Phone: +47 77 60 06 60 – Fax: +47 77 60 06 61 – Email: tor-are@fiskebatm.no

#### **RUSSIAN FEDERATION**

#### **Head of Delegation**

Drevetnyak, Konstantin, Head of the Barentsevo-Belomorskoe Territorial Department of the Federal Agency for Fisheries, Kominterna St. 7, Murmansk, 18308 Phone: +7 921 661 6777 – Email: drevetnyak@bbtu.ru

#### Advisers

- Agalakov, Vadim E., Chief State Inspector, Barentsevo-Belomorskoe Territorial Department of the Federal Agency for Fisheries, str. Kominterna 7, 183038 Murmansk Phone: +7 815 2 798 116 – Fax: +7 815 2 451 945 – Email: murmansk@bbtu.ru
- Badina, Yulia, International Cooperation Department, Federal Agency for Fisheries, Rozhdestvensky blvd. 12, Moscow 107996 Phone: + 7 495 987 0675 – Email: badina@fishcom.ru
- Bakeiro, Pavel, Zakharov-Vakeiro, 183001 Trakivata str., 12A, Office 207, Murmansk Phone: + 8 8152 550 360 Fax: + 8 8152 286454
- Egochina, Victoria, Knipovich Polar Research Institute of Marine Fisheries and Oceanography (PINRO), 6 Knipovich St., Murmansk 183763 Phone: +7 8113062277 – Email: egochina@pinro.ru
- Fomin, Konstantin., Junior Scientist, Knipovich Polar Research Institute of Marine Fisheries and Oceanography (PINRO), 6 Knipovich St., Murmansk 183763 Phone: + 7 8152 47 2469 – E -mail: fomin@pinro.ru
- Orlov, Alexey, Russian Federal Research Institute of Fisheries and Oceanography (VNIRO), 17, V. Krasnoselskaya, Moscow 107140 Phone/Fax: +79031024453 – Email: orlov@vniro.ru
- Shirvel, Irina, Director Zakharov-Vakeiro, 183001 Trakivata str., 12A, Office 207, Murmansk Phone: + 8 8152 550 360 Fax: + 8 8152 286454 Email: irina.dobr@mail.ru
- Skryabin, Ilya A., Principal specialist, Barentsevo-Belomonskoe Territorial Department of the Federal Agency for Fisheries, 6 Kominterna St., Murmansk 183038 Phone: +7 8152 798 113 – Email: skryabin@bbtu.ru
- Tairov, Temur, Representative of the Federal Agency for Fisheries in Republic of Korea Phone: +82 (10) 6367 8907– Fax: +82 (10) 2506 8907 Email: temurtairov@mail.ru
- Tretyakov, Ivan, Junior Scientist, Knipovich Polar Research Institute of Marine Fisheries and Oceanography (PINRO), 6 Knipovich St., Murmansk 183763 Phone: + 7 8152 47 2469 – E -mail: tis@pinro.ru
- Volkov, Victor M., Deputy Head of Murmansk Branch of the Fisheries Monitoring Centre, 43, Tralovaya, Murmansk, 183950

Phone: +7 8152 47 4167 - Fax: +7 8152 47 4852 - Email: volkov@mrcm.ru

### UNITED STATES OF AMERICA

#### **Head of Delegation**

Swanson, Dean, Chief, International Fisheries Affairs Div., F/IA1, National Marine Fisheries Service, U.S. Dept. of Commerce, 1315 East-West Highway, Silver Spring, MD 20910 Phone: +301 427 8380 – Fax: +301 713 2313 – Email: dean.swanson@noaa.gov

#### Advisers

- Bode, Scott, 68 Conway Street, New Bedford, MA 0285 Phone: +508 542 0320 - Fax: +508 993 0400 - Email: scottb@pierfish.com
- Preble, Dave, US Commissioner, 64 Courtland Drive, Narragansett, RI 02882 Phone: +401 789 7596 – Email: fishearlybird@cox.net

Christel, Doug, Fishery Policy Analyst, Sustainable Fisheries Div., US Dept. of Commerce, NOAA, National Marine Fisheries Service, 55 Great Republic Drive, Gloucester, MA 01930 Phone: +978 281 9141 – Fax: +978 281 9135 – Email: douglas.christel@noaa.gov

Hinrichsen, Britta, Attorney Advisor, Office of General Counsel for Enforcement and Litigation Northeast Regional Office, NOAA, 55 Great Republic Drive, Gloucester, MA 01930 Phone: +978-281-9238 – Email: britta.hinrichsen@noaa.gov Martin, Jr., Gene S., Northeast Section Chief, NOAA General Counsel, 55 Great Republic Drive, Gloucester, MA 01930

Phone: + 978 281 9242 - Fax: + 978 281 9389 - Email: gene.s.martin@noaa.gov

- Moran, Patrick, Foreign Affairs Analyst, Office of International Affairs, F/IA-2, National Marine Fisheries Service, U.S. Dept. of Commerce, 1315 East-West Hwy., Silver Spring, MD 20910 Phone: +301 713 2276 – Fax: +301 713 2313 – Email: pat.moran@noaa.gov
- Motoi, Ellen, Enforcement Branch, First Coast Guard District, 408 Atlantic Avenue, Office of Law Enforcement, Boston, MA 02110 Phone: +347 884 1896 - Email: ellenmmotoi@yahoo.com
- Sosebee, Katherine, National Marine Fisheries Service, NEFSC, 166 Water Street, Woods Hole, MA 02543 Phone: +508 495 2372 - Fax: - +508 495 2393 - Email: katherine.sosebee@noaa.gov
- Usher II, Richard R. Operations Manager, A.I.S. Inc., 89 North Water St., PO Box 2093, New Bedford, MA 02741 Phone: +774-200-0563 – Email: ricku@aisobservers.com
- Warner-Kramer, Deirdre, Senior Foreign Affairs Officer, Office of Marine Conservation (OES/OMC), Department of State, Washington, DC 20520 Phone +1 202 647 2883 – Fax: +1 202 736 7350 – Email: warner-kramerdm@state.gov

#### **OBSERVERS**

#### International Coalition of Fisheries Associations (ICFA)

Chapman, Bruce, Executive Director, Groundfish Enterprise Allocation Council, 1362 Revell Dr., Manotick, ON K4M 1K8

Phone: +613 692 8249 – Fax: +613 692 8250 – Email: bchapman@sympatico.ca

#### North East Atlantic Fisheries Commission (NEAFC)

Ehlers, Esben, Head of Section, Aalisarnermut, Piniarnermut Nunalerinermullu Naalakkersuisoqarfik, Departementet for Fiskeri, Fangst og Landbrug, Ministry for Fisheries, Hunting and Agriculture, Greenland Phone: +299 345314 – Email: eseh@nanoq.gl

#### North Pacific Anadromous Fish Commission (NPAFC)

Day, Robert, Director, IAD, Strategic Policy, Atlantic and Americas Regional Affairs Bureau, International Affair Directorate, Fisheries and Oceans Canada, 200 Kent St., Ottawa, ON K1A 0E6 Phone: +613 991 6135 – Fax: +613 990 9574 – Email: robert.day@dfo-mpo.gc.ca

#### Southeast Atlantic Fisheries Organisation (SEAFO)

Dross, Nicolas, International Relations Officer, International Affairs, Law of the Sea and Regional Fisheries Organizations, European Commission, Directorate General for Fisheries and Maritime Affairs (DG MARE.B.1), Rue Joseph II, 99, 1000 Brussels, Belgium Phone: +32 2 298 0855 – Fax: +32 2 295 5700 – Email: nicolas.dross@ec.europa.eu

#### **Dalhousie University**

Avdic, Vanja, Dalhousie University, Environment Information: Use & Influence Research Initiative, Dalhousie University, Rowe Building, School of Information Management, University Avenue, Halifax, Nova Scotia, Canada Email: vanja.avdic@dal.ca

and Donald Douting Environment Information: Use &

- MacDonald, Bertrum, Environment Information: Use & Influence Research Initiative, Dalhousie University, Rowe Building, School of Information Management, University Avenue, Halifax, Nova Scotia, Canada Phone: +902 494 2472 - Fax: +902 494 2451 - Email: bertrum.macdonald@dal.ca
- Soomai, Suzuette, Environment Information: Use & Influence Research Initiative, Dalhousie University, Rowe Building, School of Information Management, University Avenue, Halifax, Nova Scotia, Canada Email: suzuette.soomai@dal.ca

#### **Ecology Action Centre**

Fuller, Susanna, Marine Conservation Coordinator, Ecology Action Centre, 2705 Fern Lane, Halifax, Nova Scotia, Canada B3K 4L3

Phone: +902 446 4840 - Fax: +902 405 3716 - Email: susannafuller@gmail.com

#### FAO

Sanders, Jessica, FAO, Fishery Liaison Officer, Policy, Economics and Institutions Service, Fisheries and Aquaculture Dept., Food and Agriculture Organization of the United Nations (FAO), Viale delle Terme di Caracalla, 00153 Rome, Italy Email: Jessica.sander@fao.org

#### WWF

- Biggar, Scott, WWF-Canada, Atlantic Region, 5251 Duke St., Suite 1202, Halifax, NS, Canada B3J 1P3 Phone: +902 482 1105 ext. 35 – Fax: +902 482 1107 – Email: rrangeley@wwfcanada.org
- Rangeley, Robert, Vice President, Atlantic, WWF-Canada, Atlantic Region, 5251 Duke St., Suite 1202, Halifax, NS, Canada B3J 1P3 Phone: +902 482 1105 ext. 23 – Fax: +902 482 1107 – Email: rrangeley@wwfcanada.org
- Diz, Daniela, Senior Officer, Marine Policy, WWF-Canada, Atlantic Region, 5251 Duke St., Suite 1202, Halifax, NS, Canada B3J 1P3 Phone: +902 482 1105 ext. 35 – Fax: +902 482 1107 – Email: ddiz@wwfcanada.org
- Saier, Bettina, Director, Oceans, WWF-Canada, Atlantic Region, 5251 Duke St., Suite 1202, Halifax, NS, Canada B3J 1P3
   Phone: +902 482 1105 ext. 24 Fax: +902 482 1107 Email: bsaier@wwfcanada.org
- Chaplin, Christopher, WWF-Canada, 2115 Eglinton Avenue East, Toronto, Ontario, Canada Phone: +416 669 9155 – Email: cchaplin@wwfcanada.org

#### **NAFO Secretariat**

Shibanov, Vladimir, Executive Secretary	vshibanov@nafo.int
Goodick, Stan, Deputy Executive Secretary/	
Senior Finance and Staff Administrator	sgoodick@nafo.int
Federizon, Ricardo, Senior Fisheries Commission Coordinator	rfederizon@nafo.int
Campbell, Neil, Scientific Council Coordinator	ncampbell@nafo.int
Marshall, Barbara, Senior Information Officer	bmarshall@nafo.int
Kerr, Cindy, Senior Fisheries Information Manager	ckerr@nafo.int
Ward, Tracey, Administrative Assistant	tward@nafo.int
Lefort, Lisa, Office Manager	lpelzmann@nafo.int
Pacey, Alexis, Publications Manager	apacey@nafo.int
Kendall, Matthew, IT Manager	mkendall@nafo.int
Harley, Mark, Database Manager	mharley@nafo.int
Reilly, Thomas, NAFO Intern	treilly@nafo.int

## Annex 2. Record of Decisions and Actions by the Fisheries Commission (Annual Meeting 2013)

Substantive Issues (Agenda item):	Decision/Action:
<ol> <li>Review of 2012 PREP Recommendations addressed to the Fisheries Commission</li> </ol>	<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).
<ol> <li>Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 2015 and on other matters</li> </ol>	Adopted the FC Request to the SC for scientific advice (FC WP 13/14 Rev2).
<ol> <li>Meeting Report of the Working Group of Fishery Managers and Scientists on Conservation Plans and Rebuilding Strategies, July 2013 (WGFMS-CPRS)</li> </ol>	Noted the WG Meeting Report of July 2013 (FC Doc 13/5). Adopted 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	Adopted 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	Set the TAC at 14 521 t.
13.2 Shrimp in Division 3M	Agreed to continue the moratorium.
13.3 Redfish in Division 3M	Agreed to rollover the 6 500-t TAC.
<ol> <li>Management of Technical Measures for Fish Stocks Straddling National Fishing Limits, 2014</li> </ol>	(see 2014 Quota Table)
14.1 Redfish in Divisions 3LN	Set the TAC at 7 000 t. Amended Article 13.2.f of the NCEM setting the minimum mesh size of mid-water trawls to 90 mm.
14.2 Redfish in Divisions 30	Set 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	Agreed to continue the moratorium.
14.4 American plaice in Divisions 3LNO	Agreed to continue the moratorium.
14.5 Yellowtail flounder in Divisions 3LNO	Set the TAC at 17 000 t, applicable in 2014 and 2015.

14.6 Witch flounder in Divisions 3NO	Agreed to continue the moratorium								
14.7 White hake in Divisions 3NO	<ul> <li>Set the TAC at 1 000 t.</li> <li>Revised 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).</li> </ul>								
14.8 Greenland halibut in Subarea 2 and Divisions 3KLMNO	<ul><li>Set the TAC at 15 441 t (11 442 t in Divisions 3LMNO).</li><li>Agreed to extend the implementation of the Management Strategy for additional three years (2015-2017) (FC WP 13/19 Rev).</li></ul>								
14.9 Shrimp in Division 3LNO	Decided on TAC of 4 300 t.								
14.10 Northern shortfin squid in Subareas 3+4	Agreed to rollover the TAC of 34 000 t, applicable in 2014-2016.								
14.11 Capelin in Division 3NO	Agreed to continue the moratorium, applicable in years 2014-2015.								
14.12 Cod in Division 3NO	Agreed to continue the moratorium, applicable in years 2014-2016.								
14.13 Witch flounder in Divisions 2J + 3KL	Agreed 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)	Noted the WG Meeting Report of April 2013 (FC Doc 13/3). Adopted 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	Adopted 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)	<ul> <li>Noted the STACTIC May 2013 Intersessional Meeting Report (FC Doc 13/4) and the current meeting report (see Part II of this Report).</li> <li>Adopted Proposed changes to NCEM (STACTIC WP 13/4 Rev.2).</li> <li>Adopted Standardization of observer program data and reporting requirements in the NRA (STACTIC WP 13/14).</li> <li>Adopted Proposed revisions to Article 3, 5 and 6 of the NCEM (Phase II) (STACTIC WP 13/5 Rev. 4).</li> <li>Adopted Fishing operations under a charter arrangement (STACTIC WP 13/23, Revised).</li> <li>Adopted Observer reporting (STACTIC WP 13/25 Rev2).</li> <li>Adopted Directed Species DS in Authorization message for transhipment (STACTIC WP 13/29 Rev 2).</li> <li>Accepted Annual Compliance Review 2013, for fishing year 2012 (STACTIC WP 13/17 Rev3).</li> </ul>								
22.Draft Terms of Reference and Rules of Procedure for the proposed joint NEAFC/NAFO Advisory Group on Data	<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).								

Management	
23. Other Matters pertaining to Conservation and Enforcement Measures	<ul> <li>Amended 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).</li> <li>Amended Article 28.5 of the NCEM making daily catch report (CAT) data easily accessible to SC and working groups (FC WP 13/16 Rev).</li> <li>Created an ad hoc working group tasked to reflect on the rules governing by-catches, discards and selectivity (FC WP 13/31).</li> </ul>
24. Election of Chair	<b>Re-elected</b> Sylvie Lapointe as the Chair of the Fisheries Commission.

## 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. 30
  - 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:

- 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;
- The continued exploration of VMS and other data sources for innovative approaches to verify and compare information, while respecting confidentiality;
- 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
- 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 F0.1 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 F0.1 or F35%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. 3O 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)

- 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).

<u>Two year basis</u> 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 <u>Three year basis</u> 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<sub>msy</sub>, 3/4 F<sub>msy</sub>, 85% F<sub>msy</sub>, 75% F<sub>2013</sub>, F<sub>2013</sub>, 125% F<sub>2013</sub>,
- 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 ref	Limit reference points										-			
				P(F>Flim	)		P(B <blir< td=""><td>n)</td><td></td><td></td><td>P(F&gt;Fm:</td><td>sy)</td><td></td><td>P(B<bm< td=""><td>ısyP</td><td></td><td></td><td>P(B2016 &gt; B2013)</td></bm<></td></blir<>	n)			P(F>Fm:	sy)		P(B <bm< td=""><td>ısyP</td><td></td><td></td><td>P(B2016 &gt; B2013)</td></bm<>	ısyP			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 <sub>msy</sub>	t	t	t	%	%	%	%	%	%		%	%	%	%	%	%		%
3/4 F <sub>msy</sub>	t	t	t	%	%	%	%	%	%		%	%	%	%	%	%		%
85% F <sub>msy</sub>	t	t	t	%	%	%	%	%	%		%	%	%	%	%	%		%
0.75 X F <sub>2013</sub>	t	t	t	%	%	%	%	%	%		%	%	%	%	%	%		%
F <sub>2013</sub>	t	t	t	%	%	%	%	%	%		%	%	%	%	%	%		%
1.25 X F <sub>2013</sub>	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<sub>0.1</sub>, F<sub>max</sub>, 2/3 F<sub>max</sub>, 3/4 F<sub>max</sub>, 85% F<sub>max</sub>, 75% F<sub>2013</sub>, F<sub>2013</sub>, 125% F<sub>2013</sub>,
- 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 rei	erence po	Jints										 
				P(F > F <sub>lim</sub>	.)		P(B <b<sub>lim</b<sub>	)		P(F>F <sub>0.1</sub> )	I		P(F>F <sub>max</sub>	<i>.</i> )		P(B <sub>2016</sub> > B <sub>2013</sub> )
F in 2014 and following years*	Yield 2014	Yield 2015	Yield 2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	2014	2015	2016	
F <sub>0.1</sub>	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
F <sub>max</sub>	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
66% F <sub>max</sub>	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
75% F <sub>max</sub>	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
85% F <sub>max</sub>	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
0.75 X F <sub>2013</sub>	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
F <sub>2013</sub>	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%
1.25 X <i>F</i> <sub>2013</sub>	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%

Limit reference points

#### 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

- 4.1Concerning 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.
- 4.3Concerning 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' <u>life history characteristics</u> (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
- <u>Multispecies interactions</u> these can have a strong influence on stock recovery potential and ability of all stocks to reach MSY
- <u>Environmental conditions</u> (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  $low^2$  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.

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

#### 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.

#### 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

Species Division/Contracting Party		С	od				Redfish			American	n plaice	Yellowtail
	3L	3M	% of 3M Cod TAC	3NO	3LN	% of 3LN Redfish TAC	3M	30	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	$\frac{0^{2,3}}{0^{2,15}}$	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	<b>*</b> 20,9	7000 <sup>24</sup>	100.0	6500 <sup>8</sup>	20000 <sup>16</sup>	0 <sup>10,17</sup>	*21	<b>*</b> 9,16	17000 <sup>21,22,16</sup>

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	W	itch	White hake	Capelin	Skates	Greenland halibut	Squid ( <i>Illex</i> ) <sup>1</sup>	SI	nrimp
Division/Contracting Party	3L	3NO	3NO	3NO	3LNO	3LMNO	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>	<u>N.S.<sup>6</sup></u> 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	07	794	0	
TOTAL ALLOWABLE CATCH	*9,20	*8	100027	*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.

<sup>2.</sup> 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.

<sup>3.</sup> 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.

<sup>4.</sup> Quota to be shared by vessels from Canada, Cuba, France (St. Pierre et Miquelon), Japan, Korea, Ukraine and USA.

<sup>5.</sup> 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.

<sup>6.</sup> 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).

#### Annex I.A (contd)

- <sup>7.</sup> 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.
- <sup>8.</sup> Not more than 3250 tons may be fished before 01 July 2014.
- <sup>9.</sup> The provisions of Article 6.3 of the Conservation and Enforcement Measures shall apply.
- <sup>10.</sup> 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.
- <sup>11.</sup> 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).
- <sup>12.</sup> 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.
- <sup>13.</sup> 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.
- <sup>14.</sup> 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.
- <sup>15.</sup> Allocation of 17.85% to Lithuania and 2.15% to Latvia following their accession to the European Union.
- <sup>16.</sup> Applicable to 2014 and 2015.
- <sup>17.</sup> 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.
- <sup>18.</sup> Including an allocation of 375 tonnes for Estonia, Latvia, and Lithuania following their accession to the European Union.
- <sup>19.</sup> 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.
- <sup>20.</sup> Applicable to 2014, 2015 and 2016.
- <sup>21.</sup> 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<sub>lim</sub>, this rate may be subject to a reassessment by the Fisheries Commission.
- <sup>22.</sup> 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.
- <sup>23.</sup> The allocation key of this stock is based on the 1998 Quota Table. In 1999, a moratorium on cod in Division 3M was declared.
- <sup>24.</sup> The allocation key of this stock is based on the 1997 Quota Table. In 1998, a moratorium on redfish in Division 3LN was declared.
- <sup>25.</sup> 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.
- <sup>26.</sup> 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.
- <sup>27.</sup> 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.

CONTRACTING PARTY	<b>NUMBER OF</b> <b>FISHING DAYS</b> <sup>1</sup>	NUMBER OF VESSELS <sup>1</sup>
Canada	0	0
Cuba	0	0
Denmark		
Faroe Islands	0	0
Greenland		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

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

<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 Division 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.



Figure 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 Artcile 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.

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

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

Latitude	Longitude						
47° 49' 41.51" N	46° 22' 48.18" W						
47° 47' 17.14" N	46° 17' 27.91" W						
47° 58' 42.28" N	46° 6' 43.74" W						
47° 59' 15.77" N	46° 7' 57.76" W						
48° 7' 48.97" N	45° 59' 58.46" W						
48° 9' 34.66" N	46° 4' 8.54" W						
	Latitude 47° 49' 41.51" N 47° 47' 17.14" N 47° 58' 42.28" N 47° 59' 15.77" N 48° 7' 48.97" N						

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 Artcile 16.5 of the NCEM as follows (see Figure 3):

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



Figure 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:
  - 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 of bottom fishing activities on vulnerable marine ecosystems, including the evaluation of associated risks, by:

- 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.
- Providing recommendations to Fisheries Commission in relation to requests to conduct exploratory bottom fishing and/ or evaluation of previously authorized exploratory fishing activities.
- 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
Throughout the CEM			
Revise all references to any derivation of "flag		capitalization of the terms.	
Revise all references to "pursuant to" with "in a	ccordance with" for consistency of language.		
Article 7 – Cod Recovery Plans	1.7.1		
Add left parenthesis to Articles 7.9 (a), (b), (c) a	und (d).		Made formatting of paragraphs consistent
Article 9 – Shrimp			
1. For the purpose of this measure, Division 3M Table 1 and depicted in Figure 1(1):	Revised to remove first sentence (moved to Article 5) and update Figure and Table references.		
with Annex I.B.	n of Division 3L that is included in Division 3	M for the management of shrimp in accordance	New Table Heading following paragraph 1.
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 fishery. The number of fishing days shall be cal	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 no utilized by a vessel flying the flag of another Co	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 3 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		

Point No.	Latitude	Longitude	Revised table format for
1 (same as no.7)	47°55'0 N	45°00'0 W	consistency
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	
escribed in Table 3 and depicted in Figure 1(3)	:	st of a line bound by the following coordinates	Article 9.7 moved to Article 9.6 because original Article 9.3 was moved to Article 5.5 and to insert table reference
able 3: Boundary points delineating 200 m ba	•	<b>•</b> •/ •	New table heading
Point No.	Latitude 46°00′00" N	Longitude 47°49′00" W	
2		47°49 00 W 47°27′00" W	
3	46°25′00" N 46°42′00" N	47°27'00' W 47°25'00'' W	
4	46°42'00' N 46°48'00" N	47°25′50″ W	
5	48°48'00'N 47°16′50"N	47°23 50 W 47°43′50" W	
Each vessel that has fished for shrimp in Div athority at least 24 hours prior notice of its esti			Article 9.8 moved to Article 9.7 because original Article 9.3 was moved to Article 5.5 and to insert table reference
rticle 10 – Greenland halibut			
rticle 10 – Greenland halibut Where within 24 hours of the notification tra otification from an inspection vessel, the Exect spection vessels and the flag State FMC accor	tive Secretary immediately advises the fishing		Correction of flag State capitalization.
Where within 24 hours of the notification tra otification from an inspection vessel, the Execu	tive Secretary immediately advises the fishing		
Where within 24 hours of the notification tra otification from an inspection vessel, the Execu spection vessels and the flag State FMC accor	ative Secretary immediately advises the fishing dingly.		

1. [insert figure of seamount closures]	Insert new Figure 2 to depict existing seamount closure areas, renumbering subsequent Figures and updating cross references.
Article 25 – Vessel Requirements	
Authorization to conduct fishing activities and notification requirements	
3. Each Contracting Party shall transmit to the Executive Secretary, electronically in the format prescribed in Annex II.C, a list of the vessels	Replace the word
which it has authorized to conduct fishing activities in the Regulatory Area and any amendments thereto from time to time no later than 30	"operate" with "conduct
days following any change to the list	fishing activities" in 25.3
Article 27 – Product Labelling Requirements	
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
Article 28 – Monitoring of Catch Recording of Catch and Stowage	
1. For the purposes of monitoring catch, each fishing vessel shall utilize a fishing logbook, a production log book and a stowage plan as	New paragraph. Cross
defined below, to record fishing activities in the Regulatory Area.	references and subsequent
defined below, to record fishing derivities in the Regulatory Area.	paragraph numbering will
	be updated upon approval.
Fishing look ook	
<i>Fishing logbook</i> 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)
(a) accurately records calch of each tow/set related to the smallest geographical area for which a quota has been allocated; (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,	28.1(d)(ii) and (iii)
(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)(11) and (11)
_disearced, of transmipped during the editent fishing trip, and	29.1(4)(3)
(c) is retained on board for at least 12 months.	28.1(d)(iv)
(c) is retained on board for at least 12 months.	28.1(d)(1V)
(c) is retained on board for at least 12 months.  Production logbook	
<ul> <li>(c) is retained on board for at least 12 months.</li> <li><i>Production logbook</i></li> <li>3. Each fishing vessel shall maintain a production logbook that:</li> </ul>	28.1(d)(1V) 28.1(c) 28.1(e)
(c) is retained on board for at least 12 months.  Production logbook	28.1(c)
<ul> <li>(c) is retained on board for at least 12 months.</li> <li><i>Production logbook</i></li> <li>3. Each fishing vessel shall maintain a production logbook that:</li> <li>(a) accurately records the daily cumulative production for each species and product type in kg for the preceding day from 0001 hrs (UTC)</li> </ul>	28.1(c)
<ul> <li>(c) is retained on board for at least 12 months.</li> <li><i>Production logbook</i></li> <li>3. Each fishing vessel shall maintain a production logbook that:</li> <li>(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);</li> </ul>	28.1(c) 28.1(c)
<ul> <li>(c) is retained on board for at least 12 months.</li> <li><i>Production logbook</i></li> <li>3. Each fishing vessel shall maintain a production logbook that: <ul> <li>(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);</li> <li>(b) relates the production of each species and product type to the smallest geographical area for which a quota has been allocated;</li> </ul> </li> </ul>	28.1(c) 28.1(e) 28.1(d)(I)

Stowage of catch	
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, <u>with all</u> <u>subsequent paragraphs</u> <u>renumbered</u> .
(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
Article 29 – Vessel Monitoring System (VMS)	
VMS position data and costs	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

Transmission of VMS position data from the FMC to the Executive Secretary	
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)
Article 30 – Observer Program	
(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:	Revised paragraph 7 to
<ul> <li>(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</li> <li>(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.</li> </ul>	clarify how data is distributed to Contracting Parties with and without an inspection presence in the Regulatory Area
Article 33 – Surveillance Procedures	
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
Article 39 – Follow-up to Infringements	

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.
Article 40 – Contracting Party Reports on Inspection, Surveillance and Infringements	
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"	
Annex II.A – Recording of Catch (Fishing Logbook Entries)	
<ol> <li>Vessel name</li> <li>Vessel nationality</li> <li>Vessel registration number</li> <li>Registration port</li> <li>Type of gear used (*1) (*2)</li> <li>Date of fishing activity (day/month/year: dd-mm-yyyy)</li> <li>Start time of each tow/set (UTC)</li> <li>Start position of each tow/set:         <ul> <li>a. Latitude</li> <li>b. Longitude</li> <li>c. Division</li> <li>d. Water depth</li> </ul> </li> <li>End position of each tow/set:</li> </ol>	Removed separate fields for catch for human consumption and for reduction
<ul> <li>9. End position of each tow/set:</li> <li>a. Latitude</li> <li>b. Longitude</li> <li>c. Division</li> <li>d. Water depth</li> <li>10. End time of each tow/set (UTC)</li> </ul>	

11. Species names caught in each tow/set (Annex I.C)							
12. Disposition of each tow/set: (*3) (*4)							
a. Total catch of each species (kilograms live weight)							
b. Discards of each species (kilograms live weight)							
13. Were by-catch limits specified in Article 6.2 exceeded? (Y/N)							
14. Was a trial tow conducted in accordance with Article 6.3(c) conducted? (Y/N)							
15. Landings or Transhipments of catch from the Regulatory area							
a. Quantity landed or transhiped of each species							
b. Place(s) of landing or transshipment							
c. Date(s) of landing or transshipment (day/month/year: dd-mm-yyyy)							
16. Master's signature							
Instructions							
(*1) When two or more types of gear are used in the same 24-hours period, records should be separate for the different types							
(*2) Gears and attachments shall be identified by codes in Annex II.J							
(*3) Quantities shall be in kg live weight							
(*4) Species shall be identified by the codes in Annex I.C							



Figure 2: 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 recommend 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.

#### <u>Proposal</u>

#### 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** 

	Trawl Gear Information																
	Gear # Gear Gear	Goor	Mesh Size (mm)														
Gear #		Make		Wings	5		Body		Leng	thening	Piece		Coden	d	Attachments	Grate Spacing	rate Spacing Straps
	Туре	Wake	High	Low	Average	High	Low	Average	High	Low	Average	High	Low	Average			
Comment	Comments:																

Part 2. Catch and effort information by tow/set/haul

	Catch and Effort Information by Haul																	
		Date	NAFO			ART				NISH		Species (FAO 3-	Directed	Product	Conversion	5		
Haul #	Gear #	Date (YYYYMMDD)	Division	Latitude (decimal)	Longitude (decimal)	Depth (m)	Time (UTC) (HHMM)	Latitude (decimal)	Longitude (decimal)	Depth (m)	Time (UTC) (HHMM)	(FAO 3- alphaSpecies Code)	Species? (yes or no)	Form	Factor Used	Retained (kg)	Discarded (kg)	Comments
-																		
<b> </b>																		
								-										
<b> </b>																		
<b> </b>																		
<b> </b>																		
<b> </b>																		
<b> </b>																		

## 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

	Effort Summary Table										
NAFO	Gear #	Directed	Da	ate	# of hauls	Dept	h (m)	# Hours	# Fishing		
Division	Geal #	Species	Start	Finish	# OI Hauis	Minimum	Maximum	fished	Days		

## 4B. Catch Summary

Trip Catch Summary (catch by Division and Species)										
NAFO	Species		Catch (kg)							
Division	Species	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 3	
3		3	
4		4	
2 3 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	
2 3 4		3	
4		4	
5 6		5	
6		6	
7		7	
8		8	
9		9	
0		0	
1		1	
2		2 3	
2 3 4		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 propose 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				
Article 3 – Duties of the Contracting Parties and Vessels				
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			
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.	applicability of measures to both Contracting Parties and vessels.			
Article 5 – Catch and Effort Limitations	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			
Quotas and Effort				
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.			
Closure of Fisheries for Stocks Listed in Annex I.A and I.B Subject to Quota or Fishing Effort	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	Article 5.2 (a) revised		

fishery, discards and estimated unreported catch by all vessels entitled to fly the flag of that Contracting Party;	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;				
(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)			
Re-opening of a Closed Fishery				
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:	Article 5.7 and 5.11 combined			
(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.				

Quota Adjustments	
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.	
Transfer of Quotas	
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.				
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			
Duties of the Executive Secretary				
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</i> <i>notification at 80% to</i> <i>apply the</i> <i>precautionary</i> <i>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			
Article 6 – Retention on Board of Stocks Identified in Annex I.A as By-catch When No Directed Fishery Is Permitted	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:					
(a) no quota has been allocated to that Contracting Party for that stock in that Division, in accordance with Annex I.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.					
Limits for Species Listed in Annex I.A Retained on Board as By-catch					
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.					
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	Article 6.1(c)				

on board.	
Exceeding By-catch Limits in Any One Haul	
6. Each Contracting Party shall ensure that its vessels:	
(a) do not conduct directed fisheries for species referred to in paragraph 2 of this Article;	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	Articles 6.3(b)

considered as incidental catch, but the vessel shall immediately move as specified in paragraph 6.	
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 fir Transhipment

(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 transhipment vessels e.g. all known species, one species or leave blank. Transhipment 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, <u>unless exempted in Annex II.C.3</u>.

Also in Annex II.C. 3

Add footnote XX to M (mandatory): For transhipment 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>3</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).

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>&</sup>lt;sup>3</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 in 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.



Figure 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.



Figure 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.



Figure 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) – Catchon-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).

Division Species (FAO 3- aplha code)	1F	2H	2J	3L	3M	3N	30	?
Regulated								
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
Unregulated								
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	

Table 2. Total reported catches (in tons) of regulated and selected non-regulated species (Source: CAT reports).

#### 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.



Figure 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.



Figure 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 fining practices, and there has never been an incident of shark fining 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.

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 to193 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.



Figure 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 <u>all</u> vessels landing or transhipping 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).



Figure 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.



Figure 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 2012by 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 30Jul2013, in compliance with Art. 37 of the 2012 NCEM	STATUS as of 30July2013, as reported by flag States or CPs
1	11	14-Nov-11	3N	RED	Quotas Requirements- 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	ЗN	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 techincal problem was resolved. All CAX was eventaully 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 being 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	30	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	ЗM	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-recoding 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	30	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.i, 35.1.I, 35.1.n, 25.1.h and 10.5.e.	IUU case being inititated in accordance to EU legistlation	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.i, 35.1.l, 35.1.n, 25.1.h and 10.5.e.	IUU case being inititated in accordance to EU legistlation	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.i, 35.1.l, 35.1.n, 25.1.h and 10.5.e.	IUU case being inititated in accordance to EU legistlation	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.i, 35.1.l, 35.1.n, 25.1.h and 10.5.e.	IUU case being inititated in accordance to EU legistlation	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.i, 35.1.l, 35.1.n, 25.1.h and 10.5.e.	IUU case being inititated in accordance to EU legistlation	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



Figure 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.



Figure 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.



Figure 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.

	Number of	Resolved	cases		No follow-up
Year	Reports with AI Citation/s	Number	%	Pending cases	information from CPs
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
  - 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.
  - 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.
  - Although effort in the shrimp fishery continues to decline, overall fishing effort in the NRA has been diverted to the groundfish fishery.
  - 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:
  - Based on VMS reports for 2012, closed areas are being respected.
  - Based on VTI reports for 2012, 3M redfish exceeded the 6500 t TAC in 2012.
  - Based on VMS positional reports and VTI, the 3M Shrimp fishery moratorium is being respected.
  - Based on CAT reports, total reported catches of regulated and unregulated species by division provides a detailed summary of catch in the NRA.
  - 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.
  - Based on water depth, shrimp fishing effort complies with NCEM requirements to not fish at depths less than 200 meters
- Inspections and Apparent Infringements
  - 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).
  - 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.
  - Apparent infringements detected at sea increased slightly in 2012. This was mainly non serious and administrative in nature.
  - 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

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%

Table 1. Submission of Fishing Reports\*

\*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

Yea	r 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)

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
By-catch requirements	3	0	0	3
Catch communication violations	0	0	0	0
Fishing without authorization	0	1	0	1
Gear requirements - illegal attachments	1	0	0	1
Gear requirements - mesh size	5	0	0	5
Inspection protocol	2	0	0	2
Mis-recording of catches - inaccurate recording	1	0	0	1
Observer requirements	0	1	0	1
Quota requirements	1	0	0	1
VMS requirements	0	2	0	2
TOTAL	16	5	0	21

# Table 5-2004, part 1. Effort, at-sea inspections and AIs by fisheries type

\* 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
By-catch requirements	1	0	0	1
Catch communication violations	0	0	0	0
Fishing without authorization	1	0	0	1
Gear requirements - illegal attachments	0	0	0	0
Gear requirements - mesh size	1	0	0	1
Inspection protocol	0	0	0	0
Mis-recording of catches - inaccurate recording	6	0	0	6
Observer requirements	0	0	0	0
Quota requirements	0	0	0	0
VMS requirements	0	0	0	0
TOTAL	9	0	0	9

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
By-catch requirements	2	0	0	2
Catch communication violations	0	0	0	0
Fishing without authorization	0	1	0	1
Gear requirements - illegal attachments	2	1	0	3
Gear requirements - mesh size	3	0	0	3
Inspection protocol	3	1	0	4
Mis-recording of catches - inaccurate recording	5	1	0	6
Observer requirements	0	1	0	1
Quota requirements	0	0	0	0
VMS requirements	0	1	0	1
TOTAL	24	7	0	31

# Table 5-2005, part 1, Effort, at-sea inspections and AIs by fisheries type

\* 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.

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
By-catch requirements	3	0	0	3
Catch communication violations	0	0	0	0
Fishing without authorization	0	0	0	0
Gear requirements - illegal attachments	0	0	0	0
Gear requirements - mesh size	1	0	0	1
Inspection protocol	1	0	0	1
Mis-recording of catches - inaccurate recording	1	0	0	1
Observer requirements	0	0	0	0
Quota requirements	0	0	0	0
VMS requirements	0	0	0	0
TOTAL	6	0	0	6

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
By-catch requirements	2	0	0	2
Catch communication violations	0	0	0	0
Fishing without authorization	0	0	0	0
Gear requirements - illegal attachments	2	2	1	5
Gear requirements - mesh size	0	0	1	1
Inspection protocol	0	1	0	1
Mis-recording of catches - inaccurate recording	4	0	0	4
Observer requirements	0	0	0	0
Quota requirements	0	0	0	0
VMS requirements	0	0	0	0
TOTAL	15	6	2	23

Table 5-2006, part 1. Effort, at-sea inspections and AIs by fisheries type

\* 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 5-2006, 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
By-catch requirements	2	0	0	2
Catch communication violations	1	0	0	1
Fishing without authorization	0	0	0	0
Gear requirements - illegal attachments	0	0	0	0
Gear requirements - mesh size	0	0	0	0
Inspection protocol	0	0	0	0
Mis-recording of catches - inaccurate recording	6	0	0	6
Observer requirements	0	0	0	0
Quota requirements	1	0	0	1
VMS requirements	0	0	0	0
TOTAL	14	0	0	14

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
By-catch requirements	0	0	0	0
Catch communication violations	0	0	0	0
Fishing without authorization	0	0	0	0
Gear requirements - illegal attachments	0	1	1	2
Gear requirements - mesh size	0	0	0	0
Inspection protocol	0	0	0	0
Mis-recording of catches - inaccurate recording	2	0	0	2
Observer requirements	0	0	0	0
Quota requirements	0	0	0	0
VMS requirements	0	0	0	0
TOTAL	5	5	5	15

Table 5-2007, part 1. Effort, at-sea inspections and AIs by fisheries type

\* 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
By-catch requirements	3	0	0	3
Catch communication violations	4	0	0	4
Fishing without authorization	0	0	0	0
Gear requirements - illegal attachments	0	0	0	0
Gear requirements - mesh size	0	0	0	0
Inspection protocol	0	0	0	0
Mis-recording of catches - inaccurate recording	16	0	0	16
Observer requirements	0	0	0	0
Quota requirements	0	0	0	0
VMS requirements	0	0	0	0
TOTAL	27	0	0	27

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
By-catch requirements	1			1
Catch communication violations				0
Fishing without authorization				0
Gear requirements - illegal attachments				0
Gear requirements - mesh size				0
Inspection protocol				0
Mis-recording of catches - inaccurate recording				0
Observer requirements				0
Quota requirements				0
VMS requirements				0
TOTAL	3	4	0	7

# Table 5-2008, part 1. Effort, at-sea inspections and AIs by fisheries type

\* 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 5-2008, 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
By-catch requirements				0
Catch communication violations				0
Fishing without authorization				0
Gear requirements - illegal attachments				0
Gear requirements - mesh size				0
Inspection protocol				0
Mis-recording of catches - inaccurate recording	2			2
Observer requirements				0
Quota requirements				0
VMS requirements				0
TOTAL	3	0	0	3

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
By-catch requirements	1			1
Catch communication violations				0
Fishing without authorization				0
Gear requirements - illegal attachments				0
Gear requirements - mesh size	1			1
Inspection protocol	2	1		3
Mis-recording of catches - inaccurate recording	2	1		3
Observer requirements				0
Quota requirements				0
VMS requirements				0
TOTAL	14	4	0	18

## Table 5-2009, part 1. Effort, at-sea inspections and AIs by fisheries type

\* 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 5-2009, 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
By-catch requirements				0
Catch communication violations				0
Fishing without authorization				0
Gear requirements - illegal attachments				0
Gear requirements - mesh size				0
Inspection protocol				0
Mis-recording of catches - inaccurate recording				0
Observer requirements				0
Quota requirements				0
VMS requirements				0
TOTAL	1	0	0	1

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		
By-catch requirements				
Catch communication violations				
Fishing without authorization				
Gear requirements - illegal attachments	1			
Gear requirements - mesh size	1			
Inspection protocol				
Mis-recording of catches - inaccurate recording	1	1		
Observer requirements				
Quota requirements				
VMS requirements				
TOTAL	4	3	0	7

Table 5-2010, part 1, Effort, at-sea inspections and AIs by fisheries type

\* 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.

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				
By-catch requirements				
Catch communication violations				
Fishing without authorization				
Gear requirements - illegal attachments				
Gear requirements - mesh size				
Inspection protocol				
Mis-recording of catches - inaccurate recording				
Observer requirements				
Quota requirements				
VMS requirements				
TOTAL	0	0	0	0

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		
By-catch requirements	1			
Catch communication violations				
Fishing without authorization				
Gear requirements - illegal attachments				
Gear requirements - mesh size	1****			
Inspection protocol				
Mis-recording of catches - inaccurate recording				
Observer requirements				
Quota requirements				
VMS requirements				
TOTAL	7	1		8

# Table 5-2011, part 1. Effort, at-sea inspections and AIs by fisheries type

\* 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				
By-catch requirements				
Catch communication violations				
Fishing without authorization				
Gear requirements - illegal attachments				
Gear requirements - mesh size				
Inspection protocol				
Mis-recording of catches - inaccurate recording				
Observer requirements				
Quota requirements				
VMS requirements				
TOTAL	0	0	0	0

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	
By-catch requirements				
Catch communication violations				
Fishing without authorization				
Gear requirements - illegal attachments				
Gear requirements - mesh size				
Inspection protocol				
Mis-recording of catches - inaccurate recording	1			
Observer requirements				
Quota requirements	2			
VMS requirements	1			
TOTAL	8	1	1	10

Table 5-2012, part 1. Effort, at-sea inspections and AIs by fisheries type

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2J \*\*AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

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					
By-catch requirements					
Catch communication violations					
Evidence tampering	1				
Fishing without authorization					
Gear requirements - illegal attachments					
Gear requirements - mesh size					
Inspection protocol	1				
Mis-recording of catches - inaccurate recording	1				
Observer requirements					
Quota requirements					
VMS requirements					
TOTAL	6	0	0	0	
<b>Resolution of Apparent Infringement Cases</b>	2008	2009	2010	2011	2012
--	------	------	------	------	------
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

Table 6. Resolution of Apparent Infringement (AI) cases (as of August 2012)

\* 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. JAGDM 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>4</sup>:

- a TAC (6 500 tonnes for 2013) allocated on a first come first serve basis<sup>5</sup>,

- individual quotas allocated to some Contracting Parties (for a total of 20 000 tonnes in 2013<sup>6</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>7</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:

<sup>&</sup>lt;sup>4</sup> NAFO CEM - Annex I.A

<sup>&</sup>lt;sup>5</sup> 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)

<sup>&</sup>lt;sup>6</sup> Including a quota designated for "Others" (total = 124 tonnes), which benefits Iceland, Norway and Ukraine.

<sup>&</sup>lt;sup>7</sup> STACTIC may be consulted on this issue, prior to the discussion in the Fisheries Commission.

"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.

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.

\* \* \*

It is recommended that the Fisheries Commission tasks an ad-hoc working group to reflect on rules governing bycatches, 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.

#### 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

LT 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:
  - 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:
  - STACTIC WP 13/23 Fishing operations under a chartering arrangement for inclusion under agenda item 14.
  - STACTIC WP 13/24 By-catch in directed fishery for skate for inclusion under agenda item 10e;
- Canada introduced the following proposals:
  - STACTIC WP 13/26 Standardized conversion factors in the NAFO Regulatory Area: Pilot Project for inclusion under agenda item 12.
  - 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 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 transhipment vessels. Transhipment 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 transhipment 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 transhipment 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 deterrence 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)





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

CAT reports are the very useful and effective because of the level

of detail, 100 % coverage and compliance of vessels in reporting

- 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  $_{(\rm Art,\,43.10]}$ 

submissions.

CATS

- Usefulness of STACTIC data:

- Usefulness can be enhanced by ...



Comparison plot of catch estimates - CATs and STATLANT 21.

- 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 to daily transmission of catch reports by each fishing vessel, by species and by Division.
  CHARDSCARG 308 Annual Approx
  CHARDSCARG 308 Annual Approx

-Bathry Canada 23/27 Sept1013