

Northwest Atlantic Fisheries Organization



Report of the Fisheries Commission

33<sup>rd</sup> Annual Meeting, 19-23 September 2011  
Halifax, Nova Scotia, Canada

NAFO  
Dartmouth, N.S., Canada  
2011

Report of the Fisheries Commission and its Subsidiary Body (STACTIC)  
33<sup>rd</sup> Annual Meeting, 19-23 September 2011  
Halifax, Nova Scotia, Canada

Part I. Report of the Fisheries Commission .....	4
I. Opening Procedures .....	4
II. Scientific Advice.....	5
III. Conservation of Fish Stocks in the Regulatory Area .....	6
IV. Ecosystem Considerations.....	9
V. Conservation and Enforcement Measures .....	11
VI. Closing Procedures.....	12
Annex 1. List of Participants .....	13
Annex 2. Record of Decisions and Actions by the Fisheries Commission .....	25
Annex 3. Agenda .....	28
Annex 4. Scientific Council Responses to Questions from the Fisheries Commission .....	30
Annex 5. Fisheries Commission's Request for Scientific Advice on Management Options in 2013 and Beyond of Certain Stocks in Subareas 2, 3 and 4 and Other Matters .....	32
Annex 6. Interim 3LNO American Plaice Conservation Plan and Rebuilding Strategy ....	38
Annex 7. Interim 3NO Cod Conservation Plan and Rebuilding Strategy .....	39
Annex 8. Terms of Reference for the Working Group of Fishery Managers and Scientists on Conservation Plans and Rebuilding Strategies .....	41
Annex 9. Recommendation from the FC Working Group on Greenland Halibut Management Strategy Evaluation to the Fisheries Commission .....	42
Annex 10. Quota Table 2012 and Effort Allocation Scheme 2012.....	43
Annex 11. Cod in Division 3NO.....	47
Annex 12. Amendments to NAFO Conservation and Enforcement Measures – Annex I.A, Footnote 21 .....	48
Annex 13. White Hake in Divisions 3NO.....	49
Annex 14. Thorny Skate in Division 3LNO .....	50
Annex 15. Greenland Halibut Management Strategy Evaluation .....	51
Annex 16. Terms of Reference for the Working Group of Fishery Managers and Scientists on Vulnerable Marine Ecosystems.....	53
Annex 17. Update of Chapter Ibis-Bottom Fisheries in the NAFO Regulatory Area.....	54
Annex 18. Proposal for a Reassessment of the Impacts of NAFO Managed Fisheries on Known or Likely Vulnerable Marine Ecosystems.....	62
Annex 19. Proposal to amend NCEM Article 15.2.....	63
Annex 20. Modifications to Shark Bycatch Reporting .....	64
Annex 21. NAFO CEM – Annex XX(c) – Product Form Codes.....	65
Annex 22. Proposal to improve NCEM – Vessel type.....	66
Annex 23. Amendment to NAFO CEM Annex XIX.....	67
Annex 24. Communication of catches – Editorial correspondence for CA, OB, RJ and US field codes – NAFO CEM – Annexes X; XXa and XXIIc .....	68
Annex 25. Communication of catches–Daily declaration of discarded fish within the CAT message; Deletion of the CAX message; Identification of vessels with an observer on board–NAFO CEM–Chapter VII; Annexes X, XXa and XXIIc ..	71
Annex 26. Communication in case of defective VMS.....	73
Annex 27. Serious Infringements.....	74
Annex 28. Annual Compliance Review 2011 (Compliance Report for Calendar Year 2010).....	75
Annex 29. Follow-up of editorial redrafting of the NAFO CEM by EDG .....	92
Annex 30. NAFO Inspectors Web Area .....	93
Annex 31. International Monitoring, Control, and Surveillance Network.....	96

Part II. Report of the Standing Committee on International Control (STACTIC) .....	97
1. Opening of the Meeting .....	97
2. Appointment of Rapporteur .....	97
3. Adoption of Agenda .....	97
4. Compliance Review 2010 including review of reports of apparent infringements .....	97
5. Review and evaluation of NAFO Practices and Procedures .....	98
6. Review of current IUU List pursuant to NAFO CEM Article 57.3.....	98
7. Inspectors Web Page .....	98
8. Editorial Drafting Group of the NAFO CEM (EDG).....	99
9. Possible revisions of the NAFO CEM .....	100
10. Observers Scheme – NCEM Chapter VII and Article 28.....	103
11. Data Security Improvements .....	104
12. Other Matters .....	104
13. Time and Place of Next Meeting.....	106
14. Adoption of Report .....	106
15. Adjournment .....	106
Annex 1. Agenda .....	107

**Report of the Fisheries Commission  
33rd Annual Meeting, 19 - 23 September 2011  
Halifax, Nova Scotia, Canada**

**I. Opening Procedures**

**1. Opening by the Chair, Kate Sanderson (Denmark in respect of the Faroe Islands and Greenland)**

The meeting was opened by the Chair, Kate Sanderson (Denmark in respect of the Faroe Islands and Greenland), at 1200 hrs on Monday, September 19, 2011. Representatives from all Contracting Parties were in attendance: Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), European Union (EU), France (in respect of St. Pierre et Miquelon), Iceland, Japan, Republic of Korea, Norway, Russian Federation, Ukraine, and the United States of America (USA) (Annex 1).

With regards to attendance by observers, FAO was present, CCAMLR was represented by the EU, NEAFC was represented by Denmark (in respect of the Faroe Islands and Greenland), and NAMMCO was represented by Iceland.

The presence of the following NGOs which had been granted observer status was also acknowledged: the Ecology Action Centre (EAC), Pew Environment Group, the Sierra Club of Canada (SCC) and World Wildlife Fund (WWF).

**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 2011.

**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 2011 intersessional meeting which was held in London, UK. (FC Doc 11/3). He reported on the progress of the NAFO Conservation and Enforcement Measures (NCEM) Editorial Review Drafting Group and on the proposals on changes in the NCEM to be finalized at this Meeting.

The Fisheries Commission commended the work of STACTIC and encouraged the Committee to continue its work.

The Fisheries Commission also asked STACTIC to provide feedback on how the following recommendations from the Performance Review Panel (PRP) can be followed-up:

- Continuation in incorporating relevant Port State Measures, in particular those of the FAO Port States Measures Agreement, into its monitoring, control and surveillance (MSC) provisions.
- Clarification on the definition of “shark weight” as this could impact the calculation of the amount of shark fins permitted aboard a fishing vessel, and
- Consideration of expanding Article 23 of the NCEM so that all catches are labelled according to the stock area and traceability can be improved.

The recommendations from the intersessional meeting would be forwarded to the Fisheries Commission together with the recommendations from this Annual Meeting (see item 17).

## II. Scientific Advice

### 6. Presentation of scientific advice by the Chair of the Scientific Council

The Scientific Council (SC) Chair, Ricardo Alpoim (EU), presented the comprehensive and detailed scientific advice to the Fisheries Commission. The scientific advice for fish stocks and on other topics is contained in SCS Doc 11/16 from the June 2011 Scientific Council meeting. Advice on shrimps was updated during the SC WebEx meeting in 1-12 September (SCS Doc 11/17).

The following represents an overview of the scientific advice on the fish stocks which were fully assessed or monitored at the SC meetings, as well as on the selected topics from special requests items on Conservation Plans and Rebuilding Strategies, Management Strategy Evaluation, and Vulnerable Marine Ecosystems. The advice may contain special comments and caveats. The SC Chair urged the Fisheries Commission to consult the details in the relevant SC meeting reports when considering management and conservation measures.

#### 6.1 Scientific advice on fish stocks

- **Shrimp in Division 3M.** Fishing mortality for 2012 be set as close to zero as possible.
- **Shrimp in Divisions 3LNO.** Total Allowable Catch (TAC) for 2012 to be less than 9 350 t.
- **Cod in Division 3M.** Catches in 2012 should not exceed the level of  $F_{0.1}$  (9 280 t).
- **American plaice in Divisions 3LNO.** No directed fishery in 2012 and 2013.
- **Yellowtail flounder in Division 3LNO.**  $F$  options of up to 85%  $F_{msy}$  are considered low risk of exceeding  $F_{lim}$  ( $= F_{msy}$ ) in 2012 and 2013.
- **Redfish in Division 3M.** Catch in 2012 and 2013 should not exceed 6 500 t.
- **White hake in Divisions 3NO.** TAC of 6 000 t is unrealistic and that catches in 2012 and 2013 should not exceed their current levels.
- **Capelin in Division 3NO.** No directed fishery in 2012 and 2013.
- **American plaice in Division 3M.** No directed fishery in 2012, 2013 and 2014.
- **Witch flounder in Division 3NO.** No directed fishery in 2012, 2013 and 2014.
- **Cod 3NO.** Reiterated advice of no directed fishery in 2011-2013.
- **Redfish in Division 3LN.** Reiterated advice of TAC = 6 000 t for 2011 and 2012.
- **Witch flounder Divisions 2J3KL.** Reiterated advice of no directed fishery in 2011-2013.
- **Redfish in Division 3O.** Reiterated that SC was unable to advise on a TAC.
- **Thorny skate in Division 3LNO.** Reiterated that TAC in 2011 and 2012 should not exceed 5 000 t.
- **Northern shortfinned squid SA 3+4.** Reiterated that TAC for 2011 to 2013 be set between 19 000 and 34 000 t.

#### 6.2 Conservation Plans and Rebuilding Strategies (CPRS)

On the identification of reference points for  $F_{msy}$  and  $B_{msy}$ :

	Div. 3LNO American Plaice	Div. 3NO cod	Div. 3LN redfish
$F_{msy}$	0.31	0.30	0.13
$B_{msy}$	242 000 t SSB	248 000 t SSB	186 000 t

#### 6.3 Management Strategy Evaluation (MSE)

On the computation of 2012 TAC for 2 +3KLMNO Greenland halibut according to the adopted Harvest Control Rule (HCR): “Averaging the individual survey slopes yields slope = -0.1130. Therefore,  $17185 * [1 + 2 * (-0.1130)] = 13\,301$  t. However, as this change exceeds 5%, the HCR constraint is activated and  $TAC_{2012} = 0.95 * 17185 = 16\,326$  t.”

#### 6.4 Vulnerable Marine Ecosystems (VME)

On the review of any new scientific information on the areas as vulnerable marine ecosystems: “... the lower boundary of the Closed Area # 5 (Flemish Cap northeast prong) does not reach sufficiently deep waters to protect the entire gradient of coral and sponges assemblages. Therefore it would be advisable to extend the lower boundary of this closed area up to the 2500 m contour.”

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

The SC Chair drew attention to concerns of the Scientific Council at its June 2011 Meeting: “Scientific Council expressed some concerns with the role of Fisheries Commission Working Groups which require scientific input. In principle Scientific Council supports the increase of dialogue between scientists, managers and fishers, but notes the increased workload this places on scientists and feels that any new science should be peer reviewed by Scientific Council before consideration by managers. If it is felt that Scientific Council lacks the experience to address a particular issue, it is within the remit of Contracting Parties to support the work of Scientific Council by adding additional members with the required skills and knowledge to their delegations.”

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

Questions and enquiries for further clarification arose in response to the Scientific Council Chair’s presentation, to which the Scientific Council prepared responses during the meeting. The questions from the Fisheries Commission and the responses from the Scientific Council are compiled in Annex 4. These concern the shrimp in 3M and 3LNO, cod in 3M, and Greenland halibut in 2+3KLMNO.

## **7. Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 2013 and on other matters**

The Fisheries Commission **adopted** FC WP 11/32 Revised containing its request to the Scientific Council for scientific advice on management in 2013 and beyond of certain stocks in Subareas 2, 3, and 4 and on other matters (Annex 5).

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

## **8. FC Working Groups and Recommendations**

### **8.1 Reports and Recommendations of the FC Working Group of Fishery Managers and Scientists on Conservation Plans and Rebuilding Strategies (WGFMS-CPRS)**

The Chair of the WGFMS-CPRS Jean-Claude Mahé (EU) presented the recommendations of the working group which met in April 2011 via WebEx and in June 2011 in Halifax. The recommendations call for the adoption of interim Conservation Plans and Rebuilding Strategies (CPRS) for 3LNO American plaice and 3NO cod.

The CPRS for 3LNO American plaice (FC WP 11/4, Annex 1) was **adopted** (Annex 6). The CPRS for 3NO cod (Annex 2 of FC WP 11/4) was **adopted** with a modification that under Ecosystem Consideration, the moratorium on 3NO capelin will continue until at least December 31, 2013 (Annex 7). In the adoption the two CPRS, the Fisheries Commission noted that the reference points of the stocks would be reviewed and updated by the Scientific Council.

As recommended by the WG, the bycatch regulations for 3NO cod were also reviewed and revised in association with the adoption of CPRS of this stock (see item 10.1).

The Fisheries Commission also updated the Terms of Reference of this WG in order for the WG to continue its work until at least 2014. The WG is expected to review the existing CPRS and develop CPRS for other fish stocks under the management of NAFO (FC WP 11/31 Revised, Annex 8).

### **8.2 Report and Recommendations of the FC Working Group on Greenland Halibut Management Strategy Evaluation (WGMSE)**

The co-Chair of the WGMSE Sylvie Lapointe presented the recommendation of the working group which met in September 2011 via WebEx. The recommendation for the “Exceptional Circumstances Protocol” was **adopted** by the Fisheries Commission (FC WP 11/7, Annex 9).

## **9. Management and Technical Measures for Fish Stocks in the Regulatory Area, 2012**

The Quota Table for 2012 and the Effort Allocation Scheme for the shrimp fishery in NAFO Division 3M can be found in Annex 10 of this Report. Allocation schemes for the fish stocks mentioned in items 9 and 10 are the same as in 2011.

### 9.1 Cod in Division 3M

It was **agreed** to set the TAC at 9 280 t.

### 9.2 Redfish in Division 3M

It was **agreed** to set the TAC at 6 500 t for 2012 and 2013.

The proposal from Russian Federation of minimum mesh size reduction from 130 mm to 90 mm for redfish in the fishery using mid-water trawls in Division 3M was forwarded to STACTIC for evaluation (See Part II of this Report).

### 9.3 American plaice in Division 3M

It was **agreed** that there shall be no directed fishery in 2012, 2013 and 2014. The bycatch provisions of Article 12.1.b) of the NCEM shall apply.

### 9.4 Shrimp in Division 3M

It was **agreed** that the fishing moratorium continues. When the scientific advice estimates that the stock shows sign 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.

Iceland expressed that notwithstanding the closure of the fishery in 2012, it maintains its position against the effort allocation scheme applied to this stock.

## 10. Management and Technical Measures for Fish Stocks Straddling National Fishing Limits, 2012

### 10.1 Cod in Divisions 3NO

The measure of no directed fishery until 2013 was decided in 2010.

In view of the adoption of the updated CPRS applied on this stock (see item 8.1 and Annex 7), the bycatch provision of Article 12 of the NCEM was revised to reflect a bycatch limitation of 1 000 kg or 4%, whichever is greater, for this stock (FC WP 11/26 Revised, Annex 11). The updated CPRS replaces Article 9 of the 2011 NCEM.

### 10.2 Redfish in Divisions 3O

It was **agreed** to set the TAC at 20 000 t, the same level as in 2011.

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

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

Norway reiterated the Scientific Council's recognition of the ICES advice for oceanic pelagic redfish and in particular to the recommendation relating to shallow pelagic redfish. It recalled that ICES had advised that no directed fishery should be conducted on this stock, and that bycatches in non-directed fisheries should be kept as low as possible since the stock is at a very low state.

There were different views among Contracting Parties as to how existing management measures for this stock should best be adapted in light of the fact that the relevant Coastal States and NEAFC are endeavouring to develop appropriate management measures for oceanic redfish with is shared by NAFO. While some Contracting Parties were of the opinion that NAFO decisions on this stock should be considered contingent to the NEAFC decision; other Contracting Parties were of the opinion that management measures applied to this stock should be considered as independent NAFO decisions.

### 10.4 American plaice in Divisions 3LNO

It was **agreed** that there shall be no directed fishery in 2012 and 2013.

Footnote 21 of the Quota Table concerning a 15% bycatch requirement involving this stock and the yellowtail fishery in Divisions 3LNO was revised in order to clarify its application (FC WP 11/28, Annex 12).

A CPRS, to be integrated in the NCEM as a new Article, on this stock was developed and adopted (See item 8.1 and Annex 6).

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

It was **agreed** to set the TAC at 17 000 t, the same level as in 2011.

Footnote 21 of the Quota Table concerning a 15% bycatch requirement involving this stock and the American plaice fishery in Divisions 3LNO was revised in order to clarify its application (FC WP 11/28, Annex 12).

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

It was **agreed** that there shall be no directed fishery in 2012.

It was recognized that this stock would be a candidate to be under CPRS, and it was decided to revisit this stock at the next Annual Meeting.

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

It was **agreed** to set the TAC at 5 000 t (FC WP 11/27, Annex 13).

#### **10.8 Capelin in Divisions 3NO**

Consistent with the 3NO Cod CPRS, it was **agreed** that the moratorium shall continue until at least December 31<sup>st</sup>, 2013.

#### **10.9 Thorny skate in Divisions 3LNO**

It was **agreed** to set the TAC at 8 500 t.

Footnote 28 was inserted: This TAC will be reviewed in 2012 in line with the available scientific advice on this stock (FC WP 11/12 Revised, Annex 14).

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

Consistent with the Management Strategy Evaluation (MSE) approach, it was agreed to set the TAC at 16 326 t (12 098 t in Divisions 3LMNO).

In line with the implementation of the MSE approach and the adoption of *Exceptional Circumstances Protocol* (see item 8.2 and Annex 9), Article 7 of the NCEM was **revised**, and Annexes XXVI – *Greenland halibut Management Strategy* and XXVII - *Exceptional Circumstances Protocol* were **inserted** (FC WP 11/20 Revised, Annex 15).

#### **10.11 Shrimp in Division 3LNO**

It was **decided** that for 2012 and 2013 the TACs would be 12 000 t and 9 350 t, respectively. The 2013 TAC is subject to review based on available Scientific Council advice on this stock.

The decision was reached through a voting procedure in accordance with Article XIV of the NAFO Convention and FC Rules of Procedure 2.3 and 2.4. Ten Contracting Parties (Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), European Union, France (in respect of St. Pierre et Miquelon), Japan, Republic of Korea, Russian Federation, Ukraine, and the United States of America) voted in favour of a proposal for a 2012 TAC of 12 000 t and 2013 TAC of 9 350 t, and two Contracting Parties (Iceland and Norway) votes against the proposal. Norway gave the following statement:

Norway had expected that the Contracting Parties would honour their commitment from last year to respect the scientific advice for 2012 for shrimps in 3L. Norway could not agree once again to postpone the adoption of the TAC recommended by the Scientific Council. According to the Scientific Council, exploitation rates over 14 % implied high risk of continued stock decline. A DFG autonomous quota of 10.3 % of the TAC would imply an extra overshoot of the fixed TAC. Hence a precautionary approach was called for. Norway favoured consensus in the decision-making process in NAFO. However, consensus could not always imply TACs which go beyond the scientific recommendations. When there is no consensus, both the existing and the new Convention provide for a voting procedure, which could be used when appropriate.

Iceland gave the following statement:

Last year we were given a clear advice from the Scientific Council on 3L shrimp. Exploitation rates should be set no higher than 14% which meant a TAC of 17 000 tonnes at the time. The Fisheries Commission decided anyway to set the TAC at 19 200 tonnes for the year 2011 but exploitation rates for 2012 were to be set at 14%.

Last week the Scientific Council gave its preliminary advice for the year 2012. This advice is no better than last year's advice, exploitation rate are still to be set no higher than 14% but this time it would only be representing a TAC of 9 350 tonnes, due to lower biomass estimate. Other indicators all point to the fact that this stock is in a bad shape and any higher exploitation rates are only to be associated with higher risk of further stock decline. Since the only variable within the powers of this commission to restore the stock to MSY level is the actual fishery, Iceland can not endorse any proposal which involves exploitation rates higher than already advised by the Scientific Council.

Notwithstanding the adoption of the TAC for 2012 and 2013, the reservation of Denmark (in respect of the Faroe Islands and Greenland) to the division of shares of 3L shrimp was noted.

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

Serious concerns were reiterated about the issue of catch estimation process and data utilization and its implications on Greenland halibut, to which the recently adopted MSE is applied, as well as on other stocks such as cod. The TAC overrun suggested by the Scientific Council estimate of catch remains a big problem. As expressed at the 2009 Annual Meeting, one of the underlying causes could be the quality of the data that is provided to the SC when it assesses fish stocks and formulates scientific advice. Contracting Parties were urged to ensure that the Scientific Council is provided with reliable data so that Fisheries Commission can make more informed decisions on conservation and management measures. The Chair acknowledged that the Fisheries Commission should identify more concrete steps in addressing this issue.

USA informed the Fisheries Commission about the new national legislation Shark Conservation Act prohibiting shark finning in the protection of the species. The Act also directs the US to urge international fishery management organizations to adopt measures for the conservation of sharks.

Ukraine expressed its view that the allocation schemes currently applied are not consistent with the spirit paragraph 3, Article 8 of the UN Fish Stock Agreement, considering that Ukraine has history in fishing in the NAFO Convention Area. It suggested that allocation schemes should be reviewed and discussed at the next meeting.

### **IV. Ecosystem Considerations**

#### **12. Report and Recommendations of the FC Working Group of Fishery Managers and Scientists on VMEs (WGFMS-VME)**

The Chair of the WGFMS-VME Bill Brodie (Canada) presented the following recommendations of the working group which met in June 2011 in Halifax for adoption, or review:

- a) The WG recommends the extension of the existing coral and sponge closures until December 31, 2014 to synchronize with the seamount closure.
- b) The WG recommends the adoption of the proposed update of Chapter Ibis of the NCEM (FCWG-VME WP 11//2 Revision 3).
- c) In relation to Article 1bis 6 of the draft update concerning VME indicator species, the WG recommends Fisheries Commission to formulate a request to the SC to produce a detailed list of VME indicator species and possibly other VME elements.
- d) In relation to Article 2bis3 of the draft update, it is implied that exploratory fishery in the seamounts is allowed. The WG recommends that the Fisheries Commission clarify this measure and its application, with specific reference to Article 2bis, paragraph 2 (regarding "fishable area"). The WG is of the view that there should be clear and consistent measures in the NCEM on exploratory fisheries vis-à-vis closed areas (seamounts, coral and sponge areas).

e) In relation to Article 2bis8 of the draft update concerning the establishment of national coral and sponge monitoring programs, the WG recommends that the Fisheries Commission clarify the intent of this measure.

f) Concerning the role and task of the WG, the WG recommends Fisheries Commission to clarify whether this group should consider scientific advice before it is presented to the Fisheries Commission and make recommendations to the Fisheries Commission at the Annual Meeting.

Regarding recommendation a), the proposed closure date was **adopted**.

Regarding recommendation b), the bracketed texts in the proposed draft update were clarified, and the draft update was **adopted**.

Regarding recommendation c), the Fisheries Commission **included** a requested item to the Fisheries Commission request to SC for scientific advice (see item 7 and paragraph 15 of Annex 5).

Regarding recommendation d), Fisheries Commission **decided to delete** Article 2bis2 in the draft update. This decision is subject to review at the next Annual Meeting.

Regarding recommendation e) Article 2bis8 in the draft update (currently Article 16 in the NCEM) was **revised**, as reflected in FC WP 11/30.

Regarding recommendation f) the Terms of Reference of the WG (FC Doc 10/15) were **modified** to reflect that meetings should occur one week prior to the NAFO Annual Meeting (FC WP 11/33, Annex 16).

In addition, Fisheries Commission **agreed to revise** some existing measures on VMEs in the NCEM:

a) Following scientific advice which drew from the latest available information, the boundary of Area 5 - Northeast Flemish Cap (see Article 16.3) was extended to the deeper boundary up to the 2 500 meter-contour. The new coordinates can be found in FC WP 11/21 Revision 3.

b) The 800-kg live sponge threshold (see Article 5bis3) was reduced to 400 kg and 600 kg in new and existing fishing areas, respectively (FC WP 11/10 Revision 2).

The revisions of the articles relating in NCEM, as described above, are incorporated in FC WP 11/34 Revised and presented in Annex 17.

The Fisheries Commission also resolved that reassessment of the likely impacts on known or likely VME will be done by year 2016 and every five years thereafter (FC WP 11/24 Revised, Annex 18). The proposal to involve observers in compliance with the reporting requirements as stipulated in Article 5bis1 (FC WP 11/23) was forwarded to STACTIC for evaluation.

### 13. Climate Change and NAFO Fisheries resources

The EU presented the joint proposal with the USA of a resolution concerning the promotion of scientific research on climate change and its potential effects on NAFO fishery resources. This proposal incorporated the comments and addressed the concerns of other Contracting Parties when this proposal was first introduced at the 2010 Annual Meeting. While the general intent of the proposal garnered was more broadly supported among the Contracting Parties at this meeting, a consensus to adopt the proposal could not be reached.

The EU expressed regrets that Contracting Parties were not in a position to act on one of the Performance Review Panel's recommendations and adopt the proposal.

This topic may be revisited and included in the agenda at the next Annual Meeting.

### 14. International Guidelines on Bycatch Management and Reduction of Discards

For information purposes, the Secretariat presented the document *FAO International Guidelines on Bycatch Management and Reduction of Discards*. The Guidelines were developed during the FAO Technical Consultation Meeting in Rome in 2010 and endorsed by the FAO Committee on Fisheries at its meeting in February 2011. The Guidelines are intended to assist States and Regional Fisheries Bodies like NAFO.

Sections of the Guidelines were highlighted in the presentation --- Management Framework, Bycatch Management Planning, Data Collection and Bycatch Assessments; Research and Development; Measures to Manage Bycatch and reduce Discards, and Monitoring Control and Surveillance (MCS)—as these were deemed relevant to NAFO as a Regional Fisheries Management Organization (RFMO).

## 15. Other Matters pertaining to Ecosystem Considerations

Norway circulated an information paper concerning its measures in protecting VMEs in Norwegian waters. As a precautionary measure all bottom areas below 1 000 meters depth --- approximately 1 118 000 km<sup>2</sup> --- are considered VME. The VMEs are covered by regulations which entered into force in September 2011. The regulations include, among others, fishing gear restrictions, strict exploratory protocol, coral and sponge threshold levels and move-away provisions.

## V. Conservation and Enforcement Measures

### 16. Review of Chartering Arrangements

A report on chartering arrangements was presented by the NAFO Secretariat (FC WP 11/1 Revision 2). There were seven charter arrangements made during 2010 and three during January-September 2011. The Secretariat noted full compliance with all the chartering requirements stipulated in Article 19 of the NCEM.

### 17. Reports of STACTIC (from May 2011 intersessional meeting and current Annual Meeting) and Recommendations

The May 2011 intersessional meeting report was presented under item 5. The STACTIC Chair presented the results of the STACTIC meeting (see Part II of this Report) and forwarded the following recommendations to the Fisheries Commission:

- a) *Proposal to Amend Article 15.2* (STACTIC WP 11/01 Revision 2, Annex 19)
- b) *Modifications to Shark Bycatch Reporting* (STACTIC WP 11/10 Revision 3, Annex 20)
- c) *NAFO CEM – Annex XXc – Product Form Codes* (from the May 2011 Intersessional meeting) (STACTIC WP 11/14 Revised, Annex 21)
- d) *Proposal to improve NCEM – Vessel type* (STACTIC WP 11/17, Annex 22)
- e) *Security provisions in NCEM – ISO 27001 Best Practices* (STACTIC WP 11/24, Annex 23)
- f) *Communication of catches – editorial correspondence for CA, OB, RJ and US field codes --- NCEM Annexes X; XXa and XXIIc* (STACTIC 11/25 Revision 2, Annex 24)
- g) *Communication of catches – NCEM Chapter VII; Annexes X, XXa, and XXIIc* (STACTIC 11/26 Revision 2, Annex 25)
- h) *Communication in case of defective VMS – Art. 26.5* (STACTIC WP 11/28, Annex 26)
- i) *Serious infringement – Art. 37.1* (STACTIC WP 11/29 Revision 3, Annex 27)
- j) *Proposed Revisions to NAFO's Conservation and Enforcement Measures – Final Product of the Editorial Drafting Group (EDG)* (STACTIC WP 11/21 Revised)
- k) *Annual Compliance Review* – (STACTIC WP 11/38 Revised, Annex 28)
- l) *Follow-up of editorial redrafting of the NCEM by EDG* (STACTIC WP 11/40, Annex 29)
- m) *Inspector's Web Area* (STACTIC WP 11/7 Revised, Annex 30)
- n) *International Monitoring, Control, and Surveillance Network (IMCS Network)* (STACTIC WP 11/33 Revised, Annex 31)

Fisheries Commission **adopted** recommendations a) – i); **accepted** recommendations j) and k); **approved** recommendations l) –n).

Concerning the three PRP recommendations on which the Fisheries Commission asked STACTIC to provide feedback (see item 5), STACTIC agreed to consider the recommendations at the next STACTIC intersessional meeting.

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

No other matter was discussed.

## VI. Closing Procedures

### 19. Election of Chair

Sylvie Lapointe (Canada) was **elected** the Chair of the Fisheries Commission.

### 20. Time and Place of the Next Meeting

It was **decided** to hold the next Annual Meeting on 17-21 September, 2012. The Russian Federation kindly offered to host the meeting at St. Petersburg and NAFO **welcomed** the invitation.

### 21. Other Business

The Fisheries Commission noted the PRP recommendations specific to the Commission, as specified in GC WP 11/8 Rev and 11/9 Rev. The Fisheries Commission noted that a new GC working group was created to review and develop, where relevant, plans of action for the implementation of the PRP recommendations. The working group would meet in March 2012.

It was **agreed** that the Fisheries Commission Chair would work intersessionally, in coordination with the Secretariat, in developing a draft Fisheries Commission plan of action in preparation for the GC working group meeting, and thereby progress follow-up on recommendations that can already be addressed in the coming year.

### 22. Adjournment

In her closing remarks as outgoing Chair of the Fisheries Commission, Kate Sanderson (Denmark in respect of the Faroe Islands and Greenland) expressed her thanks to all delegations for their cooperation. She also thanked the Secretariat for their excellent assistance and professional work both at and between meetings. USA expressed on behalf of all Contracting Parties their appreciation to the outgoing Chair for her leadership and excellent services as Chair of the Fisheries Commission.

The meeting was adjourned at 1525 hrs on Friday, 23 September 2011.

## Annex 1. List of Participants

### NAFO President/GC Chair:

Lobach, Terje, Senior Legal Adviser, Directorate of Fisheries, P. O. Box 2009 Nordnes, NO-5817 Bergen, Norway  
Phone: +47 55 23 80 00 / 8139 – Fax: +47 55 23 80 90 – E-mail: [terje.lobach@fiskeridir.no](mailto:terje.lobach@fiskeridir.no)

### CANADA

#### Head of Delegation

Baird, James W., Regional Director General, Newfoundland and Labrador Region, Fisheries and Oceans Canada,  
P. O. Box 5667, St John's, NL A1C 5X1  
Phone: +709 772 4417 – Fax: +709 772 6306 – E-mail: [james.baird@dfo-mpo.gc.ca](mailto:james.baird@dfo-mpo.gc.ca)

#### Alternate

Pearson, Michael, Director General, International Affairs, Fisheries and Oceans Canada, 200 Kent St., Ottawa,  
Ontario K1A 0E6  
Phone: +613 993 1914 – Fax: +613 990 9574 – E-mail: [michael.pearson@dfo-mpo.gc.ca](mailto:michael.pearson@dfo-mpo.gc.ca)

#### Representatives

Baird, James W. (see address above)  
Pearson, Michael (see address above)  
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 – E-mail: [emccurdy@ffaw.nfld.net](mailto:emccurdy@ffaw.nfld.net)  
Andrews, Ray, Andrews Port Services Limited, Fisheries and Community Consultants, 5 McPherson Avenue,  
St. John's, NL A1B 2B8  
Phone: +709 754 0444 – Fax: +709 754 0444 – E-mail: [raymondandrews@me.com](mailto:raymondandrews@me.com)

#### Advisers

Anderson, Kevin, Director, Conservation and Protection (C&P), NL Region, Fisheries and Oceans Canada, P. O. Box  
5667, St. John's, NL A1C 5X1  
Phone: +709 772 4494 – Fax: +709 772 3628 – E-mail: [kevin.anderson@dfo-mpo.gc.ca](mailto:kevin.anderson@dfo-mpo.gc.ca)  
Belle-Isle, Alain, Senior Communications Advisor, Fisheries and Oceans Canada, International Fisheries and Seals,  
200 Kent Street, Ottawa, ON K1A 0E6  
Phone: +613 990 0298 – Fax: +613 990 1866 – E-mail: [alain.belle-isle@dfo-mpo.gc.ca](mailto:alain.belle-isle@dfo-mpo.gc.ca)  
Boudreau, Cyril, Marine Adviser – Groundfish, Marine Services, Fisheries and Aquaculture Nova Scotia, 1741  
Brunswick Street, 3<sup>rd</sup> Floor, P. O. Box 2223, Halifax, NS B3J 3C4  
Phone: +902 424 2677 – Fax: +902 424 1766 – E-mail: [boudrecy@gov.ns.ca](mailto:boudrecy@gov.ns.ca)  
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 – E-mail: [bill.brodie@dfo-mpo.gc.ca](mailto: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 – E-mail: [bchapman@sympatico.ca](mailto: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 – E-mail: [couturee@dfo-mpo.gc.ca](mailto:couturee@dfo-mpo.gc.ca)  
Day, Robert, Director, 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: +613 993 5995 – E-mail: [robert.day@dfo-mpo.gc.ca](mailto:robert.day@dfo-mpo.gc.ca)  
Docherty, Verna, Senior Advisor, Fisheries and Oceans Canada, Resource Management, 176 Portland Street, P. O. Box  
1035, Dartmouth, NS B2Y 4T3  
Phone: +902 426 4669 – Fax: +902 426 9683 – E-mail: [verna.docherty@dfo-mpo.gc.ca](mailto:verna.docherty@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 – E-mail: [tdooley@gov.nl.ca](mailto:tdooley@gov.nl.ca)

Dwyer, Shelley, Resource Policy and Development Officer, Sustainable Fisheries and Oceans Policy, Dept. of Fisheries and Aquaculture, Government of Newfoundland and Labrador, P. O. Box 8700, St. John's, NL A1B 4J6  
Phone: +709 729 3735 – E-mail: [shelley.dwyer@gov.nl.ca](mailto:shelley.dwyer@gov.nl.ca)

Gilchrist, Brett, Senior International Fisheries Officer, Atlantic and Americas Regional Affairs Bureau, International Affairs Bureau, International Affairs Directorate, Fisheries and Oceans Canada, 200 Kent St., Ottawa, ON K1A 0E6  
Phone: +1 613 991 0218 – Fax: +1 613 993 5995 – E-mail: [brett.gilchrist@dfo-mpo.gc.ca](mailto:brett.gilchrist@dfo-mpo.gc.ca)

Greig, Neil, Department Head, Fisheries Division and Economic Development, Makivik Corporation, P. O. Box 179, Kuujuaq, QC J0M 1C0  
Phone: +819 964 2925 ext. 225 – Fax: +819 964 2613 – E-mail: [n\\_greig@makivik.org](mailto:n_greig@makivik.org)

Jenkins, Randy, Director, Enforcement, Conservation and Protection (C&P), Fisheries and Oceans Canada, 200 Kent Street, Ottawa, ON K1A 0E6  
Phone: +613 990 0108 – Fax: +613 941 2718 – E-mail: [randy.jenkins@dfo-mpo.gc.ca](mailto:randy.jenkins@dfo-mpo.gc.ca)

Kenchington, Ellen, Research Scientist, Fisheries and Oceans Canada, Bedford Institute of Oceanography, 1 Challenger Dr., P. O. Box 1006, Dartmouth, NS B2Y 4A2  
Phone: + 902 426 2030 – E-mail: [ellen.kenchington@dfo-mpo.gc.ca](mailto:ellen.kenchington@dfo-mpo.gc.ca)

Knight, Morley, Regional Director, Fisheries and Aquaculture Management, NL Region, Fisheries and Oceans Canada, P. O. Box 5667, St. John's, NL A1C 5X1  
Phone: +709 772 4543 – Fax: +709 772 2046 – E-mail: [morley.knight@dfo-mpo.gc.ca](mailto:morley.knight@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 – E-mail: [mariano.koen-alonso@dfo-mpo.gc.ca](mailto:mariano.koen-alonso@dfo-mpo.gc.ca)

Lambert, Bob, 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 – E-mail: [robert.lambert@dfo-mpo.gc.ca](mailto:robert.lambert@dfo-mpo.gc.ca)

Lester, Brian, Manager, Atlantic Fisheries, Fisheries and Oceans Canada, 200 Kent Street, Ottawa, ON K1A 0E6  
Phone: +613 990 0090 – Fax: +613 990 7051 – E-mail: [brian.lester@dfo-mpo.gc.ca](mailto:brian.lester@dfo-mpo.gc.ca)

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 – E-mail: [sylvie.lapointe@dfo-mpo.gc.ca](mailto:sylvie.lapointe@dfo-mpo.gc.ca)

McNamara, Brian, President, Newfound Resources Ltd., 90 O'Leary Ave., P. O. Box 13695, St. John's, NL  
Phone: +709 726 7223 – E-mail: [nrl@nfl.com](mailto:nrl@nfl.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 – E-mail: [joanne.morgan@dfo-mpo.gc.ca](mailto:joanne.morgan@dfo-mpo.gc.ca)

O'Connor, Michael, Managing Director, Iceswater Harvesting Inc., P. O. Box 89, Arnold's Cove, NL A0B 1A0  
Phone: +902 482 7747 – Fax: +902 482 8146 – E-mail: [mcoconnor@eastlink.ca](mailto:mcoconnor@eastlink.ca)

O'Rielly, Alastair, Deputy Minister, Government of Newfoundland and Labrador, Fisheries and Aquaculture, P. O. Box 8700, St. John's, NL A1B 4J6  
Phone: +709 729 3707 – Fax: +709 729 4219 – E-mail: [aurielly@gov.nl.ca](mailto:aurielly@gov.nl.ca)

Orr, Dave, Science Br., Fisheries and Oceans Canada, Newfoundland & Labrador Region, 80 East White Hills Rd., P. O. Box 5667, St. John's, NL A1C 5X1  
Phone: +709 772 7343 – E-mail: [david.orr@dfo-mpo.gc.ca](mailto:david.orr@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 – E-mail: [bsheppard@hgsc.ca](mailto:bsheppard@hgsc.ca)

St-Pierre, Nicolas, Foreign Affairs and International Trade Canada, 125 Sussex Drive, Ottawa, Ontario K1A 0G2  
Phone: +613 944 0747 – E-mail: [nicolas.st-pierre@international.gc.ca](mailto:nicolas.st-pierre@international.gc.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 – E-mail: [don.stansbury@dfo-mpo.gc.ca](mailto: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 – E-mail: [lsullivan@oceanchoice.com](mailto:lsullivan@oceanchoice.com)

Sullivan, Martin, President & 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 – E-mail: [msullivan@oceanchoice.com](mailto:msullivan@oceanchoice.com)

Twining, Doug, Senior Policy Analyst, Atlantic and Americas Regional Affairs Bureau, International Affairs Directorate, Fisheries and Oceans Canada, 200 Kent St., Ottawa, ON K1A 0E6  
Phone: +613 991 949 7809 – Fax: +613 993 5995 – E-mail: [doug.twining@dfo-mpo.gc.ca](mailto:doug.twining@dfo-mpo.gc.ca)

Walsh, Ray, Resource Manager, Fisheries and Aquaculture Management Br., Fisheries and Oceans Canada, P.O. Box 5667, St. John's, NL A1C 5X1

Phone: +709 772 4472 – Fax: +709 772 3628 – E-mail: [walshrp@dfo-mpo.gc.ca](mailto:walshrp@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 – E-mail: [rwalsh@nfld.net](mailto:rwalsh@nfld.net)

Ward, Jerry, Chief Executive Officer, Baffin Fisheries Coalition, P. O. Box 6008, Iqaluit, NU XOA 0H0

Phone: +867 979 3066 – Fax: +867 979 3068 – E-mail: [jward@bfcoalition.ca](mailto:jward@bfcoalition.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 – E-mail: [awareham@icewaterseafoods.com](mailto: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 – E-mail: [norita@minal.cu](mailto:norita@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 – E-mail: [marthat@minal.cu](mailto:marthat@minal.cu)

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

### Head of Delegation (GC)

Feldthaus, Sonja, Head of Unit, Ministry of Fisheries, Hunting and Agriculture, Government of Greenland, Department of Fisheries, Postbox 269, DK-3900 Nuuk, Greenland

Phone: +299 34 53 15 – Fax: +299 324 704 – E-mail: [sofe@nanoq.gl](mailto:sofe@nanoq.gl)

### Head of Delegation (FC)

Wang, Ulla Svarrer, Special Adviser, Ministry of Fisheries, Bókbindaragøta 8, P. O. Box 347, FO-110 Torshavn, Faroe Islands

Phone: +298 35 32 42 – Fax: +298 35 30 35 – E-mail: [ulla.svarrer.wang@fisk.fo](mailto:ulla.svarrer.wang@fisk.fo)

### Advisers

Fuglholt, Rasmus, Head of Section, Government of Greenland, Ministry of Fisheries, Hunting and Agriculture, Postbox 269, DK-3900 Nuuk, Greenland

Phone: +299 34 53 14 – Fax: +299 324 704 – E-mail: [rafu@nanoq.gl](mailto:rafu@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 – E-mail: [meinhardg@fve.fo](mailto:meinhardg@fve.fo)

Jóansdóttir, Durita, Adviser, Ministry of Foreign Affairs, Tinganes, FO-110 Torshavn, Faroe Islands

Phone: +298 55 61 08 – E-mail: [duritalj@mfa.fo](mailto:duritalj@mfa.fo)

Joensen, Jogvan Martin F., Project Development Manager, P/F Thor, FO 420 Hosvik, Faroe Islands

Phone: +298 42 25 03 – Fax: +298 42 23 83 – E-mail: [jm@thor.fo](mailto:jm@thor.fo)

Joensen, Jóhan, Faroe Shipowners Association, Gongin 10, P.O. Box 361, FO-110 Torshavn, Faroe Islands

Phone: +298 311800 – Fax: +298 320380 – E-mail: [shipown@post.olivant.fo](mailto:shipown@post.olivant.fo)

Kruse, Martin, Adviser, FMC-Manager, Faroe Islands Fisheries Inspection, Yviri við Strond 3, P. O. Box 1238, FO-110 Torshavn, Faroe Islands

Phone: +298 291001 – Fax: +298 313981 – E-mail: [martink@fve.fo](mailto:martink@fve.fo)

Sanderson, Kate, (FC Chair and alternate DFG HoD in GC), Director, Department of Oceans and Environment, Ministry of Foreign Affairs, Tinganes, FO-110 Torshavn, Faroe Islands

Phone: +298 30 61 37 (mobile+298 556137) – Fax: +298 30 61 05 – E-mail: [kates@mfa.fo](mailto:kates@mfa.fo)

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

Phone: +299 553347 – Fax: +299 323235 – E-mail: [mads@nanoq.gl](mailto:mads@nanoq.gl)

## EUROPEAN UNION

### Head of Delegation

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 – E-mail: [veronika.veits@ec.europa.eu](mailto:veronika.veits@ec.europa.eu)

### Alternate

Kordecka, Aleksandra, International Relations Officer, International Affairs, Law of the Sea and Regional Fisheries Organizations, European Commission, Directorate-General for Maritime Affairs and Fisheries (DG MARE.B.1), 200 Rue de la Loi/Wetstraat, B-1049 Brussels, Belgium  
Phone: +32 2 297 4070 – Fax: +32 2 295 5700 – E-mail: [aleksandra.kordecka@ec.europa.eu](mailto:aleksandra.kordecka@ec.europa.eu)

### Advisers

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 – E-mail: [nicolas.dross@ec.europa.eu](mailto:nicolas.dross@ec.europa.eu)

Timofte, Andrada, European Commission, Directorate General for Fisheries and Maritime Affairs (DG MARE.B.1), Rue Joseph II, 99, 1000 Brussels, Belgium  
Phone: +32 2 – Fax: +32 2 – E-mail: [andrada.timofte@ec.europa.eu](mailto:andrada.timofte@ec.europa.eu)

Lansley, Jon, EU Fisheries Inspector, European Commission, Directorate General for Fisheries and Maritime Affairs (DG MARE.B.1), Rue Joseph II, 79, 1000 Brussels, Belgium  
Phone: + 32 2 295 8346 – E-mail: [jon.lansley@ec.europa.eu](mailto:jon.lansley@ec.europa.eu)

Pagliarini, 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 – E-mail: [giuliano.pagliarini@ec.europa.eu](mailto:giuliano.pagliarini@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 – E-mail: [aronne.spezzani@ec.europa.eu](mailto:aronne.spezzani@ec.europa.eu)

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 – E-mail: [fred.kingston@ec.europa.eu](mailto:fred.kingston@ec.europa.eu)

Ivanescu, Raluca, Council of the European Union, General Secretariat, DG-BIII-Fisheries, Rue de la Loi 175, B-1048 Brussels, Belgium

Phone: +32 2 – Fax: +32 2 – E-mail: [raluca.ivanescu@consilium.europa.eu](mailto:raluca.ivanescu@consilium.europa.eu)

Babcionis, Genadijus, Desk Manager, Community Fisheries Control Agency (CFCA), Apartado de Correos 771 – E-36200 – Vigo, Spain

Phone: +34 986 12 06 40 – E-mail: [genadijus.babcionis@cfca.europa.eu](mailto:genadijus.babcionis@cfca.europa.eu)

Grosmann, Meit, Leading Inspector, Environmental Inspectorate, Dept. of Fisheries Protection, Kopli 76, 10416 Tallinn, Estonia

Phone: +372 696 2218 – Fax: +372 696 2237 – Email: [meit.grosmann@kki.ee](mailto:meit.grosmann@kki.ee)

Soome, Ain, Director General, Fishery Resources Dept., Ministry of the Environment, Narva mnt 7a, 15172 Tallinn, Estonia

Phone: +372 626 0711 – Fax: +372 626 0710 – E-mail: [ain.soome@envir.ee](mailto:ain.soome@envir.ee)

Sirp, Silver, Head of Observers Working Group, Estonian Marine Institute, University of Tartu, 10A Maealuse St., 12618, Tallinn, Estonia

Phone: +372 529 5396 – E-mail: [silver.sirp@ut.ee](mailto:silver.sirp@ut.ee)

Tamme, Toomas, Chairman of Supervisory Board, Reyktal A/S, Veerenni 39, 10138 Tallinn, Estonia

Phone: +372 611 0 810 – Fax: +372 611 0811 – E-mail: [reyktal@reyktal.ee](mailto:reyktal@reyktal.ee)

Vilhjalmsson, Hjalmar, Reyktal A/S, Sidumuli 34, 112 Reykjavik, Iceland

Phone: +354 896 9713 – E-mail: [hjalmar@reyktal.is](mailto:hjalmar@reyktal.is)

Yngvason, Óttar, Director, Reyktal AS, Sidumuli 34, 112 Reykjavik, Iceland

Phone: +354 892 1529 – Fax: +354 588 7610 – E-mail: [ottar@iec.is](mailto:ottar@iec.is)

Fairise, Nicolas, Chargé de mission, Affaires internationales, Ministère de l'alimentation, de l'agriculture et de la pêche, 3, place de Fontenoy 75700 Paris 07 SP, France  
 Phone: +33 1 49 55 53 55 – Fax: +33 1 49 55 82 00 – E-mail: [nicolas.fairise@agriculture.gouv.fr](mailto:nicolas.fairise@agriculture.gouv.fr)

Mahé, Jean-Claude, IFREMER, Station de Lorient, 8, rue Francois Toullec, 56100 Lorient, France  
 Phone: +33 2 9787 3818 – Fax: +33 2 9787 3801 – E-mail: [jcmahe@ifremer.fr](mailto:jcmahe@ifremer.fr)

Renwranzt, Leonie, Federal Ministry of Food, Agriculture and Consumer Protection, Div. 614-Sea Fisheries Management and Control, IWC, Rochusstrabe 1, D-53123 Bonn, Germany  
 Phone: +49 228 99 529 4124 – Fax: +49 228 99 529 4084 – E-mail: [leonie.renwranzt@bmelv.bund.de](mailto:leonie.renwranzt@bmelv.bund.de)

Gretarsson, Haraldur, Geschäftsführer, Deutsche Fischfang-Union GmbH & Co. KG, Bei der Alten Liebe 5, 27472 Cuxhaven, Germany  
 Phone: +47 21 7079 20 – Fax: +47 21 7079 29 – E-mail: [hg@dffu.de](mailto:hg@dffu.de)

Parlevliet, Diederik, (information please)

Riekstins, Normunds, Director of Fisheries Department, Ministry of Agriculture, 2, Republikas laukums, LV-1010 Riga, Latvia  
 Phone: +371 6732 3877 – Fax: +371 6733 4892 – E-mail: [normunds.riekstins@zm.gov.lv](mailto:normunds.riekstins@zm.gov.lv)

Kalinovs, Dmitrijs, Brivibas Gave 215A-46, Riga, LV-1039, Latvia  
 Phone: +371 292 27321 – Fax: +371 6754 2471 – E-mail: [skaga@latnet.lv](mailto:skaga@latnet.lv)

Davidsson, Gudjon, Blue Water Ltd., Frikirkjuvegur 3, 101 Reykjavik, Iceland  
 Phone: +354 896 0494 – Fax: +354 552 1301 – E-mail: [gudjon@simnet.is](mailto:gudjon@simnet.is)

Nienius, Darius, Director, Fisheries Department of the Ministry of Agriculture, Gedimino av. 19 (J. Lelevelio str. 6), LT-01031 Vilnius, Lithuania  
 Phone: +370 52398410 – Fax: +370 52391176 – E-mail: [dariusn@zum.lt](mailto:dariusn@zum.lt)

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 – E-mail: [leszek.dybiec@minrol.gov.pl](mailto:leszek.dybiec@minrol.gov.pl)

Lewkowska, Barbara, Senior Expert, Fisheries Department, Ministry of Agriculture and Rural Development, 30 Wspolna Street, 00-930 Warsaw, Poland  
 Phone: +48 22 623 1599 – Fax: +48 22 623 2204 – E-mail: [b.lewkowska@minrol.gov.pl](mailto:b.lewkowska@minrol.gov.pl)

Szemioth, Bogslaw, North Atlantic Producers Organization, ul. Parkowa 13/17/123, 00-759 Warsaw, Poland  
 Phone: +48 22 840 8920 – Fax: +48 22 840 8922 – E-mail: [szemioth@paop.org.pl](mailto:szemioth@paop.org.pl)

Apolinario, Jose, Director-General, Direccao-Geral das Pescas e Aquicultura, Avenida da Brasilia, 1449-030 Lisbon, Portugal  
 Phone: +351 21 303 5886 – Fax: +351 21 303 5965 – E-mail: [japolinario@dgpa.min-agricultura.pt](mailto:japolinario@dgpa.min-agricultura.pt)

Batista, Emilia, Directora de Servicos, Departamento dos Recursos, Direccao Geral das Pescas e Aquicultura, Avenida da Brasilia, 1449-030 Lisbon, Portugal  
 Phone: +351 742 3629 – Fax: +351 21 303 5922 – E-mail: [ebatista@dgpa.min-agriculture.pt](mailto:ebatista@dgpa.min-agriculture.pt)

Alpoim, Ricardo, Instituto Nacional dos Recuros Biológicos, I. P. INRB/IPIMAR, Av. de Brasilia, 1449-006 Lisbon, Portugal  
 Phone: +351 21 302 7000 – Fax: +351 21 301 5948 – E-mail: [ralpoim@ipimar.pt](mailto:ralpoim@ipimar.pt)

Franca, Pedro, Administrador, Grupo Miradouro, Av Pedro Alvares Cabral, Apart 9, 3834-908 Gafanha da Nazare, Ilhavo, Portugal  
 Phone: +934 050 170 – Fax +934 364 450 – E-mail: [pedrofranca@frip.pt](mailto:pedrofranca@frip.pt)

Schiappa Cabral, Antonio, Secretario-Geral, A.D.A.P.I., Rua General Gomes d'Araujo, Edificio Vasco da Gama, 1399-005 Lisbon, Portugal  
 Phone: +351 21 397 2094 – Fax: +351 21 397 2090 – E-mail: [adapi.pescas@mail.telepac.pt](mailto:adapi.pescas@mail.telepac.pt)

Taveira da Mota, Jose, A.D.A.P.I., Rua General Gomes d'Araujo, Edificio Vasco da Gama, 1399-005, Lisbon, Portugal  
 Phone: +351 21 397 2094 – Fax: +351 21 397 2090 – E-mail: [adapi.pescas@mail.telepac.pt](mailto:adapi.pescas@mail.telepac.pt)

Machado Paiao, 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 – E-mail: [adapi.pescas@mail.telepac.pt](mailto:adapi.pescas@mail.telepac.pt)

Vaz Pais, Tiago, Empresa De Pesca, S. Jacinto, SA, Av. Fernio de Magalhara, 114, Coimbra, Portugal  
 (Info please) Phone: +351 – Fax: +351 – E-mail:

Augusto Vieira, César, Armador, Apartado 4, Gafanha da Nazare, 3834-908 Ilhavo, Portugal  
 Phone: +351 234 364 355 – Fax: +351 234 364 350 – E-mail: [gsu@sapo.pt](mailto:gsu@sapo.pt)

Polanco Mata, Alejandro, Director General de Recursos Pesqueros y Acuicultura, Secretaria General del Mar, C/Velázquez, 144, 28006 Madrid, Spain  
 Phone: +34 91 347 60 30 / 31 – Fax: +34 91 347 60 32 – E-mail: [apolanco@marm.es](mailto:apolanco@marm.es)

Alonso Frayle, Mercedes, Subdirectora General de Acuerdos y Organizaciones Regionales de Pesca, Direccion General de Recursos Pesqueros y Acuicultura, Velazquez, 144, 28006 Madrid, Spain  
 Phone: +34 91 347 6040 – Fax: +34 91 347 6042 – E-mail: [malonsof@marm.es](mailto:malonsof@marm.es)

Mancebo Robledo, C. Margarita, Jefa de Area de Relaciones Pesqueras Internacionales, S. G. de Acuerdos y Organizaciones Regionales de Pesca, Direccion General de Recursos Pesqueros y Acuicultura, Secretaria General del Mar, C/Velázquez, 144, 28006 Madrid, Spain  
 Phone: +34 91 347 61 29 – Fax: +34 91 347 60 42 – E-mail: [cmancebo@mapya.es](mailto:cmancebo@mapya.es)

Chamizo Catalan, Carlos, Head of Fisheries Inspection Division, Secretariat General de Pesca Maritima, Ministerio de Medio Ambiente, y Medio Rural y Marino, Velázquez, 144, 28006 Madrid, Spain  
 Phone: +34 91 347 8313 – Fax: +34 91 347 1512 – E-mail: [cchamizo@mapya.es](mailto:cchamizo@mapya.es)

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 – E-mail: [edecarde@mapya.es](mailto:edecarde@mapya.es)

Gonzalez-Costas, Fernando, Instituto Español de Oceanografía, Aptdo 1552, E-36280 Vigo (Pontevedra), Spain  
 Phone: +34 9 8649 2239 – E-mail: [fernando.gonzalez@vi.ieo.es](mailto:fernando.gonzalez@vi.ieo.es)

Gonzalez-Troncoso, Diana, Instituto Español de Oceanografía, Aptdo 1552, E-36280 Vigo (Pontevedra), Spain  
 Phone: +34 9 86 49 2111 – E-mail: [diana.gonzalez@vi.ieo.es](mailto:diana.gonzalez@vi.ieo.es)

Vázquez, Antonio, Instituto de Investigaciones Marinas, Eduardo Cabello 6, 36208 Vigo, Spain  
 Phone: +34 9 86 23 1930 – Fax: +34 9 86 29 2762 – E-mail: [avazquez@iim.csic.es](mailto:avazquez@iim.csic.es)

Sacau-Cuadrado, Mar, Instituto Español de Oceanografía (IEO), E-36200 Vigo (Pontevedra)  
 Phone: +34 98 649 2111 – Fax: +34 98 649 86 26 – E-mail: [mar.sacau@vi.ieo.es](mailto:mar.sacau@vi.ieo.es)

Murillo, Javier, Instituto Español de Oceanografía (IEO), E-36200 Vigo (Pontevedra)  
 Phone: +34 98 649 2111 – Fax: +34 98 649 86 26 – E-mail: [javier.murillo@vi.ieo.es](mailto:javier.murillo@vi.ieo.es)

Morales Vila, Jose, Subdirector General de Ordenacion de los Recursos Marinos, Xunta de Galicia, Conselleria do Mar, Rua do Vilino, 63-65, 15703 Santiago de Compostela, Spain  
 Phone: +34 986 260 708 – Fax: +34 981 545 025 – E-mail: [jose.molares.vila@xunta.es](mailto:jose.molares.vila@xunta.es)

Fuertes Gamundi, Jose, Director Gerente, Cooperativa de Armadores de Pesca del Puerto de Vigo, S. Coop. Ltda., ANAMER-ANAVAR-AGARBA, Puerto Pesquero, Apartado 1.078, 36200 Vigo, Spain  
 Phone: +34 986 43 38 44 – Fax: +34 986 43 92 18 – E-mail: [direccion@arvi.org](mailto:direccion@arvi.org)

Liria Franch, Juan Manuel, Vicepresidente, Confederación Española de Pesca, C/Velázquez, 41, 4º C, 28001 Madrid, Spain  
 Phone: +34 91 432 34 89 – Fax: + 34 91 435 52 01 – E-mail: [jmliria@cepesca.com](mailto:jmliria@cepesca.com)

Lopez, Ivan, Pesquera Ancora S.L., C/Peru, 1-2B, 36202, Vigo, Spain  
 Phone: +34 659 169801 – E-mail: [ivan.lopez@pesqueraancora.com](mailto:ivan.lopez@pesqueraancora.com)

Duran Gonzalez, Jose L., Secretario Gral. ARBAC, Tomas A. Alonso, 285 – 1, Apartado 2.037, 36208 Vigo, Spain  
 Phone: +34 986 202 404 – Fax: +34 986 203 921 – E-mail: [ARBAC@mundo-r.com](mailto:ARBAC@mundo-r.com)

Molares Montenegro, Jose Carlos, ARBAC, Tomas A. Alonso, 285 – 1, Apartado 2.037, 36208 Vigo, Spain  
 Phone: +34 986 202 404 – Fax: +34 986 203 921 – E-mail: [ARBAC@mundo-r.com](mailto:ARBAC@mundo-r.com)

Alvarez, Alejandro, Av. Camelias 52, 4ªA, 3621 Vigo, Spain  
 Phone: +34 636481100 – Fax: +34 986 209505 – E-mail: [albri@albri.com](mailto:albri@albri.com)

Carroll, Andy, Sea Fisheries Conservation Div., Dept. For Environment, Food and Rural Affairs, Area D, 2<sup>nd</sup> Floor, Nobel House, London SW1P 3JR  
 Phone: +44 (0)20 7238 4656 – Fax: +44 (0)20 7238 4699 – E-mail: [andy.carroll@defra.gsi.gov.uk](mailto:andy.carroll@defra.gsi.gov.uk)

#### **FRANCE (in respect of St. 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 – E-mail: [president@cg975.fr](mailto:president@cg975.fr)

**Advisers**

Bigorgne, Matthias, Ministère de l'alimentation, de l'agriculture et de la pêche, 3, place de Fontenoy 75700 Paris 07 SP

Phone: +33 1 49 55 53 55 – Fax: +33 1 49 55 82 00 – E-mail: [matthias.bigorgne@agriculture.gouv.fr](mailto:matthias.bigorgne@agriculture.gouv.fr)

Detcheverry, Bruno, Directeur General, S.N.P.M., 11, rue Georges Daguerre, BP 4262, 97500 St. Pierre et Miquelon

Phone: +508 41 08 80 – Fax: +508 41 0889 – E-mail: [bruno.detcheverry@edcmiquelon.com](mailto:bruno.detcheverry@edcmiquelon.com)

Goraguer, Herle, IFREMER, Station de St. Pierre, BP 4240, 97500 St. Pierre et Miquelon

E-mail: [hgorague@ifremer.fr](mailto:hgorague@ifremer.fr)

Laurent-Monpetit, Christiane, Department of Agriculture and Fisheries, Ministère de l'Intérieur, de l'Outre-Mer et Des Collectivités Territoriales, 27, rue Oudinot, 75358 Paris 07SP

Phone: +53 69 24 66 – Fax: +53 69 20 65 – E-mail: [christiane.laurent-monpetit@outre-mer.gouv.fr](mailto:christiane.laurent-monpetit@outre-mer.gouv.fr)

Museux, Philippe, Assistant of Director of Territories, Food and Sea, Head of Maritime Unit of Saint-Pierre et Miquelon, Pôle Maritime, 1, rue Gloanec, BP 4206, 97500 Saint-Pierre et Miquelon

Phone: +508 41 15 36 - Fax: +508 41 48 34 - E-mail: [philippe.museux@developpement-durable.gouv.fr](mailto:philippe.museux@developpement-durable.gouv.fr)

**ICELAND****Head of Delegation**

Freyr Helgason, Kristján, Special Advisor, Department of Resource Management, Ministry of Fisheries and Agriculture, Skulagata 4, 150 Reykjavik

Phone: +354 545 8300 – Fax: +354 552 1160 – E-mail: [kristjan.freyr.helgason@slr.stjr.is](mailto:kristjan.freyr.helgason@slr.stjr.is)

**Advisers**

Benediktsdóttir, Brynhildur, Special Adviser, Department of International Affairs, Ministry of Fisheries and Agriculture, Skulagata 4, 150 Reykjavik

Phone: +354 545 8300 – Fax: +354 552 1160 – E-mail: [brynhildur.benediktsdottir@slr.stjr.is](mailto:brynhildur.benediktsdottir@slr.stjr.is)

Thormar, Anna, Quota Allocations Department, Directorate of Fisheries, Dalshrauni 1, 220 Hafnarfjörður

Phone: +354 569 7900 – Fax: +354 569 7991 – E-mail: [annatho@fiskistofa.is](mailto:annatho@fiskistofa.is)

Geirsson, Gylfi, CDR Senior Grade, Icelandic Coast Guard, Skogarhlid 14, 105 Reykjavik

Phone: +354 545 2000/545 2071 – Fax: +354 545 2040 – E-mail: [gylfi@lhg.is](mailto:gylfi@lhg.is)

Gíslason, Hjörtur, Federation of Icelandic Fishing Vessels Owners, Ögurvík Fishing Export Co. Ltd., Týsgata 1 – 101 Reykjavik

Phone: +354 552 5466 – Fax: +354 552 8863 – E-mail : [hjortur@ogunvik.is](mailto:hjortur@ogunvik.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 3502 8460 – Fax: +81 3 3591 0571 – E-mail: [keniino@hotmail.com](mailto:keniino@hotmail.com)

**Advisers**

Hiroshi Matsuura, 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 – E-mail: [hiroshi\\_matsuura2@nm.maff.go.jp](mailto:hiroshi_matsuura2@nm.maff.go.jp)

Motooka, Tsunehiko, 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 – E-mail: [tsunehiko\\_motooka@nm.maff.go.jp](mailto:tsunehiko_motooka@nm.maff.go.jp)

Onodera, Akiko, 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](mailto:akiko.onodera@mofa.go.jp)

Takagi, Noriaki, Director, Executive Secretary, Japan Overseas Fishing Association, NK-Bldg., 6F, 3-6 Kanda Ogawa-cho, Chiyoda-ku, Tokyo 101-0052

Phone: +81 3 3291 8508 – Fax: +81 3 3233 3267 – E-mail: [noritakagi@jdsta.or.jp](mailto:noritakagi@jdsta.or.jp)

## REPUBLIC OF KOREA

### Head of Delegation

Bahng, Jong Hwa, Deputy Director, International Fisheries Organization Division, Ministry for Food, Agriculture, Forestry and Fisheries (MIFAFF), 88, Gwanmun-ro, Gwacheon-si, Gyeonggi-do, 427-719  
Phone: +82 2 500 2416 – Fax: +82 2 503 9174 – E-mail: [bjh125@korea.kr](mailto:bjh125@korea.kr)

### Alternate:

Park, Hyun Jin, Ex-Head of Dok-Do Research Center, 408-403 Simteuri Apt, Sinjeong 3-dong YangCheon-gu, Seoul  
Phone: +82 10 9291 6744 – E-mail: [hjpark222@hanmail.net](mailto:hjpark222@hanmail.net)

### Adviser

Cho, Yang Sik, Manager, International Affairs Dept. 2, Korea Overseas Fisheries Association (KOFA), 6fl, Samho Center Bldg. A, 275-1, Yangja –Dong, SeoCho-Ku, Seoul  
Phone: +82 2 589 1617 – Fax: +82 2 589 1630 – E-mail: [mild@kosfa.org](mailto:mild@kosfa.org)

## NORWAY

### Head of Delegation

Holst, Sigrun M., Deputy Director General, Ministry of Fisheries and Coastal Affairs, Dept. of Marine Resources and Coastal Management, P. O. Box 8118 Dep. NO-0032 Oslo  
Phone: +47 22 24 65 76 – Fax: +47 22 24 95 85 – E-mail: [sigrun.holst@fkd.dep.no](mailto:sigrun.holst@fkd.dep.no)

### Advisers

Breigutu, Guri Mæle, Adviser, 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 – E-mail: [guri-male.breigutu@fkd.dep.no](mailto:guri-male.breigutu@fkd.dep.no)

Hvingel, Carsten, Institute of Marine Research, P. O. Box 6404, N-9294 Tromsø

Phone: +47 77 60 9750 – Fax: +47 77 60 9701 – E-mail: [carstenh@imr.no](mailto:carstenh@imr.no)

Johnsen, Stein-Aage, Senior Legal Adviser, Resource Management Dept., Directorate of Fisheries, P. O. Box 2009 Nordnes, NO-5817 Bergen

Phone: +47 55 23 80 00 / 8124 – Fax: +47 55 23 80 90 – E-mail: [stein-age.johnsen@fiskeridir.no](mailto:stein-age.johnsen@fiskeridir.no)

Østgård, Hanne, Directorate of Fisheries, P. O. Box 185, Sentrum, 5804 Bergen

Phone: +47 46 80 52 05 – Fax: +47 55 23 80 90 – E-mail: [hanne.ostgard@fiskeridir.no](mailto:hanne.ostgard@fiskeridir.no)

Palmason, Snorri Runar, Adviser, Fisheries Regulations Section, Directorate of Fisheries, P. O. Box 2009 Nordnes, NO-5817 Bergen

Phone: +47 55 23 80 00 / 8394 – Fax: +47 55 23 80 90 – E-mail: [snorri.palmason@fiskeridir.no](mailto:snorri.palmason@fiskeridir.no)

Skagestad, Odd Gunnar, Deputy Director General, Section for the High North Project, Polar Affairs, Energy and Resources, P. O. Box 8114 Dep. N0032 Oslo

Phone: +47 23 95 06 56 – Fax: +47 23 95 06 990 – E-mail: [ogs@mfa.no](mailto:ogs@mfa.no)

Vaskinn, Tor Are, Head of Department, Fiskebatredernes Forbund, Strandveien 106, 9006 Tromsø

Phone: +47 77 60 06 60 – Fax: +47 77 60 06 61 – Email: [fiskered.tr@online-no](mailto:fiskered.tr@online-no)

## RUSSIAN FEDERATION

### Head of Delegation

Balashov, Valentine V., Representative of the Russian Federation to NAFO, Head of Barentsevo-Belomorskoe Territorial Directorate of the Federal Agency for Fisheries, Rozhdestvensky blvd. 12, Moscow 107996

Phone: +7 495 621 3512 – Fax: +7 495 628 7644 – E-mail: [murmansk@bbtu.ru](mailto:murmansk@bbtu.ru)

### Advisers

Tairov, Temur T., Representative of the Federal Agency for Fisheries to Canada, 47 Oceanview Drive, Bedford, NS, Canada B4A 4C4

Phone: +902 832 9225 – E-mail: [rusfish@ns.sympatico.ca](mailto:rusfish@ns.sympatico.ca)

Sedykh, Olga M., Deputy Head of International Law Division, International Cooperation Department, Federal Agency for Fisheries, Rozhdestvensky blvd. 12, Moscow 107996

Phone: +7 495 621 3180 – Fax: +7 495 621 9594 – E-mail: [so@fishcom.ru](mailto:so@fishcom.ru)

Gorchinsky, Konstantin V., Head of Sea Fisheries Division, Barentsevo-Belomorskoe Territorial Directorate of the Federal Agency for Fisheries, str. Komintern 7, 183038 Murmansk

Phone: +7 815 2 450 268 – Fax: +7 815 2 451 945 – E-mail: [k\\_gor@rambler.ru](mailto:k_gor@rambler.ru)

Babayay, Vladimir K., Representative of the Russian Federation to the NAFO Scientific Council, Head of Laboratory, Russian Federal Research Institute of Fisheries and Oceanography (VNIRO), 17, V. Krasnoselskaya, Moscow 107140

Phone/Fax: +8 499 264 8974 – Fax: +8 499 264 8974 – E-mail: [ybabayan@vniro.ru](mailto:ybabayan@vniro.ru)

Rikhter, Vladimir A., Senior Scientist, Atlantic Scientific Research Institute of Marine Fisheries and Oceanography (AtlantNIRO), 5 Dmitry Donskoy Street, Kaliningrad 23600

Skryabin, Ilya A., Junior Scientist, North Atlantic Laboratory, Polar Research Institute of Marine Fisheries and Oceanography (PINRO), 6 Knipovich St., Murmansk 183763

Phone: +7 8152 45 0568 – E-mail: [skryabin@pinro.ru](mailto:skryabin@pinro.ru)

Fomin, Konstantin Yu., 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](mailto:fomin@pinro.ru)

Tretiakov, Ivan S., 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](mailto:tis@pinro.ru)

Sanko, Maxim V., Head of Fisheries Monitoring Centre, Rozhdestvensky blvd. 12, Moscow 107996

Phone: +7 495 504 16 03 – Fax: +7 495 628 73 19 – E-mail: [info@cfmc.ru](mailto:info@cfmc.ru)

Agalakov, Vadim E., Chief State Inspector, Barentsevo-Belomorskoe Territorial Directorate of the Federal Agency for Fisheries, str. Komintern 7, 183038 Murmansk

Phone: +7 815 2 798 116 – Fax: +7 815 2 451 945 – E-mail: [murmansk@bbtu.ru](mailto:murmansk@bbtu.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 – E-mail: [volkov@mrcm.ru](mailto:volkov@mrcm.ru)

## UKRAINE

### Head of Delegation

Viktor Dronyk, Chair, State Agency of Fisheries of Ukraine, 45A Artema str., Kyiv 04053

Phone/Fax: +38 044 486 6243 – Fax: +38 044 482 0148 - E-mail: [D-V-S-69@yandex.ru](mailto:D-V-S-69@yandex.ru)

### Advisers

Chuklin, Andriy, Deputy Director, Department of Aquatic Living Resources Protection, Reproduction, Exploitation, Fishing Regulation and Navigation Safety, State Agency of Fisheries of Ukraine, 45A Artema str., Kyiv 04053

Phone: +380 44 484 6332 – Fax: +38 044 484 6325 – E-mail: [chuklin\\_a@ukr.net](mailto:chuklin_a@ukr.net)

Shatalova, Tetyana, Head of Department of Legal Activity, International Policy and Informational-Technic Supply, State Agency of Fisheries of Ukraine, 45A Artema str., Kyiv 04053

Phone: +380 44 484 68 88 – Fax: +380 44 482 38 24 – E-mail: [shatalovatetyana@ukr.net](mailto:shatalovatetyana@ukr.net)

## 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 – E-mail: [dean.swanson@noaa.gov](mailto:dean.swanson@noaa.gov)

## Representatives

Swanson, Dean (see above)

Preble, Dave, US Commissioner, 64 Courtland Drive, Narragansett, RI 02882

Phone: +401 789 7596 – E-mail: [fishearlybird@cox.net](mailto:fishearlybird@cox.net)

Raymond, Maggie, US Commissioner, Associated Fisheries of Maine, P. O. Box 287, So. Berwick, ME 03908-0287

Phone: +207 384 4854 – E-mail: [maggieraymond@comcast.net](mailto:maggieraymond@comcast.net)

## Advisers

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 – E-mail: [douglas.christel@noaa.gov](mailto:douglas.christel@noaa.gov)

Fordham, Sonja, President, Shark Advocates International, c/o The Ocean Foundation, 1990 M Street, NW, Suite 250, Washington, DC 20036

Phone: +1 202 436 1468 – E-mail: [sonja@sharkadvocates.org](mailto:sonja@sharkadvocates.org)

Warner-Kramer, Deirdre, Senior Foreign Affairs Officer, Office of Marine Conservation, United States Department of State (Rm 2758), 2201 C Street NW, Washington, DC 20520-7878

Phone: +1 202 647 2883 – Fax: +1 202 736 7350 – E-mail: [warner-kramerm@state.gov](mailto:warner-kramerm@state.gov)

McHale, Allison, 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 9103 – Fax: +978 281 9135 – E-mail: [allison.mchale@noaa.gov](mailto:allison.mchale@noaa.gov)

Martin, Jr., Gene S., Attorney, Office of the General Counsel Northwest, National Oceanic and Atmospheric Administration, Northeast, 55 Great Republic Drive, Gloucester, MA 01930

Phone: + 978 281 9242 – Fax: + 978 281 9389 – E-mail: [gene.s.martin@noaa.gov](mailto: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 – E-mail: [pat.moran@noaa.gov](mailto:pat.moran@noaa.gov)

Quinby, William, Director, Mayflower Shipping Ltd., 5 Yeamans Road, Charleston, SC 29407

Phone: +857 222 6664 – E-mail: [mayflower@mindspring.com](mailto:mayflower@mindspring.com)

Roberts, Glynnis, Senior Associate, Protecting the Deep Sea Campaign, Pew Environment Group, 901 E Street, NW, 10<sup>th</sup> Floor, Washington, DC 20004

Phone: +202 540 6597 – Fax: +202 552 2299 – E-mail: [groberts@pewtrusts.org](mailto:groberts@pewtrusts.org)

Sosebee, Katherine, National Marine Fisheries Service, NEFSC, 166 Water Street, Woods Hole, MA 02543

Phone: +508 495 2372 – Fax: +508 495 2393 – E-mail: [katherine.sesebee@noaa.gov](mailto:katherine.sesebee@noaa.gov)

Szymanski, Luke, Marine Projects Manager, A.I.S., Inc., 89 North Water Street, New Bedford, MA 02746

Phone: +774 265 0596 – Fax: +508 990 9055 – E-mail: [lukes@aisobservers.com](mailto:lukes@aisobservers.com)

## OBSERVERS

### FAO

Camilleri, Matthew, 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

Phone: +39 06 57056435 – E-mail: [matthew.camilleri@fao.org](mailto:matthew.camilleri@fao.org)

### Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR)

Kordecka, Aleksandra, International Relations Officer, International Affairs, Law of the Sea and Regional Fisheries Organizations, European Commission, Directorate-General for Maritime Affairs and Fisheries (DG MARE.B.1), 200 Rue de la Loi/Wetstraat, B-1049 Brussels, Belgium

Phone: +32 2 297 4070 – Fax: +32 2 295 5700 – E-mail: [aleksandra.kordecka@ec.europa.eu](mailto:aleksandra.kordecka@ec.europa.eu)

### North Atlantic Marine Mammal Commission (NAMMCO)

Freyr Helgason, Kristján, Special Advisor, Department of Resource Management, Ministry of Fisheries and Agriculture, Skulagata 4, 150 Reykjavik

Phone: +354 545 8300 – Fax: +354 552 1160 – E-mail: [kristjan.freyr.helgason@slr.stjr.is](mailto:kristjan.freyr.helgason@slr.stjr.is)

### North East Atlantic Fisheries Commission (NEAFC)

Feldthaus, Sonja, Head of Unit, Ministry of Fisheries, Hunting and Agriculture, Government of Greenland, Department of Fisheries, Postbox 269, DK-3900 Nuuk, Greenland

Phone: +299 34 53 15 – Fax: +299 324 704 – E-mail: [sofe@nanoq.gl](mailto:sofe@nanoq.gl)

### Ecology Action Centre (EAC)

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

Phone: +902 442 0199 – Fax: +902 405 3716 – E-mail: [marine@ecologyaction.ca](mailto:marine@ecologyaction.ca)

Hilary Goodwin, Ecology Action Centre, 2705 Fern Lane, Halifax, Nova Scotia, Canada B3K 4L3

E-mail: [hilary.goodwin@dal.ca](mailto:hilary.goodwin@dal.ca)

### Pew Environment Group

Gianni, Matthew, Independent Advisor, Fisheries/Oceans Marine Biodiversity, Cliotraat 29-2, 1077 KB Amsterdam, Netherlands

Phone: +31 646168899 – E-mail: [matthewgianni@netscape.net](mailto:matthewgianni@netscape.net)

Kavanagh, Andrea, Pew Environment Group, 901 E Street NW, Washington, DC 2004

Phone: +1 202 887 8822 – E-mail: [akavanagh@pewtrusts.org](mailto:akavanagh@pewtrusts.org)

### Sierra Club Canada (SCC)

Winsor, Fred, Chair, Atlantic Canada Chapter, Sierra Club Canada, Suite 533, 1657 Barrington St., Halifax, N.S. B3J 2A1

E-mail: [winsorf@nl.rogers.com](mailto:winsorf@nl.rogers.com)

### WWF

Rangeley, Robert, Vice President, Atlantic, WWF-Canada, Atlantic Region, 5251 Duke St., Suite 1202, Halifax, NS, Canada B3J 1P3

Phone: +902 482 1105 ext. 35 – Fax: +902 482 1107 – E-mail: [rrangeley@wwfcanada.org](mailto: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 – E-mail: [ddaniela@wwfcanada.org](mailto:ddaniela@wwfcanada.org)

Ryan, Janice, Fisheries Advisor, WWF-Canada, Atlantic Region, Newfoundland and Labrador Office, Suite 305, 140 Water St., St. John's, NL A1C 6H6

Phone: +709 722 9453 ext. 2224 – E-mail: [jryan@wwfcanada.org](mailto:jryan@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 – E-mail: [bsaier@wwfcanada.org](mailto:bsaier@wwfcanada.org)

McCarthy, Stacey, Communications Manager, WWF-Canada, Atlantic Region, 5251 Duke St., Suite 1202, Halifax, NS, Canada B3J 1P3

Phone: +902 482 1105 ext. 41 – Fax: +902 482 1107 – E-mail: [smccarthy@wwfcanada.org](mailto:smccarthy@wwfcanada.org)

Ratcliffe, Sarah, WWF-Canada, Atlantic Region, 5251 Duke St., Suite 1202, Halifax, N. S. B3J 1P3

Phone: +902 482 1105 – Fax: + 902 482 1107 – E-mail: [sratcliffe@wwfcanada.ca](mailto:sratcliffe@wwfcanada.ca)

### NAFO Secretariat

Vladimir Shibanov, Executive Secretary

Stan Goodick, Senior Finance and Staff Administrator

Ricardo Federizon, Fisheries Commission Coordinator

Neil Campbell, Scientific Council Coordinator

Bev McLoon, Senior Personal Assistant to the Executive Secretary

Barbara Marshall, Information Officer

Cindy Kerr, Fisheries Information Manager

[vshibanov@nafo.int](mailto:vshibanov@nafo.int)

[sgoodick@nafo.int](mailto:sgoodick@nafo.int)

[rfederizon@nafo.int](mailto:rfederizon@nafo.int)

[ncampbell@nafo.int](mailto:ncampbell@nafo.int)

[bmcloon@nafo.int](mailto:bmcloon@nafo.int)

[bmarshall@nafo.int](mailto:bmarshall@nafo.int)

[ckerr@nafo.int](mailto:ckerr@nafo.int)

George Campanis, IT Manager  
Alexis Pacey, Publications Manager  
Lesley Torbacioglu, Office Manager  
Anais Melard, NAFO Intern

[gcampanis@nafo.int](mailto:gcampanis@nafo.int)  
[apacey@nafo.int](mailto:apacey@nafo.int)  
[ltorbacioglu@nafo.int](mailto:ltorbacioglu@nafo.int)  
[amelard@nafo.int](mailto:amelard@nafo.int)

*Additional support:*  
Mike LeFort – IT

**Annex 2. Record of Decisions and Actions by the Fisheries Commission  
(Annual Meeting 2011)**

<b>Substantive Issues (Agenda item):</b>	<b>Decision/Action:</b>
6. Scientific Advice	<b>Noted</b> Scientific Council Chair's presentation of the scientific advice and the SC Meeting Reports that contained the scientific advice (SCS Doc. 11/6 and 11/7).
7. Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 2013 and on other matters	<b>Adopted</b> the FC Request to the SC for scientific advice (FC WP 11/32 Revised).
8.1 Reports and Recommendations of the FC Working Group of Fishery Managers and Scientists on Conservation Plans and Rebuilding Strategies (WGFMS-CPRS)	<p><b>Noted</b> the WG Meeting Reports of April and June 2011 (FC Doc 11/2 and 11/4).</p> <p><b>Adopted</b> the interim 3LNO American plaice CPRS (FCWG-CPRS WP 11/3, Rev 5) (see item 10.4).</p> <p><b>Adopted</b> the revised interim 3NO Cod CPRS (FCWG-CPRS WP 11/4, Rev 4) (see item 10.1).</p> <p><b>Updated</b> the ToR of this WG in order for this WG to continue its work until at least 2014 (FC WP 11/31 Revised).</p>
8.2 Report and Recommendations of the FC Working Group on Greenland Halibut Management Strategy Evaluation (WGMSE)	<p><b>Noted</b> the WG Meeting Report of September 2011 (FC Doc 11/8).</p> <p><b>Adopted</b> the <i>Exceptional Circumstances Protocol</i> (FC WP 11/7).</p>
9 Management and Technical Measures for Fish Stocks in the Regulatory Area, 2012	(see 2012 Quota Table)
9.1 Cod in Division 3M	<b>Set</b> the TAC at 9 280 t.
9.2 Redfish in Division 3M	<b>Set</b> the TAC at 6 500 t, for 2012 and 2013.
9.3 American plaice in Division 3M	<b>Agreed on</b> no directed fisheries, applicable in 2012, 2013, and 2014.
9.4 Shrimp in Division 3M	<b>Agreed</b> that fishing moratorium shall continue in 2012.
10. Management of Technical Measures for Fish Stocks Straddling National Fishing Limits, 2012	(see 2012 Quota Table)
10.1 Cod in Div. 3NO	<p><b>Adopted</b> the revised interim 3NO Cod CPRS (FCWG-CPRS WP 11/4, Rev 4) (see item 8.1).</p> <p><b>Revised</b> Article 12.1.b) of the NCEM concerning bycatch (FC WP 11/26 Revised)</p>
10.2 Redfish in Divisions 3O	<b>Set</b> the TAC at 20 000 t, same level as in 2011.
10.3 Pelagic <i>Sebastes mentella</i> (oceanic redfish) in the NAFO Convention Area	<b>Agreed</b> that fishing moratorium shall continue in 2012.

10.4 American plaice in Divisions 3LNO	<p><b>Agreed on</b> no directed fisheries, applicable in 2012, 2013.</p> <p><b>Adopted</b> the interim 3LNO American plaice CPRS (FCWG-CPRS WP 11/3, Rev 5) (see item 8.1).</p> <p><b>Revised</b> Footnote 21 on the Quota Table concerning a 15% bycatch requirement involving this stock and yellowtail fishery in Divisions 3LNO (FC WP 11/28) (see item 10.5).</p>
10.5 Yellowtail flounder in Divisions 3LNO	<p><b>Set</b> the TAC at 17 000 t, same level as in 2011.</p> <p><b>Revised</b> Footnote 21 on the Quota Table concerning a 15% bycatch requirement involving this stock and American plaice fishery in Divisions 3LNO (FC WP 11/28) (see item 10.4).</p>
10.6 Witch flounder in Divisions 3NO	<b>Agreed on</b> no directed fisheries.
10.7 White hake in Divisions 3NO	<b>Set</b> the TAC at 5 000 t (FC WP 11/27).
10.8 Capelin in Divisions 3NO	<b>Agreed</b> that fishing moratorium shall continue until at least December 31 <sup>st</sup> , 2013.
10.9 Thorny skate in Divisions 3LNO	<p><b>Set</b> the TAC at 8 500 t.</p> <p><b>Inserted</b> footnote 28: The TAC will be reviewed in 2012.</p>
10.10 Greenland halibut in Subarea 2 and Divisions 3KLMNO	<p><b>Set</b> the TAC at 16 326 t (12 098 t in Divisions 3LMNO).</p> <p><b>Revised</b> Article 7 of the NCEM and <b>inserted</b> Annex XXVI – Greenland halibut Management Strategy (FC WP 11/20, Revised).</p> <p><b>Adopted</b> the <i>Exceptional Circumstances Protocol</i> (FC WP 11/7). (see also 8.2)</p>
10.11 Shrimp in Division 3LNO	<b>Set</b> the TACs at 12 000 t for 2012 and 9 350 t for 2013.
12. Report and Recommendations of the FC Working Group of Fishery Managers and Scientists on VMEs (WGFMS-VME)	<p><b>Noted</b> the WG Meeting Report of June 2011 (FC Doc 11/5).</p> <p><b>Extended</b> all existing closed areas (coral and sponge zones, and seamounts) until December 31<sup>st</sup> 2014.</p> <p><b>Clarified</b> and <b>adopted</b> the proposed update of Chapter Ibis of the NCEM (FCWGVME WP 11/2 Rev. 4).</p> <p><b>Deleted</b> Article 2bis2 in the draft update.</p> <p><b>Revised</b> Article 2bis 8 in the draft update (currently Article 16 in the NCEM).</p> <p><b>Extended</b> the boundary of Area 5 – Northeast Flemish Cap (see Article 16.3) up to the 2 500 meter-contour (FC WP 11/21 Rev. 3).</p> <p><b>Reduced</b> the 800-kg live sponge threshold (See Article 5bis 3) to 400 and 600 kg in the new and existing fishing areas, respectively (FC WP 11/10 Rev. 2).</p> <p><b>Modified</b> the Terms of Reference of the WG to reflect that meetings should occur one week prior to the NAFO Annual Meeting (FC WP 11/33).</p> <p><b>Resolved</b> that reassessment of the likely impacts on known and likely VME will be done by 2016 and every five years thereafter (FC WP 11/24 Rev.)</p> <p><i>N.B. The above-mentioned actions that entail changes in the NCEM are incorporated in FC WP 11/34 Revised presented in Annex 17 of this Report.</i></p>

<p>17. Reports of STACTIC (from May 2011 intersessional meeting and current Annual Meeting) and Recommendations</p>	<p><b>Noted</b> the STACTIC May 2011 Intersessional Meeting Report and the current meeting report (see Part II of this Report).</p> <p><b>Adopted</b> <i>Proposal to Amend Article 15.2</i> (STACTIC WP 11/01 Rev. 2)</p> <p><b>Adopted</b> <i>Modifications to Shark Bycatch Reporting</i> (STACTIC WP 11/10 Rev. 3)</p> <p><b>Adopted</b> <i>NAFO CEM – Annex XXc – Product Form Codes</i> (from the May 2011 Intersessional meeting) (STACTIC WP 11/14 Rev.)</p> <p><b>Adopted</b> <i>Proposal to improve NCEM – Vessel type</i> (STACTIC WP 11/17).</p> <p><b>Adopted</b> <i>Security provisions in NCEM – ISO 27001 Best Practices</i> (STACTIC WP 11/24).</p> <p><b>Adopted</b> – <i>editorial correspondence for CA, OB, RJ and US field codes --- NCEM Annexes X; XXa and XXIIc</i> (STACTIC 11/25 Rev 2).</p> <p><b>Adopted</b> <i>Communication of catches – NCEM Chapter VII; Annexes X, XXa, and XXIIc</i> (STACTIC 11/26 Rev. 2).</p> <p><b>Adopted</b> <i>Communication in case of defective VMS – Art. 26.5</i> (STACTIC WP 11/28).</p> <p><b>Adopted</b> <i>Serious infringement – Art. 37.1</i> (STACTIC WP 11/29 Rev3).</p> <p><b>Accepted</b> <i>Proposed Revisions to NAFO’s Conservation and Enforcement Measures – Final Product of the Editorial Drafting Group (EDG)</i> (STACTIC WP 11/21 Rev).</p> <p><b>Accepted</b> <i>Annual Compliance Review</i> – (STACTIC WP 11/38 Rev).</p> <p><b>Approved</b> <i>Follow-up of editorial redrafting of the NCEM by EDG</i> (STACTIC WP 11/40).</p> <p><b>Approved</b> <i>Inspector’s Web Area</i> (STACTIC WP 11/7 Rev).</p> <p><b>Approved</b> <i>International Monitoring, Control, and Surveillance Network (IMCS Network)</i> (STACTIC WP 11/33 Rev).</p>
<p>19. Election of Chair</p>	<p><b>Elected</b> Sylvie Lapointe (Canada) as the Chair of the Fisheries Commission.</p>
<p>20. Time and Place of Next Meeting</p>	<p><b>Decided</b> to hold the meeting on 17-21 September 2012.</p> <p><b>Accepted</b> the offer from the Russian Federation to host the meeting at St. Petersburg.</p>

### **Annex 3. Agenda**

#### **I. Opening Procedures**

1. Opening by the Chair, Kate Sanderson (Denmark in respect of the Faroe Islands and Greenland)
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. Scientific Advice**

6. Presentation of scientific advice by the Chair of the Scientific Council
  - 6.1 Scientific advice on fish stocks
  - 6.2 Conservation Plans and Rebuilding Strategies (CPRS)
  - 6.3 Management Strategy Evaluation (MSE)
  - 6.4 Vulnerable Marine Ecosystems (VME)
  - 6.5 Other issues (as determined by the Chair of the Scientific Council)
  - 6.6 Feedback to the SC regarding the advice and its work during this Meeting
7. Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 2013 and on other matters

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

8. FC Working Groups and Recommendations
  - 8.1 Reports and Recommendations of the FC Working Group of Fishery Managers and Scientists on Conservation Plans and Rebuilding Strategies (WGFMS-CPRS)
  - 8.2 Report and Recommendations of the FC Working Group on Greenland Halibut Management Strategy Evaluation (WGMSE)
9. Management and Technical Measures for Fish Stocks in the Regulatory Area, 2012
  - 9.1 Cod in Division 3M
  - 9.2 Redfish in Division 3M
  - 9.3 American plaice in Division 3M
  - 9.4 Shrimp in Division 3M
10. Management and Technical Measures for Fish Stocks Straddling National Fishing Limits, 2012
  - 10.1 Cod in Divisions 3NO
  - 10.2 Redfish in Divisions 3O
  - 10.3 Pelagic *Sebastes mentella* (oceanic redfish) in the NAFO Convention Area
  - 10.4 American plaice in Divisions 3LNO
  - 10.5 Yellowtail flounder in Divisions 3LNO
  - 10.6 Witch Flounder in Divisions 3NO

10.7 White hake in Divisions 3NO

10.8 Capelin in Divisions 3NO

10.9 Thorny skate in Divisions 3LNO

10.10 Greenland halibut in Subarea 2 and Divisions 3KLMNO

10.11 Shrimp in Division 3LNO

11. Other Matters pertaining to Conservation of Fish Stocks

#### IV. Ecosystem Considerations

12. Report and Recommendations of the FC Working Group of Fishery Managers and Scientists on VMEs (WGFMS-VME)

13. Climate Change and NAFO Fisheries resources

14. International Guidelines on Bycatch Management and Reduction of Discards

15. Other Matters pertaining to Ecosystem Considerations

#### V. Conservation and Enforcement Measures

16. Review of Chartering Arrangements

17. Reports of STACTIC (from May 2011 intersessional meeting and current Annual Meeting) and Recommendations

18. Other Matters pertaining to Conservation and Enforcement Measures

#### VI. Closing Procedures

19. Election of Chair

20. Time and Place of the Next Meeting

21. Other Business

22. Adjournment

**Annex 4. Scientific Council Responses to Questions from the Fisheries Commission**  
(FC Working Papers 11/16, 11/17, and 11/19)

1. Is the advice for shrimp in 3M and 3L based on single stock considerations or does it also take into account the ecosystem bearing in mind increasing abundance of shrimp predator species.

*Response:*

At the present time, we do not have models for that explicitly incorporate ecosystem interactions affecting 3L and 3M shrimp stocks, although efforts are being made in that direction. However, the current advice for shrimp in 3M and 3L is based on empirical indices of stock status, and hence, they implicitly capture the effects of ecosystem processes on the trajectories of shrimp stocks.

2. Can the SC comment on the fact that the biomass of shrimp 3M has declined to levels before  $B_{lim}$  following the closure of the fishery this year. What measures would the SC recommend in order to restore shrimp 3M and 3L stocks to MSY level by 2015 (Johannesburg commitment).

*Response:*

In the absence of a fishery, the fluctuations in a stock depend alone on the balance between recruitment and natural mortality. Recruitment in 3M shrimp has varied at a low level since 2004 and such variation alone could result in the variations observed in the stock. Natural mortality – although not quantified – is considered to vary over time and would therefore also contribute to this variability. Regarding measures that would restore shrimp stocks to MSY levels, two things can be highlighted. First, the only variable affecting shrimp stocks that we can actually manage is the fishery. Secondly, we do not have models for these stocks, and hence cannot calculate  $B_{MSY}$ . Therefore, Scientific Council reiterates its recommendations for Div. 3M and Div. 3LNO Northern shrimp.

3. With respect to 3M cod, provide short term projection (2012-2014) of spawning biomass, fishing mortality and yield for four alternative scenarios of total removals in 2012: 11 000 t, 12 000 t, 13 000 t and 14 000 t and with constant fishing mortality ( $F$  of 2012) afterwards. Provide also a risk analysis with associated probabilities of spawning biomass falling below  $B_{lim}$ , fishing mortality increasing above  $F_{max}$  (proxy of  $F_{lim}$ ) and probability of reaching  $B_{msy}$  in 2012-2014.

*Response:*

Scientific Council strongly reiterates its advice that catches in 2012 should not exceed the level of  $F_{0.1}$  (9 280 t).

Scientific Council has made the projections suggested by the Fisheries Commission and the results are shown in the Table below. These results are based on the same assumptions presented in the June 2011 Scientific Council report, in particular that in 2011 the catch will be equal to the approved TAC (10 000 t) and that the biological parameters observed will be the same as those in the period 2008-2010. In the case that these assumptions will not be met, results could be different. If the TAC in 2011 is overshoot and/or the mean weights decrease, the resulting  $F$  will be higher than the presented ones.

Yield 2012 = 11 000 t												
Total Biomass			SSB			F <sub>bar</sub>			Yield			
5%	50%	95%	5%	50%	95%	5%	50%	95%	5%	50%	95%	
2012	64733	95662	143429	46331	65072	90765	0.0854	0.1548	0.2738	11000		
2013	74606	120741	201974	62378	92439	143147	0.0854	0.1548	0.2738	8133	14966	28036
2014	82794	149395	274971	69986	117041	209580	0.0854	0.1548	0.2738	8064	16893	36080
Yield 2012 = 12 000 t												
Total Biomass			SSB			F <sub>bar</sub>			Yield			
5%	50%	95%	5%	50%	95%	5%	50%	95%	5%	50%	95%	
2012	64113	95556	143663	46185	65162	90602	0.0932	0.1702	0.3064	12000		
2013	73160	119010	200998	61254	91080	143337	0.0932	0.1702	0.3064	8840	16128	30741
2014	80211	145211	273239	67176	113945	205480	0.0932	0.1702	0.3064	8639	17777	38306
Yield 2012 = 13 000 t												
Total Biomass			SSB			F <sub>bar</sub>			Yield			
5%	50%	95%	5%	50%	95%	5%	50%	95%	5%	50%	95%	
2012	64342	94714	145919	46239	65021	91510	0.1004	0.1847	0.3338	13000		
2013	72226	117075	202179	60433	89376	140723	0.1004	0.1847	0.3338	9416	16919	32601
2014	77187	143439	268284	64944	109709	200940	0.1004	0.1847	0.3338	9049	18763	40706
Yield 2012 = 14 000 t												
Total Biomass			SSB			F <sub>bar</sub>			Yield			
5%	50%	95%	5%	50%	95%	5%	50%	95%	5%	50%	95%	
2012	64588	95355	142588	46420	65010	90914	0.1103	0.2006	0.3617	14000		
2013	70968	116081	196972	59458	88283	139989	0.1103	0.2006	0.3617	9884	18159	34383
2014	75440	140013	257859	62601	107600	193208	0.1103	0.2006	0.3617	9517	19824	41617

The results of these projections were used by Scientific Council to estimate the probabilities requested by the Fisheries Commission and are shown in the Table below.

TAC2012								
11 000			12 000		13 000		14 000	
P(F <sub>bar</sub> >F <sub>max</sub> )	P(SSB<B <sub>lim</sub> )		P(F <sub>bar</sub> >F <sub>max</sub> )	P(SSB<B <sub>lim</sub> )	P(F <sub>bar</sub> >F <sub>max</sub> )	P(SSB<B <sub>lim</sub> )	P(F <sub>bar</sub> >F <sub>max</sub> )	P(SSB<B <sub>lim</sub> )
2012	0.1870	<0.05	0.2782	<0.05	0.3614	<0.05	0.4494	<0.05
2013	0.1870	<0.05	0.2782	<0.05	0.3614	<0.05	0.4494	<0.05
2014	0.1870	<0.05	0.2782	<0.05	0.3614	<0.05	0.4494	<0.05

It was not possible to calculate B<sub>msy</sub> during this meeting, so Scientific Council is unable to answer the final part of this request at present.

4. Scientific Council has estimated TAC overruns of more than 60% for 2010 catches of 3M cod and 2+3KLMNO Greenland halibut. This is of concern, and we would like to know if there have been any recent changes in the Scientific Council estimation procedure.

*Response:*

SC employed the same methods for catch estimation in 2011 as in recent years. An *ad hoc* working group deliberated on catch estimates before the meeting, thereby enabling finfish catch estimates by stock, Division and Contracting Party to be available before the June SC meeting commenced. This working group considered various sources of information including reported catches. The accuracy of officially reported provisional statistics remains questionable.

**Annex 5. Fisheries Commission's Request for Scientific Advice on Management Options in 2013  
and Beyond of Certain Stocks in Subareas 2, 3 and 4 and Other Matters**  
(FC Working Paper 11/32, Revision 2 **now** FC Doc. 11/9, Revised)

1. The Fisheries Commission with the concurrence of the Coastal State as regards to the stocks below which occur within its jurisdiction ("Fisheries Commission") requests that the Scientific Council provide advice in advance of the 2012 Annual Meeting, for the management of Northern shrimp in Div. 3M, 3LNO in 2013. The advice should be provided as a range of management options and a risk analysis for each option (rather than a single TAC recommendation).

Noting that Scientific Council will meet in October of 2011 for 2013 TAC advice, Fisheries Commission requests the Scientific Council to update its advice on shrimp stocks in 2012 for 2013 TAC.

Fisheries Commission further requests that SC provide advice in accordance to Annex 1.

2. Fisheries Commission requests that the Scientific Council provide advice for the management of the fish stocks below according to the following assessment frequency (unless Fisheries Commission requests additional assessments):

Two year basis

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

Three year basis

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

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

In 2012, advice should be provided for 2013 and 2014 for Redfish in Div. 3LN and Thorny skate in Div. 3LNOPs and for 2013, 2014 and 2015 Northern shortfin squid in SA 3+4.

In addition, advice should be provided in 2012 for cod Div. 3M.

The advice should be provided as a range of management options and a risk analysis for each option (rather than a single TAC recommendation). Additionally, Fisheries Commission requests that SC provide advice in accordance to Annex 1.

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. With respect to Northern shrimp (*Pandalus borealis*) in Div. 3LNO, noting the NAFO Framework for Precautionary Approach and recognizing the desire to demonstrate NAFO's commitment to applying the precautionary approach, Fisheries Commission requests the Scientific Council to :

- a) identify  $F_{msy}$
- b) identify  $B_{msy}$
- c) provide advice on the appropriate selection of an upper reference point for biomass (e.g.  $B_{buf}$ )

4. The Fisheries Commission adopted in 2010 an MSE approach for Greenland halibut stock in Subarea 2 + Division 3KLMNO (FC Working Paper 10/7). This approach considers a survey based harvest control rule

(HCR) to set a TAC for this stock on an annual basis for the next four year period. 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 Working Paper 10/7.
  - b) Advise on whether or not an exceptional circumstance is occurring.
5. Fisheries Commission requests the Scientific Council to examine the consequences resulting from a decrease in mesh size in the mid-water trawl fishery for redfish in Div. 3LN to 90mm or lower.
  6. The Fisheries Commission adopted in September 2011, conservation plans and rebuilding strategies for 3NO cod and 3 LNO American plaice and “recognizing that further updates and development of the plans may be required to ensure that the long term objectives are met”. The Fisheries Commission requests the Scientific Council to:
    - a) Provide advice on the addition of a new intermediate reference point (i.e. B<sub>isr</sub>) in the NAFO precautionary approach framework to delineate an additional zone between B<sub>lim</sub> and B<sub>msy</sub> as proposed by the proposed by the working group
    - b) Taking into consideration the new reference point B<sub>isr</sub>, provide advice on an updating NAFO PA framework and provide a description for each zone.
    - c) Provide advice on an appropriate selection of the B<sub>isr</sub> value for 3NO cod and 3 LNO American plaice.
    - d) Review B<sub>msy</sub> and F<sub>msy</sub> provided in 2011 for both stocks and quantify uncertainty surrounding these estimates.
  7. Fisheries Commission requests the Scientific Council to review the conservation and rebuilding plans of 3LNO American Plaice (NAFO/FC Doc. 11/4, Annex 4) and 3NO Cod (NAFO/FC Doc. 11/4, Annex 5). Through projections and a risk based approach, evaluate the performance of the present rebuilding plans in terms of expected time frames (5 / 10 / 15 years) and associated probabilities to reach indicated limit and target biomass levels and catches. Projections should assume appropriate levels of recruitment and the status quo fishing mortality (3-year average scaled and unscaled) until reaching biomass levels above B<sub>lim</sub>.
  8. Fisheries Commission requests the Scientific Council to evaluate the Harvest Control Rule (HCR) indicated below as an alternative to the HCR of the 3LNO American Plaice (NAFO/FC Doc. 11/4, Annex 4, item 4) and 3NO Cod (NAFO/FC Doc. 11/4, Annex 5, item 4) Conservation Plans and Rebuilding Strategies. Through projections and a risk based approach, evaluate the performance of this HCR in terms probabilities associated with maintaining Biomass above B<sub>lim</sub> and ensuring continuous SSB growth. SC should provide SSB and associated catch trajectories for 5 / 10 / 15 years. Projections should assume appropriate levels of recruitment and the status quo fishing mortality (3-year average scaled and unscaled) until reaching biomass levels above B<sub>lim</sub>.

Harvest Control Rule:

- a) When SSB is below B<sub>lim</sub>:
  - i. no directed fishing, and
  - ii. by-catch should be restricted to unavoidable by-catch in fisheries directing for other species

- b) When SSB is above B<sub>lim</sub>:

If  $P_{y+1} > 0.9$  Then  $F_{y+1} = F_{0.1} * P_{y+1}$

Else

$F_{y+1} = 0$

$TAC_{y+1} = B_{y+1} * F_{y+1}$

Where:

Fy+1 = Fishing mortality to project catches for the following year.

Py+1 = Probability of projected Spawning Stock Biomass to be above Blim.

B y+1 = Exploitable biomass projected for the following year.

9. The Fisheries Commission requests the Scientific Council to conduct a full assessment of 3LNO American Plaice and provide advice in accordance to the rebuilding plan currently in place.
10. On the Flemish Cap, there seems to be a connection between the most recent decline of the shrimp stock, the recovery of the cod stock and the reduction of the redfish stock. The Fisheries Commission requests the Scientific Council to provide an explanation on the possible connection between these phenomena. It is also requested that SC advises on the feasibility and the manner by which these three species are maintained at levels capable of producing a combined maximum sustainable yield, in line with the objectives of the NAFO Convention.
11. Fisheries Commission requests the Scientific Council to define Bmsy for cod in Division 3M and to propose a Harvest Control Rule (HCR) consistent with the NAFO Precautionary Approach Framework. It also requests the Scientific Council to define the estimated timeframe to reach Bmsy under different scenarios, consistent with the proposed HCR.
12. SC is asked to provide, where available, information on by-catches of various species in directed fisheries on stocks under NAFO management.
13. For the cod stock in Divisions 2J+3KL, the Scientific Council is requested to report on the trends in biomass in the most recent Science Advisory Report from the Canadian Science Advisory Secretariat.
14. Taking note that recent point estimates for 3NO Witch flounder of the Canadian Autumn survey are 2-3 times higher than in 1994 when the moratorium was first implemented and are among the highest in the times series , and while more variable the recent point estimates of the Canadian Spring survey are about 50% higher than in 1994:
  - a) What are the relative strengths and weaknesses of all the indices of abundance of witch?
  - b) What are plausible reasons for different abundance trends in the Spring and Fall surveys of the SAME STRATA, and what are the rationales to support either set of results over the other?
  - c) How might the confidence intervals around the point estimates over the time series affect the interpretations of stock trend and current status?
  - d) What evidence exists (if any) to indicate whether any changes in natural mortality have occurred since the early 1990's, e.g. condition of the fish?
  - e) Is it plausible there may be a different survey catchability for younger/smaller fish relative to older/larger fish (applicable to witch flounder), and how might this affect our interpretation of stock trends and status?
  - f) What might be reasonable options for reference point proxies, with associated rationale, including those based on one or a combination of survey indices?
15. As per the recommendation outlined in the report of the Working Group of Fishery Managers and Scientists on Vulnerable Marine Ecosystems adopted in September 2011, the Fisheries Commission requests the Scientific Council to produce a detailed list of VME indicator species and possibly other VME elements.
16. Given the progress made by Scientific Council on the development of the GIS model for the evaluation of bycatch thresholds for sponges as requested by Fisheries Commission in its 2010 Annual Meeting, and mindful of the need for further refining this modelling framework, as well as exploring its potential utility for its application to other VME-defining species, Fisheries Commission requests the Executive Secretary to provide to the Scientific Council anonymous VMS data in order to further develop the current sponge model as requested by the Fisheries Commission in 2010 and to assess the feasibility of developing similar models for other VME-defining species(e.g. corals).

17. Fisheries Commission requests the Scientific Council to make recommendations for encounter thresholds and move on rules for groups of VME indicators including sea pens, small gorgonian corals, large gorgonian corals, sponge grounds and any other VME indicator species that meet the FAO Guidelines for VME and SAI. Consider thresholds for 1) inside the fishing footprint and outside of the closed areas and 2) outside the fishing footprint in the NRA, and 3) for the exploratory fishing area of seamounts if applicable.
  18. Noting Article 4bis - Assessment of bottom fishing of the NAFO Conservation and Enforcement measures. “The Scientific Council, with the co-operation of Contracting Parties, shall identify, on the basis of best available scientific information, vulnerable marine ecosystems in the Regulatory Area and map sites where these vulnerable marine ecosystem are known to occur or likely to occur and provide such data and information to the Executive Secretary for circulation to all Contracting Parties”.
- The Fisheries Commission requests the Scientific Council to produce a comprehensive map of the location of VME indicator species and elements in the NRA as defined in the FAO International Guidelines for the Management of Deep Sea Fisheries in the High Seas. This includes canyon heads and spawning grounds and any other VME not protected by the current closures to protect coral and sponge. This will be used by Contracting Parties to complete impact assessments
19. As stated in the “Reassessment of the Impact of NAFO Managed Fisheries on known or Likely Vulnerable Marine Ecosystems” (NAFO FC WP 11/24), the Scientific Council in collaboration with the Working Group of Fishery Managers and Scientists on Vulnerable Marine Ecosystem will conduct a reassessment of NAFO bottom fisheries by 2016 and every 5 years thereafter. In preparation for reassessments, the Fisheries Commission requests the Scientific Council to develop a workplan for completing the initial reassessment and identifying the resources and information to do so.

## Annex1 – Additional guidance in regards to questions 1 and 2.

Mindful of the desire to move to a risk-based approach in the management of fish stocks, Fisheries Commission requests the Scientific Council to provide a range of management options as well as a risk analysis for each option as outlined in the provisions below, rather than a single TAC recommendation.

1. 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:
  - a) The preferred tool for the presentation of a synthetic view of the past dynamics of an exploited stock and its future development is a stock assessment model, whether age-based or age-aggregated.
  - b) For those stocks subject to analytical-type assessments, the status of the stocks should be reviewed and catch options evaluated in terms of their implications for fishable stock size in both the short and long term. As general reference points, the implications of fishing at  $F_{0.1}$  and  $F_{2011}$  in 2013 and subsequent years should be evaluated. The present stock size and spawning stock size should be described in relation to those observed historically and those expected in the longer term under this range of options.
  - c) For those stocks subject to general production-type assessments, the time series of data should be updated, the status of the stock should be reviewed and catch options evaluated in the way described above to the extent possible. In this case, the level of fishing effort or fishing mortality (F) required to take two-thirds MSY catch in the long term should be calculated.
  - d) 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.
  - e) Spawning stock biomass levels considered necessary for maintenance of sustained recruitment should be recommended for each stock, defined in relation to both long-term productivity regimes, and current productivity regimes to the extent these may differ. In those cases where present spawning stock size is a matter of scientific concern in relation to the continuing reproductive potential of the stock, options should be offered that specifically respond to such concerns.
  - f) Information should be provided on stock size, spawning stock sizes, recruitment prospects, fishing mortality, catch rates and catches implied by these management strategies for the short and the long term in the following format:
    - I. For stocks for which analytical-type assessments are possible, graphs should be provided of all of the following for the longest time-period possible:
      - historical yield and fishing mortality;
      - spawning stock biomass and recruitment levels;
      - catch options for the year 2013 and subsequent years over a range of fishing mortality rates (for as many years as the data allow)
      - (F) at least from  $F_{0.1}$  to  $F_{max}$ ;
      - spawning stock biomass corresponding to each catch option;
      - yield-per-recruit and spawning stock per recruit values for a range of fishing mortalities.
    - II. For stocks for which advice is based on general production models, the relevant graph of production as a function of fishing mortality rate or fishing effort should be provided. Age aggregated assessments should also provide graphs of all of the following for the longest time period possible:
      - exploitable biomass (both absolute and relative to  $B_{MSY}$ )
      - yield/biomass ratio as a proxy for fishing mortality (both absolute and relative to  $F_{MSY}$ )

- estimates of recruitment from surveys, if available.

III. Where analytical methods are not attempted, the following graphs should be presented, for one or several surveys, for the longest time-period possible:

- time trends of survey abundance estimates, over:
- an age or size range chosen to represent the spawning population
- an age or size-range chosen to represent the exploited population
- recruitment proxy or index for an age or size-range chosen to represent the recruiting population.
- fishing mortality proxy, such as the ratio of reported commercial catches to a measure of the exploited population.

For age-structured assessments, yield-per-recruit graphs and associated estimates of yield-per-recruit based reference points should be provided. In particular, the three reference points, actual  $F$ ,  $F_{0.1}$  and  $F_{max}$  should be shown.

2. Noting the Precautionary Approach Framework as endorsed by Fisheries Commission, the Fisheries Commission requests that the Scientific Council provide the following information for the Annual Meeting of the Fisheries Commission for all stocks under its responsibility requiring advice:
  - a) the limit and precautionary reference points as described in Annex II of the UN Fisheries Agreement indicating areas of uncertainty (for those stocks for which precautionary reference points cannot be determined directly, proxies should be provided);
  - b) the stock biomass and fishing mortality trajectory over time overlaid on a plot of the PA Framework (for those stocks where biomass and/or fishing mortality cannot be determined directly, proxies should be used);
  - c) information regarding the current Zone the stock is within as well as proposals regarding possible harvest strategies which would move the resource to (or maintain it in) the Safe Zone, including medium term considerations and associated risk or probabilities which will assist the Commission in developing the management strategies described in paragraphs 4 and 5 of Annex II in the Agreement.
3. The following elements should be taken into account by the Scientific Council when considering the Precautionary Approach Framework:
  - a) References to “risk” and to “risk analyses” should refer to estimated probabilities of stock population parameters falling outside biological reference points.
  - b) Where reference points are proposed by the Scientific Council as indicators of biological risk, they should be accompanied by a description of the nature of the risk associated with crossing the reference point such as recruitment overfishing, impaired recruitment, etc.
  - c) When a buffer reference point is identified in the absence of a risk evaluation in order to maintain a low probability that a stock, measured to be at the buffer reference point, may actually be at or beyond the limit reference point, the Scientific Council should explain the assumptions made about the uncertainty with which the stock is measured.
  - d) Wherever possible, short and medium term consequences should be identified for various exploitation rates (including no fishing) in terms of yield, stability in yield from year to year, and the risk or probability of maintaining the stock within, or moving it to, the Safe Zone. Whenever possible, this information should be cast in terms of risk assessments relating fishing mortality rates to the trends in biomass (or spawning biomass), the risks of stock collapse and recruitment overfishing, as well as the risks of growth overfishing, and the consequences in terms of both short and long term yields.
  - e) When providing risk estimates, it is very important that the time horizon be clearly spelled out. By way of consequence, risks should be expressed in timeframes of 5, 10 and 15 years (or more), or in terms of other appropriate year ranges depending on stock specific dynamics. Furthermore, in order to provide the Fisheries Commission with the information necessary to consider the balance between risks and yield levels, each harvesting strategy or risk scenario should include, for the selected year ranges, the risks and yields associated with various harvesting options in relation to  $B_{lim}$ .

**Annex 6. Interim 3LNO American Plaice Conservation Plan and Rebuilding Strategy**  
**(NCEM – new Article to be inserted in Chapter I)**  
 (FC Working Paper 11/4, Annex 1 **now** FC Doc. 11/21)

**1. Objective(s):**

- a) Long-term Objective: The long-term objective of this Conservation Plan and Rebuilding Strategy is to achieve and to maintain the 3LNO American plaice Spawning Stock Biomass (SSB) in the ‘safe zone’, as defined by the NAFO Precautionary Approach framework, and at or near Bmsy.
- b) Interim Milestone: As an interim milestone, increase the 3LNO American plaice Spawning Stock Biomass (SSB) to a level above the Limit Reference Point (Blim). It may reasonably be expected that Blim will not be reached until after 2014.

**2. Reference Points:**

- a) Limit reference point for spawning stock biomass (Blim) – 50,000t
- b) An intermediate stock reference point or security margin B<sub>isr</sub><sup>1</sup> – [100,000t]
- c) Limit reference point for fishing mortality (F<sub>lim</sub> = F<sub>msy</sub>) – 0.31
- d) Bmsy – [242,000t]

**3. Re-opening to Directed Fishing:**

- a) A re-opening of a directed fishery should only occur when the estimated SSB, in the year projected for opening the fishery, has a very low<sup>2</sup> probability of actually being below Blim.
- b) An annual TAC should be established at a level which is projected to result in:
  - i. continued growth in SSB,
  - ii. low<sup>3</sup> probability of SSB declining below Blim throughout the subsequent 3-year period, and
  - iii. fishing mortality < F<sub>0.1</sub>

**4. Harvest Control Rules:**

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

- a) When SSB is below Blim:
  - i. no directed fishing, and
  - ii. by-catch should be restricted to unavoidable by-catch in fisheries directing for other species
- b) When SSB is between Blim and B<sub>isr</sub>:
  - i. TACs should be set at a level(s) to allow for continued growth in SSB consistent with established rebuilding objective(s),
  - ii. TACs should result in a low probability of SSB declining below Blim throughout the subsequent 3-year period, and
  - iii. Biomass projections should apply a low risk tolerance
- c) When SSB is above B<sub>isr</sub>:
  - i. TACs should be set at a level(s) to allow for growth in SSB consistent with the long term objective, and
  - ii. Biomass projections should apply a risk neutral approach (i.e. mean probabilities)
- d) When SSB is above Bmsy:
  - i. TACs should be set at a level of F that has a low probability of exceeding F<sub>msy</sub>, and
  - ii. Biomass projections should apply a risk neutral approach (i.e. mean probabilities)

---

<sup>1</sup> A ‘buffer zone’ (Bbuf) is not required under the NAFO PA given the availability of risk analysis related to current and projected biomass values; however, SC has advised that an additional zone(s) between Blim and Bmsy could be considered. An intermediate stock reference point (B<sub>isr</sub>) is proposed to delineate this zone. The proposed value is equivalent to twice Blim.

<sup>2</sup> ‘very low’ means 10% or less

<sup>3</sup> ‘low’ means 20% or less

## Annex 7. Interim 3NO Cod Conservation Plan and Rebuilding Strategy (NCEM Article 9)

(FC Working Paper 11/4, Annex 2 **now** FC Doc. 11/22)

### 1. Objective(s):

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

### 2. Reference Points:

- a) Limit reference point for spawning stock biomass (Blim) – 60,000t<sup>1</sup>
- b) An intermediate stock reference point or security margin Bmsr<sup>2</sup> – [120,000t]
- c) Limit reference point for fishing mortality (Flim = Fmsy) – 0.30
- d) Bmsy – [248,000t]

### 3. Re-opening to Directed Fishing:

- a) A re-opening of a directed fishery should only occur when the estimated SSB, in the year projected for opening the fishery, has a very low<sup>3</sup> probability of actually being below Blim.
- b) An annual TAC should be established at a level which is projected to result in:
  - i. continued growth in SSB,
  - ii. low<sup>4</sup> probability of SSB declining below Blim throughout the subsequent 3-year period, and
  - iii. fishing mortality < F0.1

### 4. Harvest Control Rules:

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

- a) When SSB is below Blim:
  - i. no directed fishing, and
  - ii. by-catch should be restricted to unavoidable by-catch in fisheries directing for other species

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

- b) When SSB is between Blim and Bmsr:
  - i. TACs should be set at a level(s) to allow for continued growth in SSB consistent with established rebuilding objective(s),
  - ii. TACs should result in a low probability of SSB declining below Blim throughout the subsequent 3-year period, and
  - iii. Biomass projections should apply a low risk tolerance

<sup>1</sup> The Fisheries Commission shall request the Scientific Council to review in detail the limit reference point when the Spawning Stock Biomass has reached 30,000t.

<sup>2</sup> A 'buffer zone' (Bbuf) is not required under the NAFO PA given the availability of risk analysis related to current and projected biomass values; however, SC has advised that an additional zone(s) between Blim and Bmsy could be considered. An intermediate stock reference point (Bmsr) is proposed to delineate this zone. The proposed value is set at a level equivalent to twice Blim. Should the SC review of the limit reference point (Blim) result in a change to that value then the intermediate stock reference point (Bmsr) should also be re-evaluated.

<sup>3</sup> 'very low' means 10% or less

<sup>4</sup> 'low' means 20% or less

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

**5. Ecosystem Considerations:**

Considering the importance of capelin as a food source, consistent with the ecosystem approach, the moratorium on 3NO capelin will continue until at least December 31, 2013.

## **Annex 8. Terms of Reference for the Working Group of Fishery Managers and Scientists on Conservation Plans and Rebuilding Strategies**

(FC Working Paper 11/31, Revised **now** FC Doc. 11/11)

### Structure

Establish a Working Group of Fishery Managers and Scientists, which reports to Fisheries Commission, consults with Scientific Council, and provides recommendations to Fisheries Commission.

The Working Group shall be comprised of fishery managers and scientists from Contracting Parties supported by advisors, as required, up to a maximum of three participants per Contracting Party. The Chair/Vice-chair shall be selected from participating fishery managers and scientists with both a fishery manager and a scientist represented in the two positions.

Consideration shall be given by the Fisheries Commission in 2014 to the continuation or dissolution of the working group.

### Objective

1. Consider risk management approaches in the review and update of existing Conservation Plans and Rebuilding Strategies, or future development of new Conservation Plans and Rebuilding Strategies.

This work should be presented to Fisheries Commission for consideration at the annual meeting.

### Specific Duties

The working group should review and update conservation plans and rebuilding strategies in respect of:

- a) Limit reference points, as provided by Scientific Council, and recovery target(s);
- b) Buffer reference points, developed in the context of precautionary approach framework and in support of robust rebuilding plans;
- c) Timelines or time frames that can reasonably be expected to achieve established targets;
- d) Conditions at which a directed fishery might occur;
- e) Harvest control rules which incorporate target, limit and buffer reference points, as well as, rebuilding timelines or timeframes; and
- f) An implementation strategy which promotes stability in response to natural resource fluctuations that may be expected to occur over the life of the rebuilding plan.

### Possible Principles/Elements

In the conduct of its work, the working group may consider the following principles and elements in the development of Conservation Plans and Rebuilding Strategies:

- a) When the stock has recovered beyond Blim, initial TAC levels should be set at conservative levels to allow for continued recovery and growth;
- b) Bycatch should be kept to the lowest possible level and restricted to unavoidable bycatch in fisheries directing for other species when SSB is below Blim;
- c) Interim target(s) for further growth in the stock prior to re-opening;
- d) Long-term rebuilding target (e.g. Bmsy) and associated timelines and/or timeframes;
- e) Harvest strategy, consistent with the Precautionary Approach, which ensure Spawning Stock Biomass remains above Blim;
- f) Monitoring and review process for each rebuilding plan to enable Fisheries Commission to assess and revise plans as necessary to ensure rebuilding plan targets are achieved.

The working group may also consider refining these principles/ elements outlined above.

### Meetings

The Working Group shall communicate regularly through teleconferences and electronically, as required.

Meetings may be held at the discretion of the Chair, in collaboration with Contracting Parties and the NAFO Secretariat.

**Annex 9. Recommendation from the FC Working Group on Greenland Halibut  
Management Strategy Evaluation (WGMSE) to the Fisheries Commission**  
(FC Working Paper 11/7 now FC Doc. 11/10)

The WGMSE met via WebEx on 7 September 2011 (FC Doc 11/8) and agreed to forward to the Fisheries Commission the *Exceptional Circumstances Protocol* (FCWG-MSE WP 11/2 Rev.) with a recommendation for adoption.

**Exceptional Circumstances Protocol**

**1. Background:**

Fisheries Commission (FC) adopted in 2010 a new Management Strategy (MS) for the Greenland halibut stock in Subarea 2 + Divisions 3KLMNO. This MS is applied annually to automatically adjust the TAC based on the recent trend in the survey biomass.

*Exceptional Circumstances* provisions are intended to respond to an event or observation which is outside of the range of possibilities considered within the MSE. In such cases, Fisheries Commission may have reason to over-ride the TAC provided by the MS and/ or also require the MS to be reviewed/ revised. To this effect, Scientific Council (SC) will annually monitor the situation and provide advice to Fisheries Commission on whether or not ‘exceptional circumstances’ may be occurring.

**2. Exceptional Circumstances**

Some examples, identified by the Scientific Council, which could constitute exceptional circumstances in the Greenland halibut application may include catches in excess of the range tested or observed surveys outside the range simulated. The range of catches and the survey indices are the only information that allow a direct comparison of observed data with modeled results. These should therefore be considered at a primary level. Other indicators should be considered at a secondary level of importance.

- Data Gaps - Incomplete/Missing survey data or termination of a survey time series;
- Biological Parameters - Biological inputs which differ from the range of possibilities included within the MSE (e.g. natural mortality);
- Recruitment - Estimated recruitments in the assessment no longer appear to be consistent with the range of recruitments considered in the MSE, where the same model is used for the estimation as used in the MSE; and /or
- Fishing Mortality –Estimates of fishing mortality that are outside the range of values generated in the MSE, where the same model is used for the estimation as used in the MSE; and/or
- Exploitable Biomass –Estimates of Exploitable Biomass that are outside the range of values generated in the MSE, where the same model is used for the estimation as used in the MSE.

Ongoing Scientific Council analysis related to this stock may also identify other situations which warrant consideration as exceptional circumstances.

The 90% probability intervals obtained from the projection from the MSE process should be considered as a reference.

Advice provided by Scientific Council which suggests the occurrence of exceptional circumstances should be based on compelling evidence and should include sufficient detail to allow FC to take an informed decision on implementation of the MS and possible next steps.

**3. Implementation/ Next Steps**

When SC advice indicates that exceptional circumstances may be occurring, FC will consider a range of responses/ possible courses of action taking into account the degree and type of circumstance noted. In order, those that would be considered are as follows:

1. Review the information, but maintain the MS as the management tool; additional research/monitoring may be recommended to determine if the signal detected warrants moving to step 2;
2. Advance the review period (currently 2014), and potentially revise the MS, but implement the MS outputs;
3. Set a catch limit that departs from the MS, and revise the MS.

### Annex 10. Quota Table 2012 and Effort Allocation Scheme 2012

**QUOTA TABLE. Total allowable catches (TACs) and quotas (metric tons) for 2012 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	Cod				Redfish					American plaice		Yellowtail
Division/Contracting Party	3L	3M	% of 3M Cod TAC	3NO	3LN	% of 3LN Redfish TAC	3M	3O	Sub-Area 2 and Div. 1F+3K	3LNO	3M	3LNO
Canada		74	0.80	0	2556	42.60	500	6000	0 <sup>2,4</sup>	0	0	16575 <sup>5</sup>
Cuba		343	3.70	-	588	9.80	1750		0 <sup>2,4</sup>	-	-	-
Denmark (Faroe Islands and Greenland)		2074	22.35	-	-		69 <sup>19</sup>		0 <sup>2,3</sup>	-	-	-
European Union		5292 <sup>25</sup>	57.03	0 <sup>11</sup>	1094 <sup>26</sup>	18.23	7813 <sup>12</sup>	7000	0 <sup>2,3</sup> 0 <sup>2,15</sup>	0	0 <sup>11</sup>	-
France (St. Pierre et Miquelon)		-		-	-		69 <sup>19</sup>		0 <sup>2,4</sup>	-	-	340 <sup>5</sup>
Iceland		-		-	-		-		0 <sup>2,3</sup>	-	-	-
Japan		-		-	-		400	150	0 <sup>2,4</sup>	-	-	-
Korea		-		-	-		69 <sup>19</sup>	100	0 <sup>2,4</sup>	-	-	-
Norway		859	9.25	-	-		-		0 <sup>2,3</sup>	-	-	-
Russian Federation		601	6.47	0	1726	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		37	0.40	0	36	0.60	124	100	-	0	0	85 <sup>5</sup>
TOTAL ALLOWABLE CATCH	*9	9280 <sup>23</sup>	100.0	*20,9	6000 <sup>24</sup>	100.0	6500 <sup>8,16</sup>	20000	0 <sup>10,17</sup>	*16,21	*9,29	17000 <sup>21,22</sup>

Species	Witch		White hake	Capelin	Skates	Greenland halibut	Squid (Illex) <sup>1</sup>	Shrimp	
Division/Contracting Party	3L	3NO	3NO	3NO	3LNO	3LMNO	Sub-areas 3+4	3L	3NO
Canada		0	1470	0	1417	1814	N.S. <sup>6</sup>	10000	
Cuba		-		0		-	510	133	
Denmark (Faroe Islands and Greenland)		-		-		210	-	133	
European Union		0 <sup>11</sup>	2940	0 <sup>11</sup>	5352	7093 <sup>18</sup>	N.S. <sup>6</sup> 611 <sup>13</sup>	670 <sup>14</sup>	
France (St. Pierre et Miquelon)		-		-		198	453	133	
Iceland		-		-		-	-	133	
Japan		-		0		1240	510	133	
Korea		-		-		-	453	133	
Norway		-		0		-	-	133	
Russian Federation		0	295	0	1417	1543	749	133	
Ukraine						-		133	
United States of America		-		-		-	453	133	
Others		0	295	-	314	0 <sup>7</sup>	794	0	
TOTAL ALLOWABLE CATCH	*9,20	*9	5000	*9,20	8500 <sup>28</sup>	12098	34000 <sup>20</sup>	12000 <sup>27</sup>	*9

\* Ban on fishing in force.

- Any quota listed for squid may be increased by a transfer from any “coastal state” as defined in Article 1, paragraph 3 of the NAFO Convention, provided that the TAC for squid is not exceeded. Transfers made to Contracting Parties conducting fisheries for squid in the Regulatory Area shall be reported to the Executive Secretary, and the report shall be made as promptly as possible.
- The Executive Secretary shall notify without delay all Contracting Parties the dates on which accumulated reported catch taken by vessels of Contracting Parties estimated equal to 50% and then 100% of that allocation.
- Quota to be shared by vessels from Denmark (Greenland and Faroe Islands), European Union, Iceland, Norway and Russia. Catches in the NAFO Convention Area shall be deducted from the quotas allocated in the NEAFC Convention Area.
- Quota to be shared by vessels from Canada, Cuba, France (St. Pierre et Miquelon), Japan, Korea, Ukraine and USA.
- Contracting Parties shall inform the Executive Secretary before 01 December 2011 of the measures to be taken to ensure that total catches do not exceed the levels indicated.
- The allocation to these Contracting Parties are as yet undetermined, although their sum shall not exceed the difference between the total of allocations to other Contracting Parties and the TAC (= 29.458 tons).

7. In 2005, the previous 935 t “Others” quota was assigned to three Contracting Parties. When the TAC exceeds 30,000 t the next 1,300 t beyond 30,000 will be allocated to an Others quota which can be accessed by those who do not hold Greenland halibut allocation. In deciding the relevant contributions of Contracting Parties to the 1,300 t Others quota, the Fisheries Commission will take into account the fact that some Contracting Parties received a benefit from the 935 t quota which was reassigned in 2005.
8. Not more than 3250 tons may be fished before 01 July 2012. The Executive Secretary shall notify without delay all Contracting Parties of the date on which, for this stock, accumulated reported catch taken by vessels of the Contracting Parties is estimated to equal 50% and then 100% of the TAC.
9. The provisions of Article 12, paragraph 1.b) of the Conservation and Enforcement Measures shall apply.
10. In the case of the NEAFC decision which modifies the level of TAC in 2012 as compared to 2011, these figures shall be accordingly adjusted by NAFO and formalized through a mail vote.
11. Including fishing entitlements of Estonia, Latvia, and Lithuania following their accession to the European Union and in accordance with sharing arrangements of the former USSR quota adopted by the Fisheries Commission at its Annual Meeting in 2003 (FC Working Paper 03/7).
12. Including allocations of 1571 tonnes each for Estonia, Latvia and Lithuania out of a sharing of 20,000 tonnes, following their accession to the European Union.
13. Allocations of 128 tonnes each for Estonia, Latvia and Lithuania as well as 227 tonnes for Poland out of a TAC of 34,000 tonnes, following their accession to the European Union.
14. Including allocations of 133 tonnes each for Estonia, Latvia, Lithuania and Poland out of a TAC of 12,000 tonnes, following their accession to the European Union.
15. Allocation of 17.85% to Lithuania and 2.15% to Latvia following their accession to the European Union.
16. Applicable to 2012 and 2013.
17. The quota shares in footnotes 4 and 15 can only be fished in the NAFO Regulatory Area. If an increase in the overall TAC as defined in footnote 10 leads to an increase in these shares, the first 500 tonnes of that increase shall be added to the quota share referred to in footnote 4.
18. Including an allocation of 397 tonnes for Estonia, Latvia, and Lithuania following their accession to the European Union.
19. Notwithstanding the provisions of footnote 8 and without prejudice to future agreements on allocations, these quotas may be fished in their entirety by these Contracting Parties.
20. Applicable until at least 2013.
21. In lieu of Article 12.1 (a) and (b) of the CEM, the following by-catch provisions for American plaice only in the 3LNO yellowtail fishery shall apply:  
Contracting Parties fishing for yellowtail flounder allocated under the NAFO allocation table will be restricted to an overall Am. plaice by-catch harvest limit equal to 15% of their total yellowtail fishery as calculated in accordance with Article 12.1 (c). If a Scientific Council projection indicates that this rate is likely to undermine stock recovery or cause an unreasonable delay in reaching  $B_{lim}$ , this rate may be subject to a reassessment by the Fisheries Commission.
22. Following the NAFO annual meeting and prior to January 1 of the succeeding year, at the request of the USA, Canada will transfer 1000 tonnes of its 3LNO yellowtail quota to the USA.
23. The allocation key of this stock is based on the 1998 Quota Table. In 1999, a moratorium on cod in Division 3M was declared.
24. The allocation key of this stock is based on the 1997 Quota Table. In 1998, a moratorium on redfish in Division 3LN was declared.
25. Including fishing entitlements of 103 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 352 tons for Poland following their accession to the European Union.
26. Including fishing entitlements of 297 tonnes each for Estonia, Latvia, and Lithuania in accordance with sharing arrangements of the former USSR quota adopted by the Fisheries Commission at its Annual Meeting in 2003 (FC Working Paper 03/7) following their accession to the European Union.
27. For 2013, the TAC will be reduced to 9,350 tonnes. This TAC will be reviewed based on available Scientific Council advice on this stock.
28. This TAC will be reviewed in 2012 in line with the available scientific advice on this stock.
29. Applicable to 2012, 2013 and 2014.

**Effort Allocation Scheme for Shrimp Fishery in the  
NAFO Regulatory Area Div. 3M, 2012**

CONTRACTING PARTY	NUMBER OF FISHING DAYS <sup>1</sup>	NUMBER OF VESSELS <sup>1</sup>
<b>Canada</b>	0	0
<b>Cuba</b>	0	0
<b>Denmark</b>	0	0
Faroe Islands		
Greenland		
<b>European Union</b>	0	0
<b>France (in respect of St. Pierre et Miquelon)</b>	0	0
<b>Iceland</b>	N/A	N/A
<b>Japan</b>	0	0
<b>Korea</b>	0	0
<b>Norway</b>	0	0
<b>Russia</b>	0	N/A
<b>Ukraine</b>	0	0
<b>USA</b>	0	0

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

**Annex 11. Cod in Division 3NO**  
(FC Working Paper 11/26, Revised **now** FC Doc. 11/17)

*Recalling*, that the cod stock in Div. 3NO has been under moratorium to directed fishing since February 1994;

*Further recalling*, the Fisheries Commission (FC Doc. 07/8) 3NO Cod Conservation and Rebuilding Strategy adopted in September 2007 which calls on Contracting Parties, through best efforts, to keep incidental by-catch at the lowest possible level;

*Taking into account*, the 2010 Scientific Council Advice which indicates that:

- fishing mortality has been declining since 2006 and is currently amongst the lowest estimated during the moratorium;
- recruitment remains low but has been improving in recent years with current estimates of the 2005-2007 year classes comparable to those from the mid-late 1980s;
- total biomass and spawning biomass remain low but are estimated to be at their highest levels since 1992;

*Recognizing* that the Working Group of Fisheries Managers and Scientists on Conservation Plans and Rebuilding Strategies has recommended that Fisheries Commission adopt updates to the 3NO Cod Conservation Plan and Rebuilding Strategy while also highlighting outstanding bycatch issues; and

*Mindful* of the need to minimize incidental by-catch to support the continued recovery of this stock.

**It is recommended that:**

1. **The following sentence be added to Article 12.1 b) of the NAFO Conservation and Enforcement Measures:**

**“However, for cod in Division 3NO vessels of a Contracting Party shall limit their by-catch to a maximum of 1 000 kg or 4%, whichever is greater.”**

2. **The following text be added to the 3NO Conservation Plan and Rebuilding Strategy:**

**“The by-catch provisions in the NCEMs for 3NO cod should be reviewed periodically, to coincide with scheduled assessments of the stock by Scientific Council, and adjusted to reflect the overall trend in spawning stock biomass.”**

**Annex 12. Amendment to NAFO Conservation and Enforcement Measures****Annex I.A, Footnote 21**

(FC Working Paper 11/28 **now** FC Doc. 11/19)

**It is *recommended* that footnote 21 of Annex I.A, Annual Quota Table, in the NAFO Conservation and Enforcement Measures be amended as follows:**

**Annex I.A, Footnote 21**

- <sup>21.</sup> In lieu of Article 12.1 (a) and (b) of the CEM, the following by-catch provisions for American plaice only in the 3LNO yellowtail fishery shall apply: Contracting Parties fishing for yellowtail flounder allocated under the NAFO allocation table will be restricted to an overall Am. plaice by-catch harvest limit equal to 15% of their total yellowtail fishery as calculated in accordance with Article 12.1 (c). If a Scientific Council projection indicates that this rate is likely to undermine stock recovery or cause an unreasonable delay in reaching  $B_{lim}$ , this rate may be subject to a reassessment by the Fisheries Commission.

**Annex 13. White Hake in Divisions 3NO**  
(FC Working Paper 11/27 **now** FC Doc. 11/18)

*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 Div. 3NO with the following quota key:

<b>Contracting Party</b>	<b>Quota (t)</b>	<b>Quota (%)</b>
Canada	2 500	29.4
EU	5 000	58.8
Russia	500	5.9
Others	500	5.9
<b>Total</b>	<b>8 500</b>	<b>100</b>

*Further recalling* that in 2009 NAFO agreed to a directional reduction in the TAC for White hake in Divisions 3NO to a level of 6 000 tonnes;

**It is recommended** that the overall TAC for 3NO White hake be established at 5 000t in 2012. The revised quota key follows:

<b>Contracting Party</b>	<b>2012 Quota (t)</b>
Canada	1 470
European Union	2 940
Russia	295
Others	295
<b>TAC</b>	<b>5 000</b>

**Annex 14. Thorny Skate in Division 3LNO**  
(FC Working Paper 11/12, Revised **now** FC Doc. 11/14)

Mindful of the commitment of the EU, US and Canada to take action for the conservation of thorny skate at the 2011 Annual Meeting;

Noting the 2010 advice of the Scientific Council recommending that catches should not exceed 5 000 tons, which was reiterated in 2011;

Noting the current level of catches of around 5 000 tons for 2010 and the current distribution of allocations;

Noting that, in addition, such a reduction is likely to lead to a level of catches under 5 000 tons given the current fishing pattern of the Contracting Parties;

Bearing in mind that the next Scientific Council advice for this stock will be issued in 2012;

**It is recommended:**

**1/ to reduce the TAC for 3LNO thorny skate to 8 500 tons for 2012;**

**2/ to review this TAC in 2012 in line with the available scientific advice on this stock.**

	Tons	%
Canada	1417	16,67 %
European Union	5352	62,96 %
Russia	1417	16,67 %
Others	315	3,70 %
<b>2012 TAC</b>	<b>8 500</b>	<b>100 %</b>

**Annex 15. Greenland Halibut Management Strategy Evaluation**  
(FC Working Paper 11/7 and 11/20, Revised ~~now~~ FC Doc. 11/15)

Recalling the adoption of the Greenland halibut Management Strategy by the NAFO Fisheries Commission in 2010;

Bearing in mind the recommendation of the WGMSE to Fisheries Commission in September 2010 calling on the FC to consider undertaking a revision of the Greenland halibut rebuilding programme to reflect the implementation of the Management Strategy;

**It is recommended that:**

**1) Articles 7.1, 7.4 and 7.5 of the NAFO Conservation and Enforcement Measures be amended as follows:**

- 1. The current Management Strategy (MS) for Greenland halibut stock in Subarea 2+ Divisions 3KLMNO adopted by NAFO in 2010 shall be in force initially until 2014.**
- 2. The total allowable catch (TAC) shall be adjusted annually according to the harvest control rule (HCR) specified in Annex XXVI.**
- 3. *The Exceptional Circumstances Protocol (Annex XXVII)* shall be invoked in response to an event or observation by Scientific Council which is outside of the range of possibilities considered within the MSE.**

**2) Article 7.3 be deleted**

**3) Technical specifications of the HCR should be outlined in a new Annex XXVI:**

**Annex XXVI**  
**Greenland halibut Management Strategy**

The harvest control rule (HCR) will adjust the total allowable catch (TAC) from year (y) to year (y+1), according to:

$$\text{TAC}_{y+1} = \text{TAC}_y (1 + \lambda \times \text{slope}),$$

where slope = measure of the recent trend in survey biomass and,  $\lambda = 2.0$  if slope is negative and  $\lambda = 1.0$  if slope is positive.

The TAC generated by the HCR is constrained to  $\pm 5\%$  of the TAC in the preceding year.

**Annex XXVII**  
**Exceptional Circumstances Protocol**  
**(as recommended by the WGMSE and adopted by the Fisheries Commission)**

**1. Background:**

Fisheries Commission (FC) adopted in 2010 a new Management Strategy (MS) for the Greenland halibut stock in Subarea 2 + Divisions 3KLMNO. This MS is applied annually to automatically adjust the TAC based on the recent trend in the survey biomass.

*Exceptional Circumstances* provisions are intended to respond to an event or observation which is outside of the range of possibilities considered within the MSE. In such cases, Fisheries Commission may have reason to over-ride the TAC provided by the MS and/ or also require the MS to be reviewed/ revised. To this effect, Scientific Council (SC) will annually monitor the situation and provide advice to Fisheries Commission on whether or not 'exceptional circumstances' may be occurring.

**2. Exceptional Circumstances**

Some examples, identified by the Scientific Council, which could constitute exceptional circumstances in the Greenland halibut application may include catches in excess of the range tested or observed surveys outside the range simulated. The range of catches and the survey indices are the only information that allow a direct comparison of observed data with modeled results. These should therefore be considered at a primary level. Other indicators should be considered at a secondary level of importance.

- Data Gaps - Incomplete/Missing survey data or termination of a survey time series;
- Biological Parameters - Biological inputs which differ from the range of possibilities included within the MSE (e.g. natural mortality);
- Recruitment - Estimated recruitments in the assessment no longer appear to be consistent with the range of recruitments considered in the MSE, where the same model is used for the estimation as used in the MSE; and /or
- Fishing Mortality –Estimates of fishing mortality that are outside the range of values generated in the MSE, where the same model is used for the estimation as used in the MSE; and/or
- Exploitable Biomass –Estimates of Exploitable Biomass that are outside the range of values generated in the MSE, where the same model is used for the estimation as used in the MSE.

Ongoing Scientific Council analysis related to this stock may also identify other situations which warrant consideration as exceptional circumstances.

The 90% probability intervals obtained from the projection from the MSE process should be considered as a reference.

Advice provided by Scientific Council which suggests the occurrence of exceptional circumstances should be based on compelling evidence and should include sufficient detail to allow FC to take an informed decision on implementation of the MS and possible next steps.

**3. Implementation/ Next Steps**

When SC advice indicates that exceptional circumstances may be occurring, FC will consider a range of responses/ possible courses of action taking into account the degree and type of circumstance noted. In order, those that would be considered are as follows:

1. Review the information, but maintain the MS as the management tool; additional research/monitoring may be recommended to determine if the signal detected warrants moving to step 2;
2. Advance the review period (currently 2014), and potentially revise the MS, but implement the MS outputs;
3. Set a catch limit that departs from the MS, and revise the MS.

**Annex 16. Terms of Reference for the Working Group of Fishery Managers  
and Scientists on Vulnerable Marine Ecosystems**  
(FC Working Paper 11/33 now FC Doc. 11/37)

Structure:

Working Group of Fishery Managers and Scientists on Vulnerable Marine Ecosystems reports to the Fisheries Commission, 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 advisors, as required, up to a maximum of three participants per Contracting Party. The Chair/Vice-chair shall be selected from participating fishery managers and scientists with both a fishery manager and a scientist represented in the two positions.

Objective:

The main objective of the Working Group is to make recommendations to the Fisheries Commission on the effective implementation of measures to prevent significant adverse impacts on vulnerable marine ecosystems.

Specific Duties:

In responding to requests for advice and recommendations from the Fisheries Commission, the Working Group shall:

Consider the advice of Scientific Council to Fisheries Commission; evaluate associated risks; and make recommendations on mitigation strategies and measures to avoid significant adverse impacts on vulnerable marine ecosystems, drawing on relevant international guidance<sup>1</sup>.

Review area closures, fisheries impact assessments and other measures outlined in the NAFO Conservation and Enforcement Measures (NCEMs) with specific timelines.

Update the text in Chapter I bis of the NCEMs as necessary.

Meetings:

The Working Group will meet as required by the Fisheries Commission. Whenever possible, meetings of the Working Group should occur in the week prior to the NAFO annual meeting, and shall communicate regularly through teleconferences and electronically, as required.

---

<sup>1</sup> Including but not limited to the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas

## **Annex 17. Update of Chapter Ibis – Bottom Fisheries in the NAFO Regulatory Area** (FC Working Paper 11/34, Revised)

The following text incorporates amendments to Chapter Ibis, including recommendations from the Working Group of Fishery Managers and Scientists on Vulnerable Marine Ecosystems, which have been adopted.

### **Article 1bis – Purpose and definitions**

1. The purpose of this chapter is to ensure the implementation by NAFO of effective measures to prevent significant adverse impacts of bottom fishing activities on vulnerable marine ecosystems known to occur or likely to occur in the Regulatory Area based on the best available scientific information. For the purposes of this Chapter, NAFO will take into account the guidance provided by the FAO in the framework of the Code of Conduct for Responsible Fisheries and any other internationally agreed standards, as appropriate.
2. The term ‘bottom fishing activities’ means bottom fishing activities where the fishing gear is likely to contact the seafloor during the normal course of fishing operations.
3. The term "existing bottom fishing areas" means that portion of the Regulatory Area where bottom fishing has historically occurred and is defined by the coordinates shown in Table 1 and illustrated in Figure 3.
4. The term "new bottom fishing areas" means all other areas within the Regulatory Area which are not defined as existing bottom fishing areas.
5. The term “vulnerable marine ecosystems” has the same meaning and characteristics as those contained in paragraphs 42 and 43 of the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas.
6. The term VME indicator species refers to species of coral identified as antipatharians, gorgonians, lophelia, and sea pen fields; cerianthid anemone fields; and sponges that constitute sponge grounds or aggregations, and other VME elements.
7. The term "significant adverse impacts" has the same meaning and characteristics as those described in paragraphs 17-20 of the FAO International Guidelines for the Management of Deep Sea Fisheries in the High Seas.
8. The term “exploratory fisheries” means all bottom fishing activities outside of the existing bottom fishing area (footprint), or if there are significant changes to the conduct or technology of existing bottom fishing activities within the footprint.
9. The term “encounter” means catch of a VME indicator species above threshold levels as set out in Article 6bis, paragraph 3. Any encounter with a VME indicator species or merely detecting its presence is not sufficient to identify a VME. That identification should be made on a case-by-case basis through assessment by relevant bodies.

### **Article 2bis Seamount, Coral, and Sponge Protection Zones**

1. Until December 31, 2014, no vessel shall engage in bottom fishing activities in the areas defined by connecting the following coordinates (in numerical order and back to coordinate 1).

Area	Coordinate 1	Coordinate 2	Coordinate 3	Coordinate 4
Fogo Seamounts 1	42°31'33"N 53°23'17"W	42°31'33"N 52°33'37"W	41°55'48"N 53°23'17"W	41°55'48"N 52°33'37"W
Fogo Seamounts 2	41°07'22"N 52°27'49"W	41°07'22"N 51°38'10"W	40°31'37"N 52°27'49"W	40°31'37"N 51°38'10"W
Orphan Knoll	50°00'30"N 45°00'30"W	51°00'30"N 45°00'30"W	51°00'30"N 47°00'30"W	50°00'30"N 47°00'30"W
Corner Seamounts	35°00'00"N 48°00'00"W	36°00'00"N 48°00'00"W	36°00'00"N 52°00'00"W	35°00'00"N 52°00'00"W
Newfoundland Seamounts	43°29'00"N 43°20'00"W	44°00'00"N 43°20'00"W	44°00'00"N 46°40'00"W	43°29'00"N 46°40'00"W
New England Seamounts	35°00'00"N 57°00'00"W	39°00'00"N 57°00'00"W	39°00'00"N 64°00'00"W	35°00'00"N 64°00'00"W

2. A request to conduct exploratory bottom contact fishing, in the areas defined by paragraph 1 shall be in accordance with the Exploratory Protocol for New Fishing Areas (Annex XXV). In addition to the protocol, vessels fishing in the areas defined in paragraph 1, shall have a scientific observer onboard.
3. If vessels fishing in the areas defined in paragraph 1 encounter a VME indicator species, as defined in paragraph 3 of Article 6bis of Chapter Ibis, interim encounter provisions as set out in paragraph 2 of Article 6bis of Chapter Ibis will apply.
4. Until December 31, 2014, no vessel shall engage in bottom fishing activities in the following area in Division 3O defined by connecting the following coordinates (as illustrated in Figure 1).

Point No.	Latitude	Longitude
1	42° 53' 00" N	51° 00' 00" W
2	42° 52' 04" N	51° 31' 44" W
3	43° 24' 13" N	51° 58' 12" W
4	43° 24' 20" N	51° 58' 18" W
5	43° 39' 38" N	52° 13' 10" W
6	43° 40' 59" N	52° 27' 52" W
7	43° 56' 19" N	52° 39' 48" W
8	44° 04' 53" N	52° 58' 12" W
9	44° 18' 38" N	53° 06' 00" W
10	44° 18' 36" N	53° 24' 07" W
11	44° 49' 59" N	54° 30' 00" W
12	44° 29' 55" N	54° 30' 00" W
13	43° 26' 59" N	52° 55' 59" W
14	42° 48' 00" N	51° 41' 06" W
15	42° 33' 02" N	51° 00' 00" W

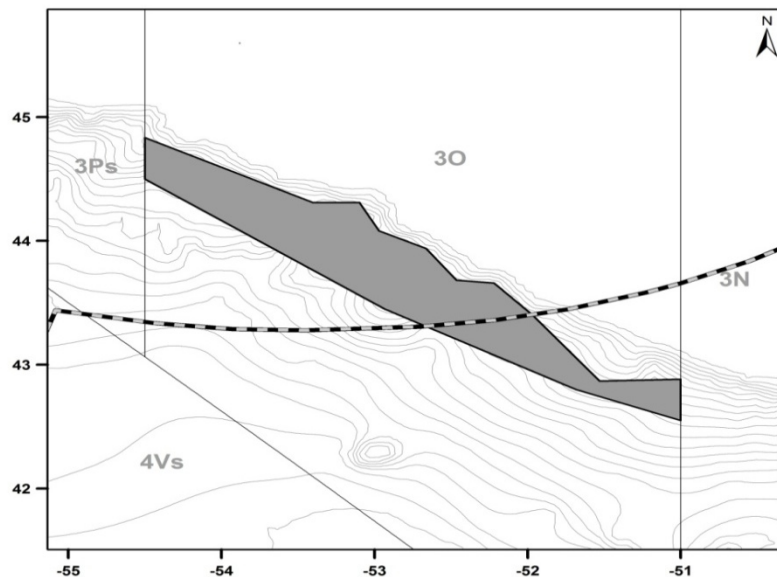


Figure 1. Polygon Delineating Area of 3O Coral Closure referred to in Article 2bis paragraph 4.

5. Until December 31, 2014, no vessel shall engage in bottom fishing activities in the areas defined by connecting the following coordinates (as illustrated in Figure 2).

Area	Description	Point No.	Latitude	Longitude
1	Tail of the Bank	1.1	44° 02' 53.88" N	48° 49' 9.48" W
		1.2	44° 21' 31.32" N	48° 46' 48" W
		1.3	44° 21' 34.56" N	48° 50' 32.64" W
		1.4	44° 11' 48.12" N	48° 50' 32.64" W
		1.5	44° 02' 54.6" N	48° 52' 52.32" W
2	Flemish Pass/ Eastern Canyon	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° 07' 1.56" N	47° 30' 36.36" W
		2.10	45° 49' 6.24" N	47° 41' 17.88" W
		2.11	45° 19' 43.32" N	48° 29' 14.28" W
		2.12	44° 53' 47.4" N	48° 49' 32.52" W
3	Beothuk Knoll	3.1	45° 49' 10.2" N	46° 06' 2.52" W
		3.2	45° 59' 47.4" N	46° 06' 2.52" W
		3.3	45° 59' 47.4" N	46° 18' 8.28" W
		3.4	45° 49' 10.2" N	46° 18' 8.28" W
4	Eastern Flemish Cap	4.1	46° 48' 35.28" N	43° 20' 51.72" W
		4.2	47° 03' 58.68" N	43° 20' 51.72" W
		4.3	47° 03' 58.68" N	43° 34' 16.32" W
		4.4	46° 48' 35.28" N	43° 34' 16.32" W
5	Northeast Flemish Cap	5.1	47° 47' 46.00" N	43° 29' 07.00" W
		5.2	47° 40' 54.47" N	43° 27' 06.71" W
		5.3	47° 35' 57.48" N	43° 43' 9.12" W
		5.4	47° 51' 14.4" N	43° 48' 35.64" W
		5.5	48° 27' 19.44" N	44° 21' 7.92" W
		5.6	48° 41' 37.32" N	43° 45' 08.08" W
		5.7	48° 37' 13.00" N	43° 41' 24.00" W
		5.8	48° 30' 15.00" N	43° 41' 32.00" W
		5.9	48° 25' 08.00" N	43° 45' 20.00" W
		5.10	48° 24' 29.00" N	43° 50' 50.00" W
		5.11	48° 14' 20.00" N	43° 48' 19.00" W
		5.12	48° 09' 53.00" N	43° 49' 24.00" W
6	Sackville Spur	6.1	48° 18' 51.12" N	46° 37' 13.44" W
		6.2	48° 28' 51.24" N	46° 08' 33.72" W
		6.3	48° 49' 37.2" N	45° 27' 20.52" W
		6.4	48° 56' 30.12" N	45° 08' 59.99" W
		6.5	49° 00' 9.72" N	45° 12' 44.64" W
		6.6	48° 21' 12.24" N	46° 39' 11.16" W
7	Northern Flemish Cap	7.1	48° 20' 29.76" N	44° 54' 38.16" W
		7.2	48° 25' 2.28" N	44° 54' 38.16" W
		7.3	48° 25' 2.28" N	45° 17' 16.44" W
		7.4	48° 20' 29.76" N	45° 17' 16.44" W
8	Northern Flemish Cap	8.1	48° 35' 56.4" N	45° 05' 35.52" W
		8.2	48° 40' 9.84" N	45° 05' 35.52" W
		8.3	48° 40' 9.84" N	45° 11' 44.88" W
		8.4	48° 35' 56.4" N	45° 11' 44.88" W

9	Northern Flemish Cap	9.1	48° 34' 23.52" N	45° 26' 18.96" W
		9.2	48° 36' 55.08" N	45° 31' 15.96" W
		9.3	48° 30' 18.36" N	45° 39' 42.48" W
		9.4	48° 27' 30.6" N	45° 34' 40.44" W
10	Northwest Flemish Cap	10.1	47° 47' 17.16" N	46° 17' 27.96" W
		10.2	47° 58' 42.24" N	46° 06' 43.92" W
		10.3	48° 01' 6.6" N	46° 12' 3.96" W
		10.4	47° 49' 41.52" N	46° 22' 48" W
11	Northwest Flemish Cap	11.1	47° 25' 48" N	46° 21' 23.76" W
		11.2	47° 30' 1.44" N	46° 21' 23.76" W
		11.3	47° 30' 1.44" N	46° 27' 33.12" W
		11.4	47° 25' 48" N	46° 27' 33.12" W

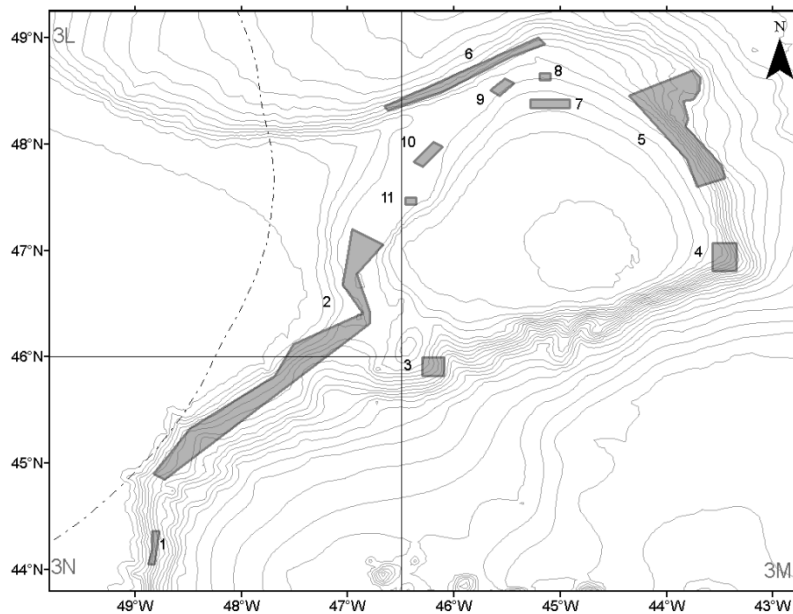


Figure 2. Polygons Delineating Areas of Higher Sponge and Coral Concentrations referred to in Article 2bis paragraph 5.

6. The measures referred to in Article 2bis paragraph 5 shall be reviewed in 2014 by the Fisheries Commission, taking account of the advice from the Scientific Council and the Working Group of Fisheries Managers and Scientists, and a decision shall be taken on future management measures.
7. Contracting Parties are encouraged to the extent possible to record all coral and sponge catch in their annual government and/or industry research programs and to consider non-destructive means for the long-term monitoring of coral and sponged in the closed areas.

### Article 3bis - Map of existing bottom fishing areas (footprint)

The comprehensive map of existing bottom fishing areas (as delineated by the coordinates shown in Table 1 and illustrated in Figure 3) shall be revised regularly to incorporate any new relevant information. Contracting Parties may, in the future, consider the possibility of refining the comprehensive map on the basis of haul by haul information, if available.

Table 1. Boundary points delineating the eastern side of the footprint in the NRA. The Canadian EEZ boundary delineates the western side of the footprint map (see Figure 3).

Point No.	Latitude	Longitude	Point No.	Latitude	Longitude
1	48°17'39"N	EEZ boundary <sup>1</sup>	26	46°26'32"N	46°58'53"W
2	48°16'51"N	47°25'37"W	27	46°27'40"N	47°12'01"W
3	48°19'15"N	46°53'48"W	28	46°04'15"N	47°09'10"W
4	48°29'21"N	46°21'17"W	29	46°04'53"N	47°31'01"W
5	48°32'43"N	46°08'04"W	30	45°48'17"N	47°37'16"W
6	48°48'10"N	45°37'59"W	31	45°33'14"N	47°52'41"W
7	48°59'54"N	45°17'46"W	32	45°27'14"N	48°10'15"W
8	49°02'20"N	44°53'17"W	33	45°16'17"N	48°26'50"W
9	48°56'46"N	44°33'18"W	34	44°54'01"N	48°43'58"W
10	48°33'53"N	44°10'25"W	35	44°33'10"N	48°50'25"W
11	48°08'29"N	43°57'28"W	36	44°09'57"N	48°48'49"W
12	47°42'00"N	43°36'44"W	37	43°50'44"N	48°52'49"W
13	47°12'44"N	43°28'36"W	38	43°34'34"N	48°50'12"W
14	46°57'14"N	43°26'15"W	39	43°23'13"N	49°03'57"W
15	46°46'02"N	43°45'27"W	40	43°03'48"N	48°55'23"W
16	46°38'10"N	44°03'37"W	41	42°54'42"N	49°14'26"W
17	46°27'43"N	44°20'38"W	42	42°48'18"N	49°32'51"W
18	46°24'41"N	44°36'01"W	43	42°39'49"N	49°58'46"W
19	46°19'28"N	45°16'34"W	44	42°37'54"N	50°28'04"W
20	46°08'16"N	45°33'27"W	45	42°40'57"N	50°53'36"W
21	46°07'13"N	45°57'44"W	46	42°51'48"N	51°10'09"W
22	46°15'06"N	46°14'21"W	47	42°45'59"N	51°31'58"W
23	45°54'33"N	46°24'03"W	48	42°51'06"N	51°41'50"W
24	45°59'36"N	46°45'33"W	49	43°03'56"N	51°48'21"W
25	46°09'58"N	46°58'53"W	50	43°22'12"N	EEZ boundary <sup>2</sup>

<sup>1</sup>approximately 47°47'45"W

<sup>2</sup>approximately 52°09'46"W

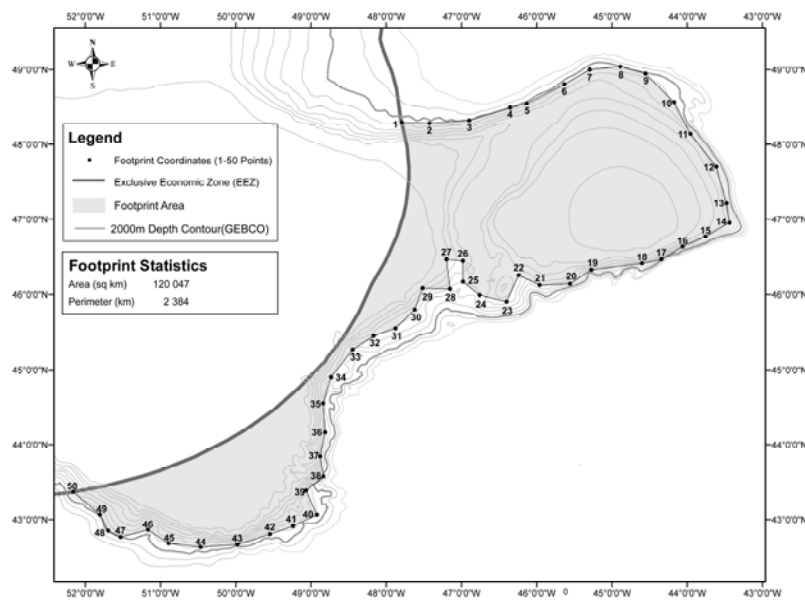


Figure 3. NAFO Regulatory Area footprint map (shaded).

#### **Article 4bis - Bottom fishing activities in new fishing areas**

1. Exploratory fisheries shall be conducted in accordance with the exploratory fisheries protocol set out in Parts I-IV of Annex XXV.
2. Contracting Parties shall communicate a 'Notice of Intent to Undertake Exploratory Fishing' (Annex XXV, Parts I and IV) to the Executive Secretary for forwarding to the Scientific Council for review and to all Contracting Parties for information, together with the preliminary impact assessment referred to in Article 5bis, paragraph 2 (i), below.
3. The exploratory bottom fishing shall be subject to the assessment procedure set forth in Article 5bis, with the understanding that particular care will be taken in the evaluation of risks of the significant adverse impact on vulnerable marine ecosystems, in line with the precautionary approach.
4. Prior to commencing new bottom fishing activities based upon the results of exploratory fisheries conducted in the prior two years, the Fisheries Commission shall review the assessments undertaken and the results of the fishing protocols implemented by the participating fleets and take decision in accordance with Article 5bis.
5. Contracting Parties shall ensure that vessels flying their flag conducting exploratory fisheries have a scientific observer on board.
6. Contracting Parties shall provide promptly an 'Exploratory Fishing Trip Report' of the results of such activities to the Executive Secretary for circulation to the Scientific Council and all Contracting Parties.

#### **Article 5bis - Assessment of bottom fishing**

1. The Scientific Council, with the co-operation of Contracting Parties, shall identify, on the basis of best available scientific information, vulnerable marine ecosystems in the Regulatory Area and map sites where these vulnerable marine ecosystem are known to occur or likely to occur and provide such data and information to the Executive Secretary for circulation to all Contracting Parties.
2. Assessment for proposed bottom fishing activities in the Regulatory Area shall follow the procedures below:
  - i. If proposed bottom fishing activities is outside of the existing bottom fishing area (footprint), or if there are significant changes to the conduct or technology of existing bottom fisheries within the footprint, or new scientific information indicating a VME in a given area, the Contracting Party proposing to participate in bottom fishing shall submit to the Executive Secretary information and a preliminary assessment of the known and anticipated impacts of its bottom fishing activities on vulnerable marine ecosystems no less than two weeks in advance of the opening of the June meeting of the Scientific Council. Assessments should address the elements as set forth in Part V of Annex XXV. The Executive Secretary shall promptly forward these submissions to the Scientific Council and the Fisheries Commission.
  - ii. The submission of such information shall be carried out in accordance with guidance developed by the Scientific Council, or, in the absence of such guidance, to the best of the Contracting Party's ability.
  - iii. The Scientific Council shall undertake an assessment, according to procedures and standards it develops, and provide advice to the Fisheries Commission as to whether the proposed bottom fishing activity would have significant adverse impacts on vulnerable marine ecosystems and, if so, whether mitigation measures would prevent such impacts. The Scientific Council may use in its assessment additional information available to it, including information from other fisheries in the region or similar fisheries elsewhere.
3. The Working Group of Fishery Managers and Scientists on VMEs shall examine the advice of the Scientific Council and shall make recommendations to the Fisheries Commission in accordance with its mandate.
4. The Fisheries Commission shall, taking account of advice and recommendations provided by the Scientific Council and the Working Group of Fishery Managers and Scientists, concerning bottom fishing activities, including data and information arising from reports pursuant to Article 6bis adopt conservation and management measures to prevent significant adverse impacts on vulnerable marine ecosystems. These may include:

- i. allowing, prohibiting or restricting bottom fishing activities;
  - ii. requiring specific mitigation measures for bottom fishing activities;
  - iii. allowing, prohibiting or restricting bottom fishing with certain gear types, or changes in gear design and/or deployment; and/or
  - iv. any other relevant requirements or restrictions to prevent significant adverse impacts to vulnerable marine ecosystems.
5. Fisheries Commission will periodically ask Scientific Council and the Working Group of Fishery Managers and Scientists on VMEs to provide advice to Fisheries Commission on the timing and requirement for assessment of a previously assessed bottom fishery.

### **Article 6bis – Interim Encounter Provision**

Contracting Parties shall require that vessels flying their flag and conducting bottom fishing activities within the Regulatory Area abide by the following rules, where, in the course of fishing operations, evidence of vulnerable marine ecosystems is encountered:

1. Existing fishing areas
  - i. Vessels shall quantify catch of VME indicator species.
  - ii. if the quantity of VME indicator species caught in a fishing operation (such as trawl tow or set of a gillnet or longline) is beyond the threshold defined in paragraph 3 below, the following shall apply:
    - The vessel master shall report the incident to the flag State Contracting Party, which without delay shall forward the information to the Executive Secretary, including the position that is provided by the vessel, either the end point of the tow or set or another position that is closest to the exact encounter location, the VME indicator species encountered, and the quantity (kg) of VME indicator species encountered. Contracting Parties may if they so wish require their vessels to also report the incident directly to the Executive Secretary. The Executive Secretary shall archive the information and report it to all Contracting Parties. The Contracting Parties shall immediately alert all fishing vessels flying their flag.
    - The vessel master shall cease fishing and move away at least 2 nautical miles from the endpoint of the tow/set in the direction least likely to result in further encounters. The captain shall use his best judgment based on all available sources of information.
    - The Executive Secretary shall make an annual report on single and multiple encounters in discrete areas within existing fishing areas to the Scientific Council. The Scientific Council shall evaluate and, on a case-by-case basis the information and provide advice to the Fisheries Commission on whether a VME exists. The advice shall be based on annually updated assessments of the accumulated information on encounters and the Scientific Council's advice on the need for action, using FAO guidelines as a basis. The Fisheries Commission shall consider the advice in accordance with Article 5bis, paragraph 4.
2. Unfished areas that are defined as 'New bottom fishing areas'
  - i. Vessels shall quantify catch of VME indicator species. Observers deployed shall identify corals, sponges and other organisms to the lowest possible taxonomical level. The sampling protocol found in Annex XXV shall be used (templates).
  - ii. If the quantity of VME indicator species caught in a fishing operation (such as trawl tow or set of a gillnet or longline) is beyond the threshold defined in paragraph 3 below, the following shall apply:
    - The vessel master shall report the incident without delay to its flag state Contracting Party, which shall forward the information to the Executive Secretary, including the position that is provided by the vessel, either the end point of the tow or set or another position that is closest to the exact encounter location, the VME indicator species encountered, and the quantity (kg) of VME indicator species

encountered. Contracting Parties may if they so wish require their vessels to also report the incident directly to the Executive Secretary. The Executive Secretary shall archive the information and without delay transmit it to all Contracting Parties. The Contracting Parties shall issue an immediate alert to all vessels flying their flag.

- The vessel shall cease fishing and move away at least 2 nautical miles from the endpoint of the tow/set in the direction least likely to result in further encounters. The captain shall use his best judgment based on all available sources of information.
  - The Executive Secretary shall at the same time request Contracting Parties to implement a temporary closure of a two mile radius around the reporting position. The reporting position is that provided by the vessel, either the endpoint of the tow/set or another position that the evidence suggests is closest to the exact encounter location.
  - The Executive Secretary shall make an annual report on single and multiple encounters in discrete areas within existing fishing areas to the Scientific Council. This report should also include reports from the exploratory fishing activities conducted in the last year. The Scientific Council at its next meeting shall examine the temporary closure. If the Scientific Council advises that the area consists of a vulnerable marine ecosystem the Executive Secretary shall request Contracting Parties to maintain the temporary closure until such time that the Fisheries Commission has adopted conservation and management measures in accordance with Article 5bis, paragraph 4 in Chapter Ibis. If the Scientific Council does not conclude that the proposed area is a VME, the Executive Secretary shall inform Contracting Parties which may re-open the area to their vessels.
  - The Executive Secretary shall make an annual report on archived reports from encounters in *new fishing areas* to the Scientific Council. This report shall also include reports from the exploratory fishing activities that were conducted in the last year. The Scientific Council shall evaluate the information and provide advice to the Fisheries Commission on the appropriateness of temporary closures and other measures. The advice should be based on annually updated assessments of the accumulated information on encounters as well as other scientific information. The Scientific Council's advice should reflect provisions outlined in the FAO guidelines. The Fisheries Commission shall consider the advice in accordance with Article 5bis, paragraph 4.
3. For both existing and new fishing areas, an encounter with primary VME indicator species is defined as a catch per set (e.g. trawl tow, longline set, or gillnet set) of more than 60 kg of live coral. For new fishing areas, an encounter with primary VME indicator species is defined as a catch per set (e.g. trawl tow, longline set, or gillnet set) of more than 400 kg of sponges. For existing fishing areas (the "footprint"), an encounter with primary VME indicator species is defined as a catch per set (e.g. trawl tow, longline set, or gillnet set) of more than 600 kg of sponges. These thresholds are set on a provisional basis and may be adjusted as experience is gained in the application of this measure.

### **Article 7bis - Review**

The provisions of this chapter shall be reviewed by the Fisheries Commission at its Annual Meeting in 2014.

**Annex 18. Proposal for a Reassessment of the Impacts of NAFO Managed Fisheries  
on Known or Likely Vulnerable Marine Ecosystems)**  
(FC Working Paper 11/24, Revised ~~now~~ FC Doc. 11/12)

Whereas assessments of the impacts of NAFO managed fisheries on known or likely vulnerable marine ecosystems were carried out by the deadline agreed to in United Nations General Assembly Resolution 61-105;

Whereas Article 4bis, paragraphs 2i, 2iii, and 5 of Chapter 1bis outline the assessment of such fishery impacts and the circumstances that would warrant reassessments;

Whereas the Scientific Council has provided in 2011 some information on the timing and frequency of reassessments;

The Fisheries Commission resolves that:

- 1) In accordance with Article 4bis 5, the Scientific Council, in collaboration with the Working Group of Fishery Managers and Scientist on Vulnerable Marine Ecosystems (WGFMS-VME), will conduct a reassessment of NAFO bottom fisheries by 2016 and every five years thereafter;
- 2) In accordance with Article 4bis 2iii, the reassessment will include advice from the Scientific Council whether bottom fisheries would have significant adverse impacts on vulnerable marine ecosystems;
- 3) In accordance with Article 4bis 3, the WGFMS-VME will examine the advice on the reassessments and make recommendations to the Fisheries Commission, in accordance with its mandate; and
- 4) The Scientific Council be requested to develop a workplan for completing the initial reassessment and identifying the resources and information needed to do so.

**Annex 19. Proposal to amend NCEM Article 15.2**  
(STACTIC Working Paper 11/01, Revision 2 **now** FC Doc. 11/23)

**Background**

In the current text it states:

All fishing for shrimp in Division 3L shall take place in depths greater than 200 meters. The fishery in the Regulatory Area shall be restricted to an area east of a line bound by the following co-ordinates:

1. 46°00'N / 47°53'W
2. 46°40'N / 47°20'W
3. 47°19'N / 47°43'W.

The line did not accurately reflect the 200 meters depth contour.

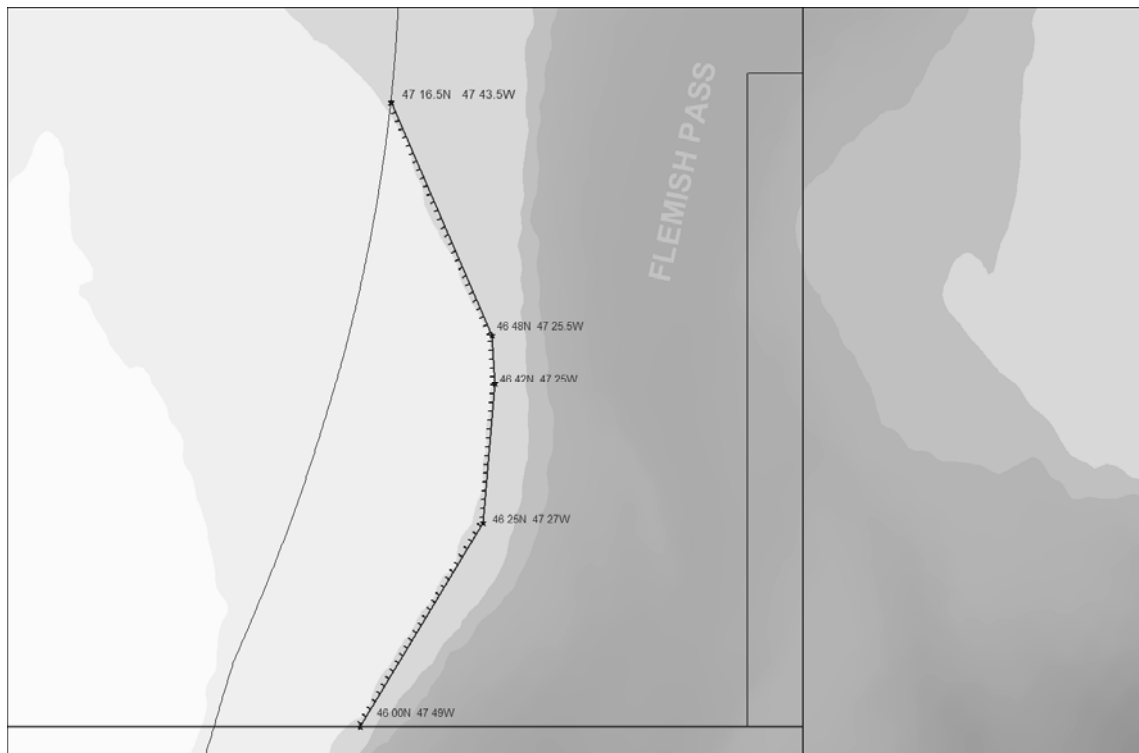
**Proposal to amend Article 15.2**

New text:

All fishing for shrimp in Division 3L shall take place in depths greater than 200 meters. The fishery in the Regulatory Area shall be restricted to an area east of a line bound by the following co-ordinates:

1. 46°00'00"N / 47°49'00"W
2. 46°25'00"N / 47°27'00"W
3. 46°42'00"N / 47°25'00"W
4. 46°48'00"N / 47°25'50"W
5. 47°16'50"N / 47°43'50"W

Annex 1. The line being proposed



**Annex 20. Modifications to Shark Bycatch Reporting**  
(STACTIC Working Paper 11/10, Revision 3 **now** FC Doc. 11/24)

Recognizing the vulnerability of sharks (all species of sharks, skates, rays, and chimaeras of the Class *Chondrichthyes*, as defined in the FAO International Plan of Action (IPOA) for Sharks) to overfishing, and also recognizing the need to improve the shark bycatch reporting provisions in NAFO's Conservation and Enforcement Measures (CEMs) to obtain species specific shark bycatch information, the United States offers the following proposal to amend Article 27, paragraph 1(f).

Article 27, paragraph 1(f):

*Add underlined text to existing paragraph 1(f) as follows:*

f) The total quantity of species reported under a), b), c), d) and e) for which the total live weight by species is less than ~~one ton~~ 100 kg may be reported under the 3 alpha code "MZZ" (marine fish not specified), except in the case of sharks. All sharks shall be reported at the species level under their corresponding 3 alpha code, to the extent possible. When species specific reporting is not possible, shark species shall be recorded as either large sharks (SHX) or dogfishes (DGX), as appropriate and in accordance with the 3-alpha codes presented in Annex II.

**Annex 21. NAFO CEM – Annex XX(c) - Product Form Codes**  
(STACTIC Working Paper 11/14, Revised now FC Doc. 11/14)

The list of product form codes in Annex XX(c) is not exhaustive enough to cover all the fish product forms on fishing vessels.

It is therefore requested to add additional codification in order to include all traditional product forms produced on board.

**Possible amendment**

Replace the actual Annex XX (c) with the table below.

**Annex XX(c)**

**Product Form Presentation**

**3-Alpha Codes**

<b>3-Alpha</b>	<b>Presentation</b>	<b>Description</b>
CBF	Cod butterfly (escalado)	HEA with skin on, spine on, tail on
CLA	Claws	Claws only
DWT	ICCAT code	Gilled, gutted, part of head off, fins off
FIL	Filletted	HEA + GUT + TLD + bones off Each fish originates two fillets
FIS	Filletted and skinned fillets	FIL+SKI Each fish originates two fillets not joined by any part
FSB	Filletted with skin and bones	Filletted with skin and bones on
FSP	Filletted skinned with pinbone on	Filletted with skin removed and pinbone on
GHT	Gutted headed and tailed	GUH+TLD
GUG	Gutted and gilled	Guts and gills removed
GUH	Gutted and headed	Guts and head removed
GUL	Gutted liver in	GUT without removing liver parts
GUS	Gutted headed and skinned	GUH+SKI
GUT	Gutted	All guts removed
HEA	Headed	Heads off
HET	Headed and tailed	Heads and tails off
JAP	Japanese cut	Transversal cut removing all parts from head to belly
JAT	Tailed Japanese cut	Japanese cut with tail removed
LAP	Lappen	Double fillet, HEA, skin + tails + fins ON
LVR	Liver	Liver only
OTH	Other	Any other presentation
ROE	Roe (s)	Roe(s) only
SAD	Salted dry	Headed with skin on, spine on, tail on and salted dry
SAL	Salted wet light	CBF + salted
SGH	Salted, gutted and headed	GUH + salted
SGT	Salted gutted	GUT+salted
SKI	Skinned	Skin off
SUR	Surimi	Surimi
TAL	Tail	Tails only
TLD	Tailed	Tail off
TNG	Tongue	Tongue only
TUB	Tube only	Tube only (Squid)
WHL	Whole	No processing
WNG	Wings	Wings only

**Annex 22. Proposal to improve NCEM – Vessel type**  
(STACTIC Working Paper 11/17 **now** FC Doc. 11/26)

**Background:**

It is very difficult to plan and carry out an inspection and the surveillance by inspectors in the RR NAFO when a fishing vessel type unknown. The position data and some catch reports are the basic information held by the inspectors. It is possible to specify the type of vessel in the report "Notification" (Annex IV.A NCEM) but this requirement is not binding.

The definition “fishing vessel” (Article 2.1 NCEM) covers a wide range of vessels:

*“fishing vessel” means any vessel which is or has engaged in fishing activities, including fish processing vessels and vessels engaged in transshipment or any activity in preparation for or related to fishing, including experimental or exploratory fishing”.*

This means that the supplying vessels, bunkering and other non-fishing vessels that support the fishing vessels are classified as "fishing vessels". However, codes of such vessels are absent in the Table “Fishing vessel Codes – Main Vessel Type” (Annex V.A NCEM).

**Proposal**

1. To bring the table “Fishing Vessel Codes – Main Vessel Type” (Annex V.A NCEM) into compliance with the definition “fishing vessel” it is necessary to supplement the table with at least the following FAO vessel codes:

Vessel type	Standard Abbreviation*
Support vessel	VOS
Bunker	VOB
Other non-fishing vessels	VOX

\* International Standard Classification of Fishery Vessels

2. To make the following change to the Annex IV.A NCEM (shown in bold):

Data element	Code	Mandatory /Optional	Remarks
Vessel Type	TP	<b>M</b>	Vessel characteristic, FAO vessel code (Annex V.A)

**Annex 23. Amendment to NAFO CEM Annex XIX**  
(STACTIC Working Paper 11/24 **now** FC Doc. 11/27)

## **Introduction**

Based on investigation performed by the Secretariat at the request of STACTIC regarding 'best practices' for HTTPs communication, it would seem appropriate to proceed to implement a system of security certificate management that accounts for the revocation of certificates using Certificate Revocation Lists (CRL), which is not currently the practice followed by the NAFO Secretariat. The consequence would be that:

1. All FMCs would be required to use certificates from a recognized Certificate Authority for VMS communication
2. The Secretariat would need to purchase a 3rd party-signed certificate, and distribute the public certificate to all inspection CPs and communicating FMCs
3. Update the current VMS software to accommodate the changes

Furthermore, it would seem necessary to update the text in NCEM Annex XIX (Provisions on security) para. 4.4. to reflect the need to ensure that public certificates more completely identify and validate the submitting party.

(amended text underlined):

### ***Annex XIX - 4.4 Communication Security***

*Appropriate encryption protocols duly tested by the Secretariat and approved by the Fisheries Commission shall be applied to ensure confidentiality and authenticity. Key management policy shall be in place to support the use of cryptographic techniques. In particular, the integrity of the PKI (public key infrastructure) will be guaranteed by ensuring that digital certificates correctly identify and validate the party submitting the information.*

**Annex 24. Communication of catches - Editorial correspondence for CA, OB, RJ and  
US field codes - NAFO CEM – Annexes X; XXa and XXIIc**  
(STACTIC Working Paper 11/25, Revision 2 **now** FC Doc. 11/28)

The communication of catch under the NAFO CEM is based on various electronic field codes to be fulfilled and sent by the Master and the Observer. The implementation of the system would gain from clarity and simplification in the definition and the handling of these field codes.

On the basis of FC Doc 10/19 adopted in 2010, it is suggested to standardize the editorial definition of the CA, OB, RJ and US field codes wherever they appear in Annexes X, XXa, and XXIIc.

To this scope, proposed amendments are detailed hereunder, for each of the field code concerned.

**1. Field code CA**

Assuming that the definition of the CA field code provided by FC Doc 10/19 should be used as unique standard definition of that field code in Annexes X, XXa and Annex XXIIc, as an activity detail, it is requested to adopt the following proposed amendments to the 2011 CEM:

**a) Annex XXa**

- On top of the right column: replace "Remarks" by "Requirement to the field"
- In point 1 (Daily Catch report - CAX) and point 2 (Observer report - OBR):
  - a) With reference to the CA field code, replace the "Requirement for the field" by the following text
 

*Activity detail; Catch retained onboard by species and by Division since last OBR report in kilograms rounded to the nearest 100 kilograms. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //CA/speciesspaceweightspacespeciesspaceweight//*
  - b) Delete footnote n° 2
  - c) For point 2, renumber the subsequent footnotes accordingly.

**b) Annex XXIIc**

- Under the "Activity details" section, replace the definition of the CA field code by the following text:
 

*Daily catch by species and by Division, retained on board, in kilograms live weight*
- Under the "Chapter VII" section, delete the row related to the CA field code

**2. Field code OB**

The OB field code always refers to the total quantity of fish on board by species at the moment of sending the hail message concerned.

Assuming that a unique edition of this definition would favour clarity, it is requested to adopt the following proposed amendments to the 2011 CEM:

**a) Annex X**

- With reference to the OB field code, replace the "Requirement for the field" by the following text:
  - a) in point 1 (Catch on Entry report - COE):

*Activity detail; Total quantity by species on board rounded to the nearest 100 kg, upon entry in the RA. Allow for several pairs of fields, consisting of (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //OB/speciesspaceweightspacspeciespaceweightspacspeciespaceweight//*

- b) in point 3 (Catch on crossing Boundary - COB)

*Activity detail; Total quantity by species on board rounded to the nearest 100 kg, upon crossing the 3L border. Allow for several pairs of fields, consisting of (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //OB/speciesspaceweightspacspeciespaceweightspacspeciespaceweight//*

- c) in point 5 (Catch on Exit - COX)

*Activity detail; Total quantity by species on board rounded to the nearest 100 kg, upon exit from the RA. Allow for several pairs of fields, consisting of (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //OB/speciesspaceweightspacspeciespaceweightspacspeciespaceweight//*

- d) in point 6 (POR message)

*Activity detail; Total quantity by species on board rounded to the nearest 100 kg, in advance of landing of the transhipped quantities. Allow for several pairs of fields, consisting of (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //OB/speciesspaceweightspacspeciespaceweightspacspeciespaceweight//*

#### **b) Annex XXIIc**

- With reference to the OB field code under the "Activity details" section, replace the definition by the following text:

*Total quantity by species on board the vessel at the moment of sending the hail message concerned in kilograms live weight*

### **3. Field codes RJ and US**

Assuming that the reporting by Division of discard (field code RJ) and undersized (field code US) fish in accordance with CEM Article 62.4 is an activity detail that should be part of the definition of each field code to favour clarity, it is requested to adopt the following proposed amendments to the 2011 CEM:

#### **a) Annex XXa**

- With reference to the RJ field code, replace the "Requirement for the field" by the following text

- a) in point 1 (Daily Catch report - CAX):

*Activity detail; Catch discarded by species and by Division since last CAX report, in kg rounded to the nearest 100 kg. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //RJ/speciesspaceweightspacspeciespaceweightspacspeciespaceweight//*

- b) in point 2 (Observer report - OBR)

*Activity detail; Catch discarded by species and by Division since last OBR report, in kg rounded to the nearest 100 kg. Allow for several pairs of fields, consisting of species (FAO 3 alpha*

*codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g.  
 //RJ/speciesspaceweightspacspeciesspaceweightspacspeciesspaceweight//*

- With reference to the US field code, replace the "Requirement for the field" by the following text:

- a) in point 1 (Daily Catch report - CAX):

*Activity detail; Undersize catch by species and by Division since last CAX report, in kg rounded to the nearest 100 kg. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g.  
 //US/speciesspaceweightspacspeciesspaceweightspacspeciesspaceweight//*

- b) in point 2 (Observer report - OBR)

*Activity detail; Undersize catch by species and by Division since last OBR report, in kg rounded to the nearest 100 kg. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g.  
 //US/speciesspaceweightspacspeciesspaceweightspacspeciesspaceweight//*

#### **b) Annex XXIIc**

- With reference to the field codes RJ and US under the "Chapter VII" section, move both lines to the "Activity details" section
- Replace the definition by the following text:

- a) with reference to the RJ field code

*Catch discarded by species and by Division in kilograms live weight*

- b) with reference to the US field code

*Undersize catch by species and by Division in kilograms live weight*

**Annex 25. Communication of catches - Daily declaration of discarded fish within the CAT message; Deletion of the CAX message; Identification of vessels with an observer on board - NAFO CEM –Chapter VII; Annexes X, XXa and XXIIc**  
(STACTIC Working Paper 11/26, Revision 2 now FC Doc. 11/29)

**1. Daily declaration of discarded fish by the Master, within the CAT message**

Catches retained on board must be reported on a daily basis by the Master (CAT message).

Discards are recorded in the fishing logbook (Annex VIII). They include the undersized fish which, in accordance with Article 14 of the NAFO CEM, must obligatorily and immediately be returned to the sea, without being subject to identification in the fishing logbook.

The reporting by the Master of discarded quantities, anytime such catch occur, on a daily basis along with the CAT message would improve transparency in fishing activities in NAFO waters, for the benefit of the management of the fisheries as well as in supporting a risk analysis approach for control purposes.

As a matter of simplification, since Masters are not committed to identify the undersize fish among the discarded quantities, it is logical that they should not be requested to edit a field code US in their CAT message. However, for management purposes, that US field code must still be provided by the compliance observer when on board, via the OBR report.

It is therefore proposed to add an RJ field code (discards) in the daily CAT message, following the proposed amendment:

**a) Annex X - point 2 (CAT message)**

- Insert the following row after the CA field code

Data element	Field code	Mandatory/Optional	Requirement for the field
Discarding	<b>RJ</b>	<b>M</b>	Activity detail; Catch discarded by species and by Division since last CAT report, in kg rounded to the nearest 100 kg. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //RJ/speciesweightspacesspeciesweightspacesspeciesweight//
Species			
Live weight			

**2. Deletion of the CAX message**

When the daily CAX message was introduced the intention was to increase the flow of information from the fishing vessel when operating without an observer onboard and the unique name “CAX” was meant to make a distinction between vessel with and without an observer onboard. As NAFO has now taken up daily catch reporting for all fisheries in the NAFO Regulatory Area, it is possible to delete this type of message by including the RJ field code in the daily CAT message, as all the information requested on a daily basis under Chapter VII (CAX message) is now compulsory for any vessel fishing in the NAFO Regulatory area.

The OBR report to be sent by the Observer is not affected.

It is proposed to adopt the following proposed amendments:

**a) Article 62, paragraph 6 – Replace the acronym CAX by CAT**

**b) Annex XXa**

- Delete the table under point 1: Daily Catch report – Chapter VII (CAX)
- Renumber the Observer report - OBR table accordingly

c) *Annex XXIIc*

- In the left column, replace "Chapter VII" by "Observer report – OBR"

**3. Identification of vessels with an observer on board**

For transparency in the fisheries activities in NAFO waters, it is necessary to introduce an indicator that a vessel is fishing with an observer onboard or not. To that end, a vessel carrying an observer should notify the presence of that observer in advance of its entry in the Regulatory area through a specific field code in their COE message.

It is proposed to adopt the following proposed amendments:

a) *Annex X*

- In point 1 "Catch on Entry" report, insert the following row after "directed species"

Data element	Field code	Mandatory/Optional	Requirement for the field
Observer on board	<b>OO</b>	<b>M</b>	Activity detail; "Yes" or "No"

b) *Annex XXIIc*

- Insert the following row after "Directed species"

Category	Data element	Field code	Type	Contents	Definition
	Observer on board	<b>OO</b>	Char*1	Y or N	Presence of a compliance observer on board

**Annex 26. Communication in case of defective VMS**  
(STACTIC Working Paper 11/28 **now** FC Doc. 11/30)

**NAFO CEM - Article 26 paragraph 5**

Although the VMS device should now ensure the communication of positions at least once every hour, it is noted from Article 26.5 that in case of defective VMS system on board, alternative reports must still be done "at least every 6 hours".

It is requested to reduce that alternative deadline from 6 to 4 hours.

**Possible amendment**

In CEM Article 26, paragraph 5, replace "6" by "4".

**Annex 27. Serious infringements**  
(STACTIC Working Paper 11/28 **now** FC Doc. 11/31)

It is noted from the NAFO CEM that prosecution of the following elements:

- Concealing, tampering with or disposing of evidence related to an investigation, including the break or tampering of seals put at sea by NAFO inspectors to secure evidence of infringements, and
- presentation of falsified documents or information

fall under the lack of collaboration of the master during inspection but are not considered as separate serious infringement in Article 37, paragraph 1.

It is requested to insert both items in Article 37 paragraph 1.

**Possible Amendment**

Add the following items in Article 37 (1):

k) Concealing, tampering with or disposing of evidence related to an investigation, including the breaking or tampering of seals or gaining access to sealed areas

l) Presentation of falsified documents or providing false information to an inspector that would prevent a serious infringement from being detected.

**Annex 28. Annual Compliance Review 2011**  
**(Compliance Report for Fishing Year 2010)**  
(STACTIC Working Paper 11/38, Revised now FC Doc. 11/33)

## 1. Introduction

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

The current 2011 NAFO compliance review utilizes information for the years 2004 to 2010 from the following sources: vessel monitoring system (VMS) and hail messages delivered by the vessels, 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 Executive Secretary.

## 2. Fishing effort in the NAFO Regulatory Area

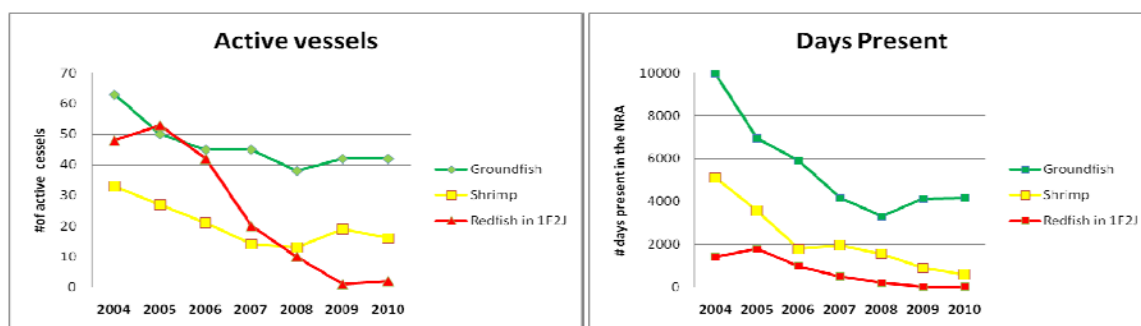
NAFO identifies three main fisheries: the groundfish (GRO - primarily in Div. 3KLMNO), shrimp (PRA - primarily in Div. 3LM) and pelagic redfish fisheries (RED - primarily in Div. 1F and 2J).

The fishing effort is measured by the number of active vessels and the days of presence by vessel per year in the NRA. Vessel-days are determined by the position reports transmitted by the vessels via the vessel's VMS system. The VMS reports are received by the Secretariat from the respective Fisheries Monitoring Centres (FMC) of the flag State Contracting Parties.

For the period 2004-2010, the overall fishing activities in the NRA show a declining trend, from 134 active vessels in 2004 to 53 in 2010, representing a 60 % decrease.

The decline is even more pronounced in terms of overall fishing days, with a 71% decrease for the same period, from 16,480 days in 2004 to 4,768 days in 2010. The average number of days each vessel operates in the NRA declined as well, from 123 days in 2004 to 90 days in 2010.

Figure 1 illustrates the evolution described above for each of the major fisheries. The general decline since 2004 is observed for the three fisheries, with the pelagic redfish fishery being close to disappearance in 2009. Relative stabilisation is noted since 2009. NAFO fisheries remain dominated by the groundfish category. In 2010, groundfish accounts for 82% of the total fishing effort, shrimp for around 17 %, and the pelagic redfish fishery represents less than 1 percent.



**Figure 1.** Number of vessels and vessel-days in the NAFO Regulatory Area by fishery type.

<sup>1</sup>For the purpose of this compliance analysis, fishing trips which ended in 2010 were considered. "Fishing trip means the time beginning when the vessel enters the Regulatory Area and ending when the vessel leaves the Regulatory Area and all catch on board from the Regulatory Area is unloaded or transhipped (Article 2.5 of the NCEM)."

### 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 reports (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 (through the FMCs) in practically real-time. When technical difficulties were encountered by the vessels in complying with the position reporting requirements, the position reports were transmitted electronically by other means (by email) and promptly entered into the VMS database by the Secretariat. 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 (positions and hails) were being received by the Secretariat and CPs with inspection presence in real-time through satellite technology.

#### *Hail messages and catch reporting by vessels*

Vessels are required to report on their fishing trips by reporting various messages detailing their presence and the results of their fishing activity in the NRA. Catches are reported through the VMS channel by Catch-on-Entry (COE), daily catch notification (CAT)<sup>2</sup> and Catch-on-Exit (COX) messages.

COE and COX reports should account for each fishing trip. Ideally, a 100% coverage would mean that all expected COEs and paired up with all expected COXs. Figure 6 and Table 1 show the percentage coverage of hail messages (COEs and COXs). Since 2005, there has been a high degree of compliance with regards to VMS reporting (between 92% in 2006 and 98% in 2009). In 2010, the VMS hail reports accounted for 95% coverage of the fishing effort. Like the position reports, the timeliness of the transmission of hail reports was not an issue.

#### *At-sea inspections (Figure 2 and Table 5)*

The total number of at-sea inspections decreased from 401 inspections in 2004 to 214 inspections in 2010. This evolution follows the observed decrease in fisheries during the same period.

Although there is no target for at-sea inspection rates, figures show that the frequency of at-sea inspections in relation to the effort (number of inspections per vessel-days per year) actually increased from 2.4 percent in 2004 to 4.5 percent in 2010. That frequency has remained fairly stable since 2006, for groundfish and shrimp fisheries ranging from 4.2 to 4.8 percent, with a relatively sharper increase for pelagic redfish. There were no at-sea inspections of pelagic redfish trips in 2009 and 2010.

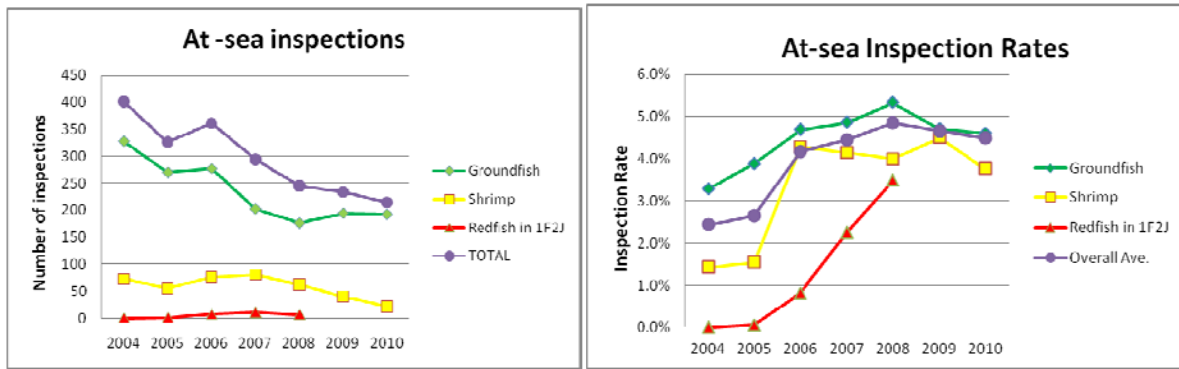
This evolution of inspection rates indicates that at-sea inspections were carried out in proportion to the fishing effort for each of the fishing category, suggesting equal treatment and equitable distribution of inspections.

The current report does not include inspection rates among Contracting Parties to evaluate whether inspections are being carried out in a manner that would ensure equal treatment between all Contracting Parties consistent with Article 29.6 of the 2011 NCEM. STACTIC has previously discussed methods used to calculate the objectivity of inspections, but suggested that the existing objectivity formula used is not very useful. The current report does not include inspection rates among Contracting Parties to evaluate whether inspections are being carried out in a manner that would ensure equal treatment between all Contracting Parties consistent with Article 29.6 of the 2011 NCEM.

---

<sup>2</sup> In 2010, daily catch reporting requirement (CAT) applied only to shrimp fisheries and a weekly reporting was required for all other fisheries. The CAT reports were not evaluated in the context of fishing trips. Instead, the catch reports derived from fishing trips were evaluated by examining the COE and COX pairs. The dates of the COE and COX gave an indication of the duration of the fishing trips. In 2011, it became a requirement for vessels to report the daily catch by stock and division for all types of fisheries.

STACTIC has previously discussed methods used to calculate the objectivity of inspections, but suggested that the existing objectivity formula used is not very useful.



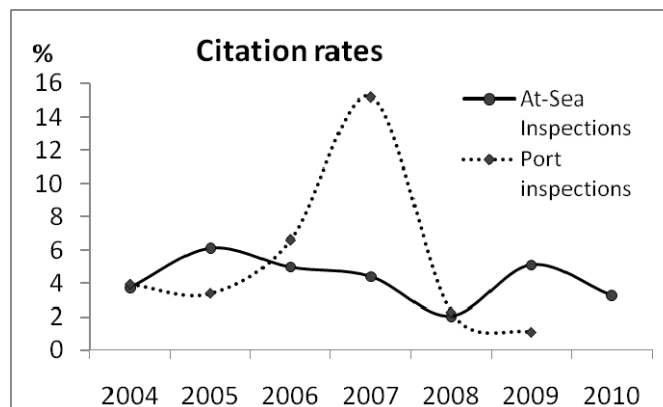
**Figure 2.** Number of At-Sea Inspections and Inspection rates (number of at-sea inspection/vessel-days) in the NAFO Regulatory Area by fishery type

#### Port inspections (Table 5)

Prior to 2009, port State Contracting Parties were required to conduct port inspections on all vessels landing or transshipping fish species from the NRA. Since the adoption of the Port State Control measures in 2009, the 100% annual port inspection rate has been maintained for all vessels landing NAFO species under recovery plans, in particular GHL, and reduced to 15 % on vessels from other Contracting Parties for all other NAFO species is landed or transshipped. Port inspection on national vessels is not compulsory anymore in other cases. Inspections in port have also declined dramatically, from a 228 in 2004 to 100 in 2010, representing a 56 percent decline over the time period, but have not change substantially since 2008. This indicates that the Port State Control measures adopted in 2009 have not had a direct impact on the port inspection coverage rate by Contracting Parties.

#### Citation rates (Figure 3 and Table 5)

The annual citation rate (the number of citations issued in relation to the number of inspections conducted) for at-sea inspections ranges between 2.0 in 2008 and 6.1 in 2005. In 2010, the citation rate for at-sea inspections was 3.3, with a relative decrease from the previous year. In contrast, the citation rate for port inspections ranges between 15.2 in 2007 and zero in 2010.



**Figure 3.** Percentage of inspections that resulted in a citation at sea and in port

### ***Closed areas***

Since 2007, in total 18 areas in NAFO have been closed to bottom fishing including 11 significant coral and sponge areas, 1 coral protection zone and 6 seamounts. To control the presence of vessels in such areas, NAFO has adopted VMS position reporting at one hour intervals. Further conservation and enforcement measures concerning the protection of the VMEs are stipulated in Chapter Ibis of the NCEM.

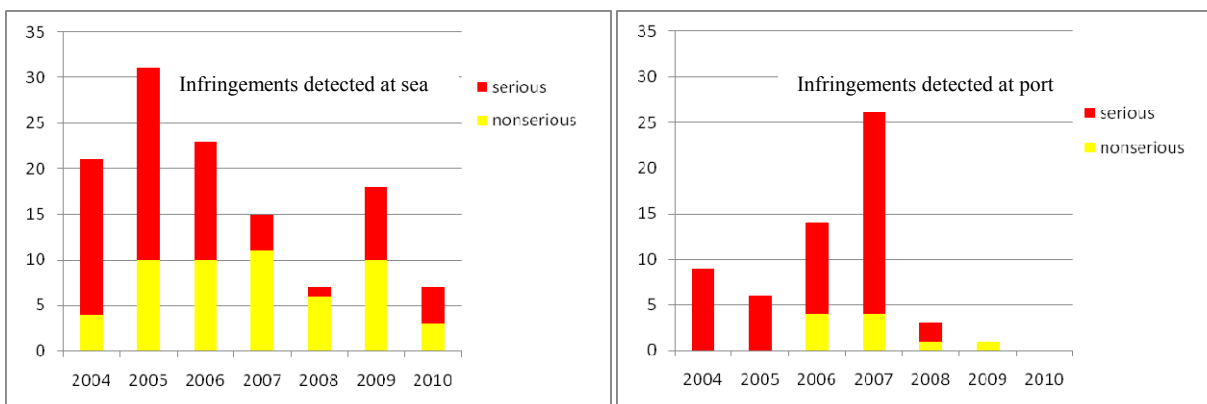
An examination of the VMS position reports revealed that all the closed areas were generally respected. However, some position reports have been recorded in Divisions 6G and, to a minor extent in 6H, and in the Corner Seamounts with a relatively low fishing effort. In 2010, two vessels spent 10 days in Division 6G which constitutes a negligible amount of effort compared to the total effort in the NRA. Moreover, it is not known whether the fishing gear used in the closed areas interacted with the sea bottom. STACTIC should explore the means to identify whether bottom fishing is occurring to enable more effective enforcement of closed area provisions.

### ***Sharks***

Fishing for the purpose of collecting shark fins is prohibited under Article 17 of the NAFO Conservation and Enforcement Measures. Sharks species taken in NAFO fisheries are not associated with shark finning practices, and there has never been an incident of shark finning observed in the NRA. However, it has been noted that there has been a lack of species-specific reporting of shark catches in the NRA.

### ***Apparent infringements (Figures 4 and 5; Table 5)***

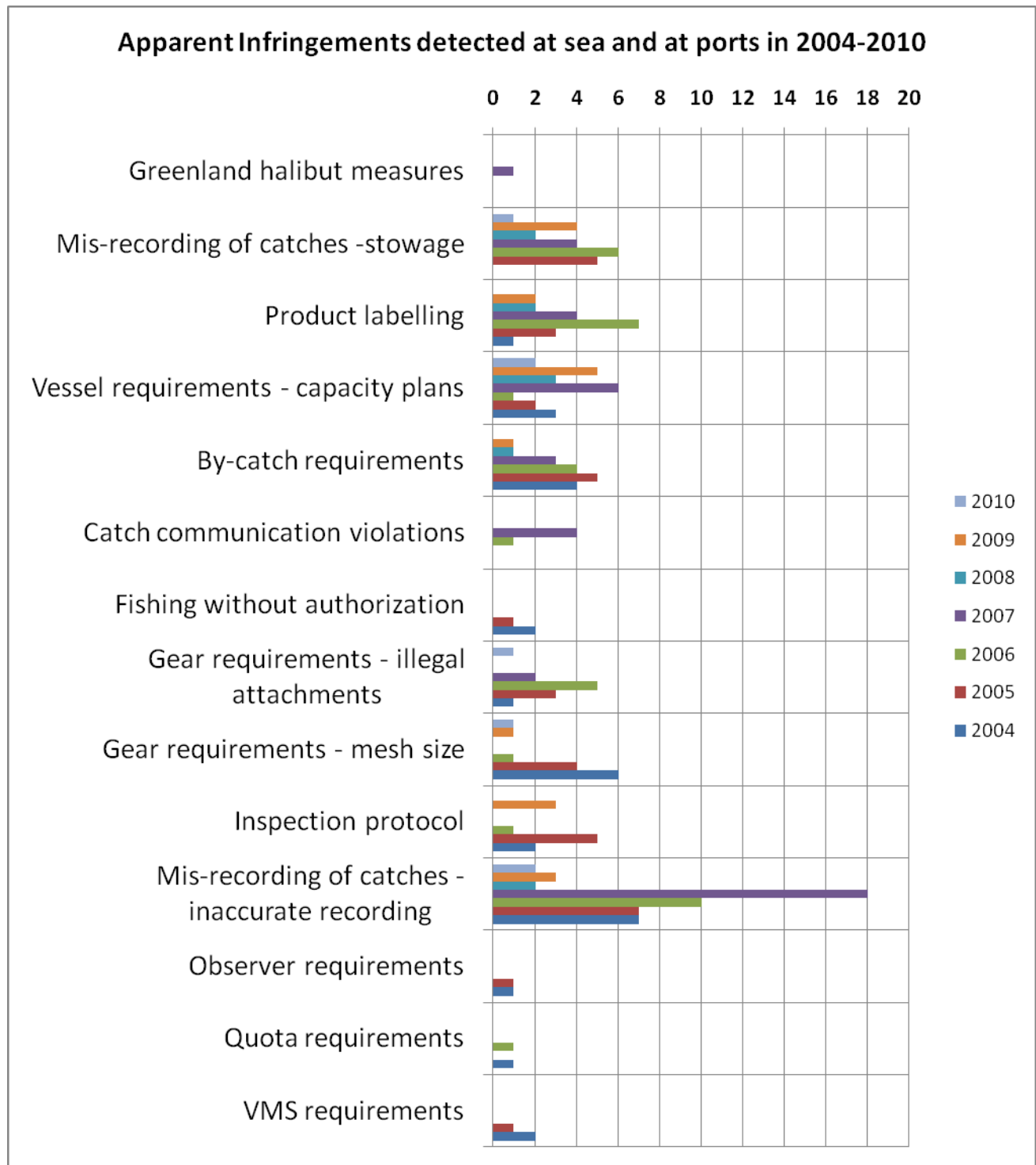
Each citation issued by NAFO inspectors can list one or more apparent infringements (AI), from which 10 are qualified as serious infringements (NCEM Article 37.1). Figure 4 shows the evolution of the total number of AIs that have been issued at-sea and in port for each year since 2004. In 2010, out of seven AIs detected at sea, three were considered serious, and two of them were detected on vessels fishing for groundfish (Table 5).



**Figure 4.** *Number of Apparent Infringements detected by NAFO at-sea and port inspectors for 2004-2010.*

The frequency of infringements by fishing type is presented in Figure 5. More details on these infringements for the years 2004 through 2010 are provided in Table 5. The most frequent infringement observed every year is inaccurate recording of catches, which is considered as a serious offence.

No apparent infringement for fishing in closed areas has ever been issued to a fishing vessel to date. Some contributing factors might be the absence of inspection patrol in some remote areas, the negligible fishing effort concerned and the difficulty in determining that vessels are engaged in “bottom fishing”.



**Figure 5.** Apparent Infringements detected by NAFO at-sea and port inspectors \*Please note that the first 4 are non-serious infringements and the remaining 10 are serious infringements.

#### 4. Reporting obligations by NAFO Contracting Parties and Observers

NAFO CEM obliges vessels and Contracting Parties to provide reports on their activity within a determined time frame. The regular delivery of those reports in time is of key importance to evaluate compliance.

##### *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. However, the new requirement did not affect the actual percentage coverage of port inspections because of the importance of landings of groundfish species subject to recovery plan (GHL). Port inspection coverage ranges from 79% in 2005 and 2009 to 91% in 2008. The port inspection coverage in 2009 and 2010 falls within this range (see Figure 6).

##### *Observer reports*

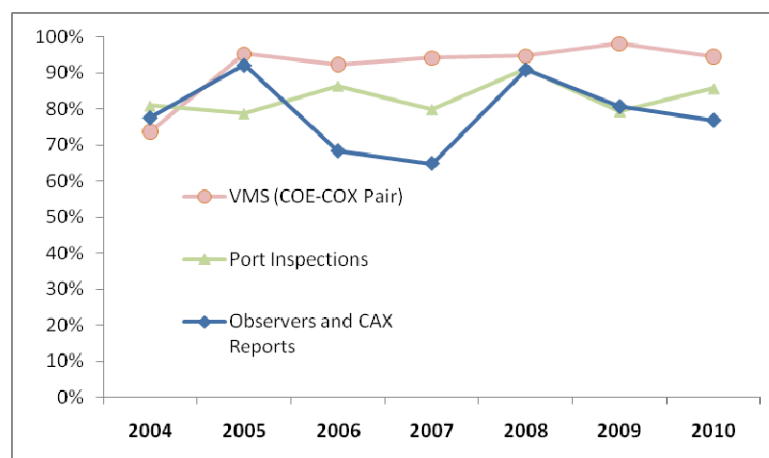
Vessels are required to have an independent compliance observer on board at all times in every fishing trip. Since 2007, Contracting Parties may allow their vessels adopting a daily electronic report of catch and discards which allows vessels to reduce the observer coverage down to 25% of the time spent in the NRA. Under this electronic scheme, observers are required to report daily their estimation of catches (OBR).

Observers 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.

Observer coverage ranges from 77% in 2010 to 92% in 2005.

Observer reports may be crosschecked with port inspection reports, for relevant fishing trips, for a comparative analysis of catches.

According to Article 28, 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 by haul basis.



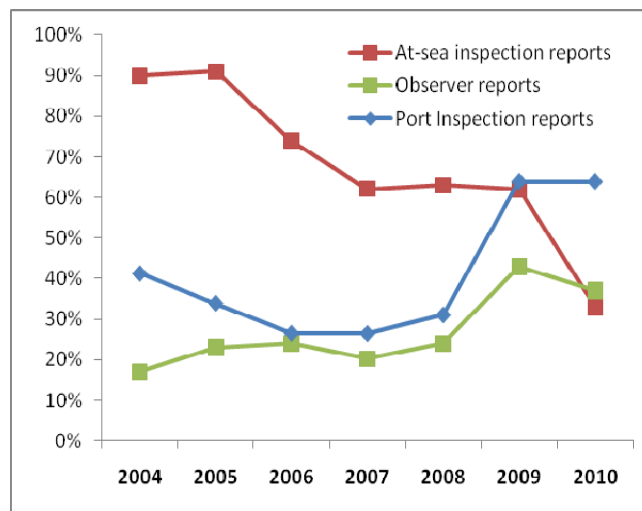
**Figure 6.** Percentage coverage of fishing effort by VMS, Port Inspection and Observer Reports

### *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 and catch reports on a daily basis; observers and at-sea inspection reports are required to be submitted within 30 days and PSC3 forms for port inspections should be sent to the Executive Secretary “without delay.” For the purpose of timeliness analysis, PSC 3 forms received more than 30 days after the date of port inspection were considered late.

Figure 7 shows the timeliness of submission of at sea inspection, observer and port inspection reports. In 2010, two-thirds of the number of port inspection reports were received on time (64%). Timeliness in the submission of at-sea inspection and observer reports were 33% and 37%, respectively, representing declines from 2009.

At-sea and port inspection reports containing citations of infringements were always transmitted to the Secretariat without delay.

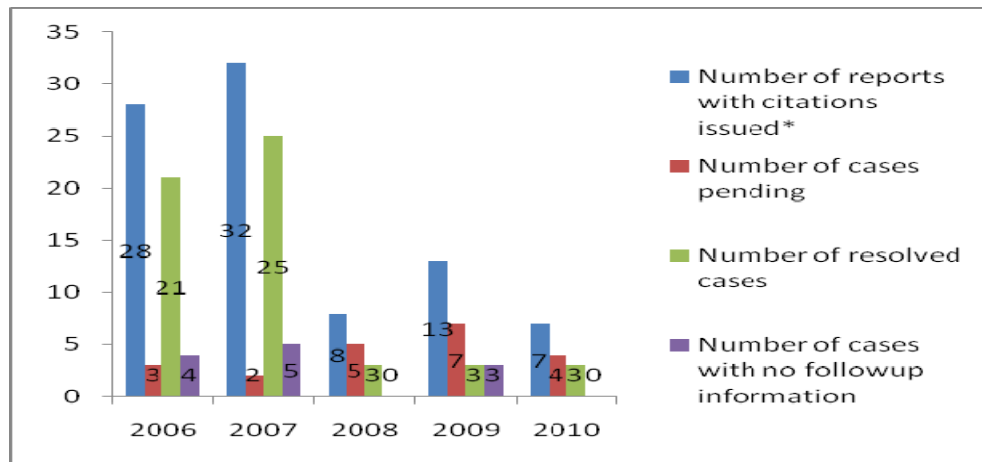


**Figure 7.** *Timeliness of submission of reports*

### **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. 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. This information is reflected in Table 6.

As of July 2011, three of these cases were resolved, with four cases still pending. There were zero cases for which the Contracting Party failed to provide follow-up information in 2010. Contrary to the 2009 compliance report, lack of follow-up on apparent infringements appears to be less of a concern than expressed in the 2009 compliance report, particularly considering there are also zero cases lacking follow-up from 2008. To ensure this trend continues, it is important to continue to remind Contracting Parties to report the status of AIs to the NAFO Secretariat.



**Figure 8.** Legal resolution of citations against vessels fishing in the NAFO Regulatory Area by year in which the citations were issued (as of July 2011). 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.

## 6. Observed Trends

- After a steady year on year decline since 2004, fishing effort appears to have stabilized at circa 500 days present in the NRA each year. In parallel the steady decline in vessel numbers active in the NRA appears to have leveled out at circa 50 vessels per annum.
- The number of at sea inspections has reduced from 401 in 2004 to 214 in 2010 but the inspection rate has actually increased from 2.4% in 2004 to 4.5% in 2010.
- Port inspection coverage of landings remains high owing to the high number of landings of species subjected to a recovery plan, particularly groundfish.
- A high rate of compliance with VMS hail messages and catch reporting has been achieved with 98% coverage in 2009 and 95% coverage of fishing effort achieved in 2010<sup>3</sup>.
- The most common apparent infringement detected at sea or in port has been mis-recording of catches with a steady increase in citations from 2004 to 2007. However, the number of citations for mis-recording has fallen dramatically since 2007.
- While all inspection reports were received, the timeliness of submission of at sea inspection reports has fallen in recent years whilst submission of port inspection reports has increased and submission of observer reports has improved slightly over the period 2004 – 2010.
- Overall, there appears to be a declining trend in the number of citations issued since 2006. Seven citations were issued in 2010, down from 13 in 2009 and a high of 32 in 2007.

<sup>3</sup> Based on VMS reports

## 7. Annexes: The “Report tables

**Table 1. Submission of Fishing Reports\***

Year	Days at the Regulatory Area (Effort)	Number of Days accounted by COE-COX pairs	Percentage of Effort accounted by COE-COX pairs	Number of Days accounted by Port Inspection and TRA reports	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 CAX reports
<b>2004</b>	16480	12156	74%	13327	81%	12779	78%
<b>2005</b>	12290	11706	95%	9679	79%	11326	92%
<b>2006</b>	8663	7991	92%	7488	86%	5921	68%
<b>2007</b>	6598	6210	94%	5269	80%	4276	65%
<b>2008</b>	5054	4785	95%	4613	91%	4596	91%
<b>2009</b>	5016	4920	98%	3981	79%	4047	81%
<b>2010</b>	4768	4510	95%	4084	86%	3665	77%

\*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
Total Number of Port Inspection Reports received	228	177	151	125	133	94	101
Total Number of Port Inspection Reports received late	134	117	111	92	92	34	36
Percentage % of late Port Inspection Reports	59%	66%	74%	74%	69%	36%	36%

NB. Port Inspection reports are submitted to the Secretariat by the port States.

**Table 3. Timely submission of At-Sea Inspection Reports**

Year	2004	2005	2006	2007	2008	2009	2010
Total Number of at-sea Inspections	401	326	361	296	263	324	215
Number of at-sea Inspections received late	40	30	95	112	96	124	144
Percentage % of late at-sea Inspection Reports	10%	9%	26%	38%	37%	38%	67%

NB. At-sea Inspection Reports are submitted by the CP with inspection presence at NAFO Regulatory Area.

**Table 4. Timely submission of Observer Reports**

Year	2004	2005	2006	2007	2008	2009	2010
Total Number of Observers Reports	211	170	114	84	126	86	76
Number of Observers Reports received late	176	131	87	67	96	49	48
Percentage % of late Observers Reports	83%	77%	76%	80%	76%	57%	63%

NB. Observer Reports are submitted by the flag States of the fishing vessel.

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

<b>Fisheries*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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
<b>AIs issued by category - from at-sea inspections***</b>				
Greenland halibut measures	0	0	0	0
Mis-recording of catches -stowage	0	0	0	0
Product labeling	0	1	0	1
Vessel requirements - capacity plans	3	0	0	3
<b>By-catch requirements</b>	3	0	0	3
<b>Catch communication violations</b>	0	0	0	0
<b>Fishing without authorization</b>	0	1	0	1
<b>Gear requirements - illegal attachments</b>	1	0	0	1
<b>Gear requirements - mesh size</b>	5	0	0	5
<b>Inspection protocol</b>	2	0	0	2
<b>Mis-recording of catches - inaccurate recording</b>	1	0	0	1
<b>Observer requirements</b>	0	1	0	1
<b>Quota requirements</b>	1	0	0	1
<b>VMS requirements</b>	0	2	0	2
<b>TOTAL</b>	16	5	0	21

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2J

\*\* Some vessels switched directed species within the year.

\*\*\* AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

**Table 5-2004, part 2. Effort, port inspections and AIs by fisheries type**

<b>FISHERIES*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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
<b>AIs issued by category - from port inspections***</b>				
Greenland halibut measures	0	0	0	0
Mis-recording of catches -stowage	0	0	0	0
Product labeling	0	0	0	0
Vessel requirements - capacity plans	0	0	0	0
<b>By-catch requirements</b>	1	0	0	1
<b>Catch communication violations</b>	0	0	0	0
<b>Fishing without authorization</b>	1	0	0	1
<b>Gear requirements - illegal attachments</b>	0	0	0	0
<b>Gear requirements - mesh size</b>	1	0	0	1
<b>Inspection protocol</b>	0	0	0	0
<b>Mis-recording of catches - inaccurate recording</b>	6	0	0	6
<b>Observer requirements</b>	0	0	0	0
<b>Quota requirements</b>	0	0	0	0
<b>VMS requirements</b>	0	0	0	0
<b>TOTAL</b>	9	0	0	9

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

<b>FISHERIES*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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
<b>AIs issued by category - from at-sea inspections***</b>				
Greenland halibut measures	0	0	0	0
Mis-recording of catches -stowage	5	0	0	5
Product labeling	2	1	0	3
Vessel requirements - capacity plans	2	0	0	2
<b>By-catch requirements</b>	2	0	0	2
<b>Catch communication violations</b>	0	0	0	0
<b>Fishing without authorization</b>	0	1	0	1
<b>Gear requirements - illegal attachments</b>	2	1	0	3
<b>Gear requirements - mesh size</b>	3	0	0	3
<b>Inspection protocol</b>	3	1	0	4
<b>Mis-recording of catches - inaccurate recording</b>	5	1	0	6
<b>Observer requirements</b>	0	1	0	1
<b>Quota requirements</b>	0	0	0	0
<b>VMS requirements</b>	0	1	0	1
<b>TOTAL</b>	<b>24</b>	<b>7</b>	<b>0</b>	<b>31</b>

\* 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 5-2005, part 2. Effort, port inspections and AIs by fisheries type**

<b>FISHERIES*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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
<b>AIs issued by category - from port inspections***</b>				
Greenland halibut measures	0	0	0	0
Mis-recording of catches –stowage	0	0	0	0
Product labelling	0	0	0	0
Vessel requirements - capacity plans	0	0	0	0
<b>By-catch requirements</b>	3	0	0	3
<b>Catch communication violations</b>	0	0	0	0
<b>Fishing without authorization</b>	0	0	0	0
<b>Gear requirements - illegal attachments</b>	0	0	0	0
<b>Gear requirements - mesh size</b>	1	0	0	1
<b>Inspection protocol</b>	1	0	0	1
<b>Mis-recording of catches - inaccurate recording</b>	1	0	0	1
<b>Observer requirements</b>	0	0	0	0
<b>Quota requirements</b>	0	0	0	0
<b>VMS requirements</b>	0	0	0	0
<b>TOTAL</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>6</b>

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

<b>FISHERIES*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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
<b>AIs issued by category - from at-sea inspections***</b>				
Greenland halibut measures	0	0	0	0
Mis-recording of catches -stowage	5	1	0	6
Product labelling	1	2	0	3
Vessel requirements - capacity plans	1	0	0	1
<b>By-catch requirements</b>	2	0	0	2
<b>Catch communication violations</b>	0	0	0	0
<b>Fishing without authorization</b>	0	0	0	0
<b>Gear requirements - illegal attachments</b>	2	2	1	5
<b>Gear requirements - mesh size</b>	0	0	1	1
<b>Inspection protocol</b>	0	1	0	1
<b>Mis-recording of catches - inaccurate recording</b>	4	0	0	4
<b>Observer requirements</b>	0	0	0	0
<b>Quota requirements</b>	0	0	0	0
<b>VMS requirements</b>	0	0	0	0
<b>TOTAL</b>	15	6	2	23

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 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**

<b>FISHERIES*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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
<b>AIs issued by category - from port inspections***</b>				
Greenland halibut measures	0	0	0	0
Mis-recording of catches -stowage	0	0	0	0
Product labeling	4	0	0	4
Vessel requirements - capacity plans	0	0	0	0
<b>By-catch requirements</b>	2	0	0	2
<b>Catch communication violations</b>	1	0	0	1
<b>Fishing without authorization</b>	0	0	0	0
<b>Gear requirements - illegal attachments</b>	0	0	0	0
<b>Gear requirements - mesh size</b>	0	0	0	0
<b>Inspection protocol</b>	0	0	0	0
<b>Mis-recording of catches - inaccurate recording</b>	6	0	0	6
<b>Observer requirements</b>	0	0	0	0
<b>Quota requirements</b>	1	0	0	1
<b>VMS requirements</b>	0	0	0	0
<b>TOTAL</b>	14	0	0	14

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

<b>FISHERIES*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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
<b>AIs issued by category - from at-sea inspections***</b>				
Greenland halibut measures	0	0	0	0
Mis-recording of catches -stowage	3	1	0	4
Product labeling	0	1	0	1
Vessel requirements - capacity plans	0	2	4	6
<b>By-catch requirements</b>	0	0	0	0
<b>Catch communication violations</b>	0	0	0	0
<b>Fishing without authorization</b>	0	0	0	0
<b>Gear requirements - illegal attachments</b>	0	1	1	2
<b>Gear requirements - mesh size</b>	0	0	0	0
<b>Inspection protocol</b>	0	0	0	0
<b>Mis-recording of catches - inaccurate recording</b>	2	0	0	2
<b>Observer requirements</b>	0	0	0	0
<b>Quota requirements</b>	0	0	0	0
<b>VMS requirements</b>	0	0	0	0
<b>TOTAL</b>	5	5	5	15

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2J

\*\* Some vessels switched directed species within the year.

\*\*\* AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

**Table 5-2007, part 2. Effort, port inspections and AIs by fisheries type**

<b>FISHERIES*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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
<b>AIs issued by category - from port inspections***</b>				
Greenland halibut measures	1	0	0	1
Mis-recording of catches -stowage	0	0	0	0
Product labeling	3	0	0	3
Vessel requirements - capacity plans	0	0	0	0
<b>By-catch requirements</b>	3	0	0	3
<b>Catch communication violations</b>	4	0	0	4
<b>Fishing without authorization</b>	0	0	0	0
<b>Gear requirements - illegal attachments</b>	0	0	0	0
<b>Gear requirements - mesh size</b>	0	0	0	0
<b>Inspection protocol</b>	0	0	0	0
<b>Mis-recording of catches - inaccurate recording</b>	16	0	0	16
<b>Observer requirements</b>	0	0	0	0
<b>Quota requirements</b>	0	0	0	0
<b>VMS requirements</b>	0	0	0	0
<b>TOTAL</b>	27	0	0	27

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

<b>FISHERIES*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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
<b>AIs issued by category - from at-sea inspections***</b>				
Greenland halibut measures				0
Mis-recording of catches -stowage	1	1		2
Product labeling	1			1
Vessel requirements - capacity plans		3		3
<b>By-catch requirements</b>	1			1
<b>Catch communication violations</b>				0
<b>Fishing without authorization</b>				0
<b>Gear requirements - illegal attachments</b>				0
<b>Gear requirements - mesh size</b>				0
<b>Inspection protocol</b>				0
<b>Mis-recording of catches - inaccurate recording</b>				0
<b>Observer requirements</b>				0
<b>Quota requirements</b>				0
<b>VMS requirements</b>				0
<b>TOTAL</b>	<b>3</b>	<b>4</b>	<b>0</b>	<b>7</b>

\* 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**

<b>FISHERIES*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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			
<b>AIs issued by category - from port inspections***</b>				
Greenland halibut measures				0
Mis-recording of catches -stowage				0
Product labeling	1			1
Vessel requirements - capacity plans				0
<b>By-catch requirements</b>				0
<b>Catch communication violations</b>				0
<b>Fishing without authorization</b>				0
<b>Gear requirements - illegal attachments</b>				0
<b>Gear requirements - mesh size</b>				0
<b>Inspection protocol</b>				0
<b>Mis-recording of catches - inaccurate recording</b>	2			2
<b>Observer requirements</b>				0
<b>Quota requirements</b>				0
<b>VMS requirements</b>				0
<b>TOTAL</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

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

<b>FISHERIES*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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
<b>AIs issued by category - from at-sea inspections***</b>				
Greenland halibut measures				0
Mis-recording of catches -stowage	4			4
Product labeling	1			1
Vessel requirements - capacity plans	3	2		5
<b>By-catch requirements</b>	1			1
<b>Catch communication violations</b>				0
<b>Fishing without authorization</b>				0
<b>Gear requirements - illegal attachments</b>				0
<b>Gear requirements - mesh size</b>	1			1
<b>Inspection protocol</b>	2	1		3
<b>Mis-recording of catches - inaccurate recording</b>	2	1		3
<b>Observer requirements</b>				0
<b>Quota requirements</b>				0
<b>VMS requirements</b>				0
<b>TOTAL</b>	14	4	0	18

\* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 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**

<b>FISHERIES*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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			
<b>AIs issued by category - from port inspections***</b>				
Greenland halibut measures				0
Mis-recording of catches -stowage				0
Product labeling	1			1
Vessel requirements - capacity plans				0
<b>By-catch requirements</b>				0
<b>Catch communication violations</b>				0
<b>Fishing without authorization</b>				0
<b>Gear requirements - illegal attachments</b>				0
<b>Gear requirements - mesh size</b>				0
<b>Inspection protocol</b>				0
<b>Mis-recording of catches - inaccurate recording</b>				0
<b>Observer requirements</b>				0
<b>Quota requirements</b>				0
<b>VMS requirements</b>				0
<b>TOTAL</b>	1	0	0	1

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

<b>FISHERIES*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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		7
Number of vessels cited with AIs at sea				
AIs issued by category - from at-sea inspections***				
Greenland halibut measures				
Mis-recording of catches -stowage		1		
Product labelling				
Vessel requirements - capacity plans	1	1		
<b>By-catch requirements</b>				
<b>Catch communication violations</b>				
<b>Fishing without authorization</b>				
<b>Gear requirements - illegal attachments</b>	1			
<b>Gear requirements - mesh size</b>	1			
<b>Inspection protocol</b>				
<b>Mis-recording of catches - inaccurate recording</b>	1	1		
<b>Observer requirements</b>				
<b>Quota requirements</b>				
<b>VMS requirements</b>				
<b>TOTAL</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>0</b>

\* 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 5-2010, part 2. Effort, port inspections and AIs by fisheries type.**

<b>FISHERIES*</b>	<b>GRO</b>	<b>PRA</b>	<b>REB</b>	<b>Total</b>
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				
AIs issued by category - from port inspections***				
Greenland halibut measures				
Mis-recording of catches -stowage				
Product labelling				
Vessel requirements - capacity plans				
<b>By-catch requirements</b>				
<b>Catch communication violations</b>				
<b>Fishing without authorization</b>				
<b>Gear requirements - illegal attachments</b>				
<b>Gear requirements - mesh size</b>				
<b>Inspection protocol</b>				
<b>Mis-recording of catches - inaccurate recording</b>				
<b>Observer requirements</b>				
<b>Quota requirements</b>				
<b>VMS requirements</b>				
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Table 6. Resolution of Apparent Infringement (AI) cases (as of July 2011)**

<b>Resolution of Apparent Infringement Cases</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Number of reports with citations issued*	28	32	8	13	7
Number of resolved cases	21	25	3	3	3
Percentage of resolved cases (as of July 2011)	75%	78%	38%	23%	43%
Number of cases pending	3	2	5	7	4
Number of cases with no follow-up information	4	5	0	3	0

\* Number of inspection reports with serious and non-serious AI citations. A report may contain one or more AIs. Reports serving to confirm identical cases are not counted.

**Annex 29. Follow-up of editorial redrafting of the NAFO CEM by EDG**  
(STACTIC Working Paper 11/40 **now** FC Doc. 11/34)

During the review of the NCEM, EDG identified several areas where further clarification and improvements may be required to support new measures, aiming at maximizing the effectiveness of the NAFO control and inspection scheme.

It is requested that the Fisheries Commission authorize STACTIC to continue the work of the EDG, with the scope to streamline the issues identified during the initial review and propose new measures to address them.

**Annex 30. NAFO Inspectors Web Area**  
(STACTIC Working Paper 11/7, Revised now FC Doc. 11/35)

At the September 2010 NAFO Annual Meeting , discussions were held in STACTIC on the possibility of NAFO having electronic accessibility available for inspectors to access all information regarding the fishing vessels operating in the NAFO Regulatory Area. A representative of Iceland presented STACTIC WP 10/16 as an introduction to the type of information that would be useful.

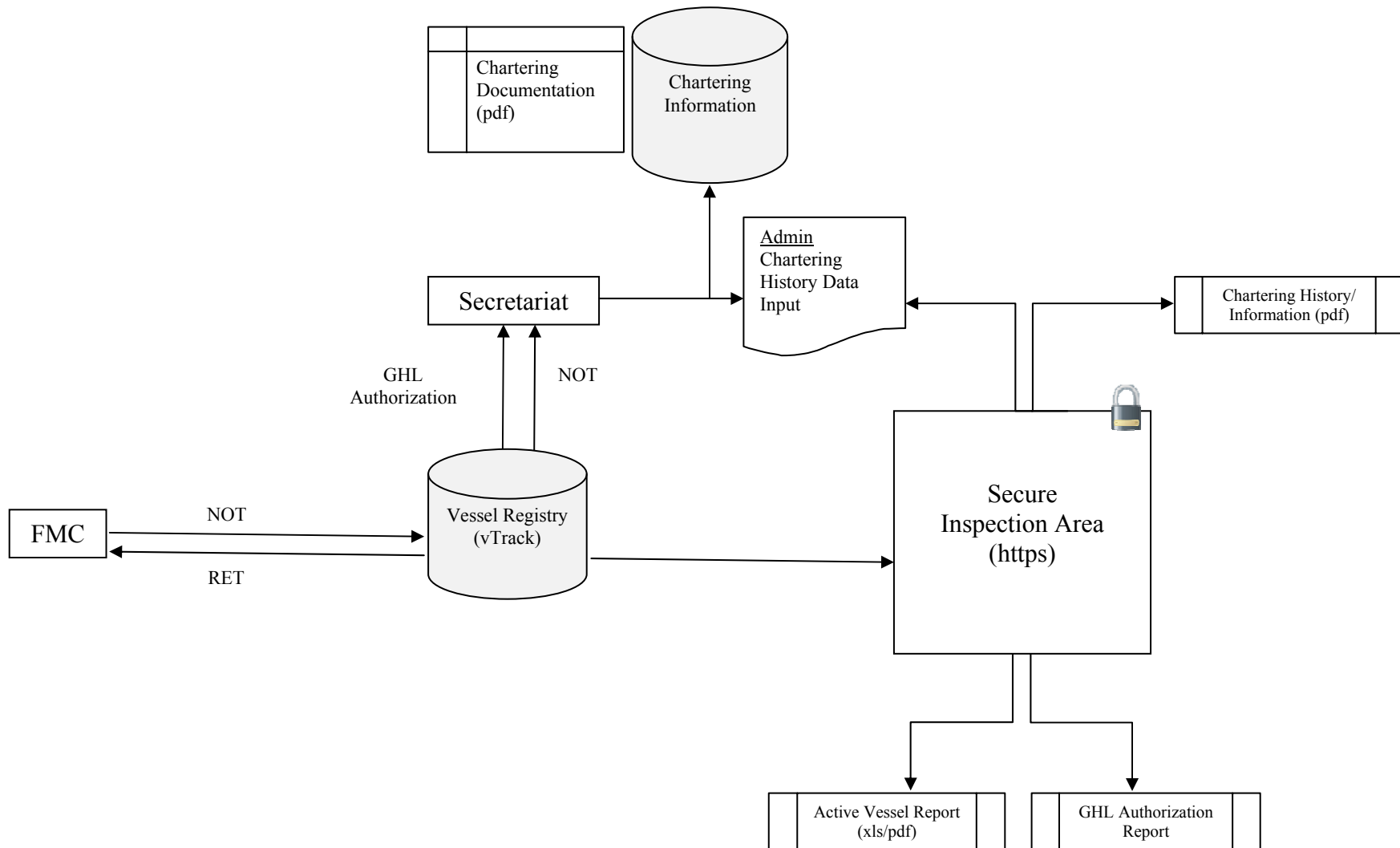
It was noted that NEAFC had implemented a system for their inspection service to access electronic versions of relevant information on a secure website. A number of Contracting Parties are members to both organizations and in keeping with the harmonization of the two, the NAFO Secretariat has consulted further with the NEAFC Secretariat on its experience in setting up and implementing its own Inspectors web area. Considering the benefits of NEAFC's experience in developing their Inspectors web area, and the possibility to replicate or adopt some of the functionality, the Secretariat deemed it appropriate to only pursue cooperation with NEAFC for the development of NAFO's Inspectors web area.

It was agreed that the NAFO Secretariat would develop a work plan with options and cost implications for presentation to STACTIC. We have reviewed the NEAFC Inspectors area in order for us to compare and elaborate what NAFO requirements would be. As this development would take several years to complete we have broken the work down into phases. We have identified Phase 1 as a starting point of the project. Included in the attached pages are:

- the NAFO requirements and comparison
- a Phase 1 workflow and process diagram
- cost estimate

**NAFO Inspectors' Web Area: Requirements and Expected Timeline.**

Phase	NAFO Requirements	NEAFC 's Web site	NEAFC- NAFO Comparison	Expected Timeline	Est. costs
1	VESSEL REGISTER - Article 20 and OTHER DOCUMENTS				
	List of Active vessels (either derived from VMS records or the Secretariat's database)	A list of notifications of vessels and authorizations. Ability to search, download and print.	This feature is good to have in the same way. (We could possibly expand if needed)	Development and Testing: by May 2012 to be presented at STACTIC Intersessional.  Start of Implementation: July 2012.	£8360.00 (STACTIC WP 11/7, Revised)
	List of Research vessels -CEM Annex IV.B	Does not have	List of Research vessel information and ability to search.		
	Chartering Arrangements -Article 19.7 & 8 Relevant documentation of a charter arrangement .	Does not have	A database or list to contain relevant documentation of a charter arrangement to have the ability to search, download and print.		
2	Inspection and Surveillance				
	Information of inspection vessels location in order to coordinate activity. Article 30.	Active Inspection presence list	NAFO would need to show the names of inspection vessel , radio call sign, communication information. Possibly show the commencing and terminating of their duties . See Article 30.1 and 2.	Development and Testing: by May 2013 to be presented at STACTIC Intersessional.  Start of Implementation: July 2013.	£8527.20 (STACTIC WP 11/7, Revised)
	Inspection Report -Annex XI . To have the ability to enter and submit the report electronically and information to go direct into a database. Make the inspection report interactive and able to input the required information to go direct into a database.	Inspections Tracking Reports  NEAFC is able to fill in their inspection reports and submit directly to this site.	NAFO at-sea inspectors to be able to accomplish their own inspection reports directly into a database.		
	An interface to lookup inspections during a selected timeframe. The ability to search the inspection reports and to query the information.	NEAFC has an interface to search for inspection reports	This feature would be good for NAFO to have in the same way.		
3	Port State Measures				
	PSC 1, PSC 2 and PSC 3 forms ability to enter information and have it stored in a database	Under a separate secured area from at-sea Inspectors. NEAFC has PSC forms stored in a database.			
4	Real Time VMS access by Inspectors at Sea				

Phase 1. Workflow and Process Diagram

## **Annex 31. International Monitoring, Control, and Surveillance Network (IMCS Network)**

(STACTIC Working Paper 11/33, Revised)

The Secretariat received a questionnaire from the International Monitoring, Control, and Surveillance Network (IMCS Network). Following consultation with the NAFO President and the STACTIC Chair it was suggested that STACTIC could include this item for discussion and comments regarding the possible involvement of NAFO in the IMCS. The Secretariat has drafted the following responses to the IMCS questionnaire for consideration by STACTIC.

### **1. Would your organization be interested in participating in the Network in some status?**

*Contracting Parties of NAFO have been actively cooperating in fighting IUU fisheries, in particular by exchanging relevant information, in accordance with the existing NAFO rules. NAFO is also engaged in a close collaboration with the other RFMOs on this issue, and is open to extend that collaboration to other organizations concerned. In this context NAFO is interested to further improve international cooperation against IUU fisheries and collaboration with IMCS is considered as a possible way to achieve this.*

*Therefore, NAFO is prepared to consider involvement with IMCS but remains unable to provide any commitment until the status of IMCS is clarified.*

### **2. What form might this participation take, i.e., what activities or exchanges might you see your organization participating in?**

*Sharing of IUU List with other RFMOs. Sharing of other information concerning NAFO MCS measures.*  
*NAFO has an IUU list that is shared with other RFMOs particularly the North East Atlantic Fisheries Commission (NEAFC). A non-Contracting Party vessel that has been sighted or by other means identified by a Contracting Party as engaging in fishing activities in the Regulatory Area is presumed to be undermining the effectiveness of the Conservation and Enforcement Measures. A vessel that has been placed on the NEAFC IUU list is presumed to be engaging in fishing activities in the NRA. The NAFO IUU list is posted on NAFO's website that the Network can access at [www.nafo.int/fisheries/fishery/iuu/list.html](http://www.nafo.int/fisheries/fishery/iuu/list.html)*

### **3. Please outline your RFMO's policy for accessing and sharing MCS-relevant information, including any relevant confidentiality policy that pertains to the protection of sensitive information.**

*Under the NAFO Conservation and Enforcement Measures, Annex XIX contains Rules on Confidentiality regarding treatment of electronic reports and messages transmitted pursuant to Articles 26-27 of the NAFO Conservation and Enforcement Measures. At-sea Inspection Reports and Observer Reports are treated with confidentiality. Notwithstanding the secure information described above, there is relevant information available on the NAFO public website such as the Annual Report on Compliance provided by STACTIC. Likewise the proceedings of the Annual meeting of NAFO, including the summaries from the various working groups are available for viewing.*

### **4. Please describe what value and use you believe could be provided to your organization, particularly as related to MCS, from a strengthened relationship with the Network.**

*Through the Network, NAFO can benefit from having more informed background in formulating and implementing MCS measures. Information could also be obtained relevant to trends in IUU fishing outside of the NRA.*

### **5. Please describe what value and use you believe could be provided to the MCS Network from a strengthened working relationship with your RFMO.**

*NAFO developed and is further improving the Annual Compliance Review. This Review was recently considered by Performance Assessment Panel, comprising of both internal and external experts, to be a high level document in comparison with similar efforts of many other fishery organizations.*

*Members of the MCS Network may benefit from this NAFO experience. Similarly information obtained through NAFO may lay the foundation for bilateral and Regional contact information.*

## PART II

### Report of the Standing Committee on International Control (STACTIC)

#### 33rd Annual Meeting Halifax, Nova Scotia, Canada September 19-23, 2011

##### 1. Opening of the Meeting (Chair: Gene Martin, United States)

The Chair opened the meeting at 1652 hrs on Monday, September 19, 2011, at the Westin Hotel in Halifax, NS Canada. The Chair welcomed representatives from the following Contracting Parties (CPs): Canada, Denmark (in respect of the Faroe Islands and Greenland) (DFG), the European Union (EU), France (in respect of St. Pierre et Miquelon), Iceland, Norway, the Russian Federation, Japan, the Republic of Korea (Korea), and the United States. The NAFO Secretariat was also in attendance.

In his opening remarks, the Chair outlined the agenda items to be addressed by STACTIC, including possible recommendations resulting from the Performance Review Panel (GC WP 11/2 and FC WP 11/13).

##### 2. Appointment of Rapporteur

*Douglas Christel (US) was appointed Rapporteur.*

##### 3. Adoption of Agenda

Nine additional issues were proposed to be added to the agenda as follows:

- *Provisional Agenda Item 8 was split into two agenda items. Agenda Item 8a discussed ongoing edits and clarifications to the CEM described in STACTIC WPs 11/11, 11/15, 11/21, 11/22, 11/23, and 11/36; Agenda Item 8b discussed further revisions to the CEM to be explored by STACTIC that are of a more substantive nature.*
- *STACTIC WP 11/35 (posting of weekly catch) was added as a new issue for discussion under the existing Agenda Item 9a*
- *STACTIC WP 11/34 (amendments to Chapter 2 of the NAFO Conservation and Enforcement Measures (CEM)) was added as a new issue under the discussion of revisions to the CEM as Agenda Item 9g*
- *STACTIC WP 11/28 (alternative reporting for defective vessel monitoring systems (VMS)) was added as a new issue for discussion as Agenda Item 9h*
- *STACTIC WP 11/29 (reclassifying tampering with or disposing of evidence and falsifying documents as serious infringements) was added as a new issue for discussion as Agenda Item 9i*
- *Four other issues were added for discussion under Other Matters (Agenda Item 12), including (1) Clarifying the application of minimum mesh size requirements for the redfish fishery Area 3M (FC WP 11/9); (2) consideration of NAFO participation in the International Monitoring Control and Surveillance (IMCS) Network (STACTIC WP 11/33); (3) clarifying the relationship of NAFO with the Northeast Atlantic Fisheries Commission's (NEAFC) Advisory Group for Data Communication (AGDC) (STACTIC WP 11/32); and (4) consideration of recommendations from the Performance Review Panel (GC WP 11/2 and FC WP 11/13).*

*The agenda, with the addition of the nine issues listed above, was adopted (Annex 1).*

##### 4. Compliance Review 2010 including review of reports of apparent infringements

The Secretariat prepared a draft compliance report for 2010 based on the template from last year that incorporated revisions and improvements from comments from Contracting Parties (CPs) (STACTIC WPs 11/16 and 11/38). An ad-hoc working group, including representatives from the EU, Canada, and the US, reviewed the 2010 draft compliance report prepared by the Secretariat, and drafted section 6 of the report that

summarized basic trends in fishing activities within the NAFO Regulatory Area. This group also ensured that the 2010 compliance report incorporated suggestions emanating from the May 2011 STACTIC intercessional meeting. The US noted that discussions of compliance with vulnerable marine ecosystem (VME) measures are included in the discussion of the compliance of closed area restrictions, and that a summary of chartering arrangements is presented in FC WP 11/1 REV 2. The Chair asked for comments and questions about the draft compliance report. After a brief discussion, the working group made minor editorial changes resulting in a final draft 2010 compliance review report (STACTIC WP 11/38 (Revised)) that was found acceptable to all CPs.

***STACTIC approved the final draft of the 2010 compliance review report (STACTIC WP 11/38 (Revised)) for submission to the FC.***

## **5. Review and Evaluation of NAFO Practices and Procedures**

Following a recommendation from the May 2011 intercessional meeting, the Secretariat developed a draft web page entitled “NAFO Practices and Procedures” to allow CPs to share information on individual practices and procedures employed to enforce the CEM. The Secretariat presented a draft web page to STACTIC, noting that the infrastructure was ready to post this on the NAFO member page upon approval. CPs indicated that the web page would be very useful as a resource tool. CPs agreed that the contents of the web page should consist of documents sent by CPs to the Secretariat which would be posted without review by STACTIC except on an annual basis as part of this agenda item.

***STACTIC recommends that the FC approve the creation of the “practices and procedures” web page on the NAFO members’ web site, with the understanding that the web page would be reviewed annually.***

Several CPs highlighted the successes of recent joint inspection efforts, and supported promoting further cooperation in future planned patrols. CPs noted that the following patrols involving inspectors from multiple CPs have occurred, or will occur, during 2011:

- US inspectors participated in three patrols aboard Canadian Coast Guard vessels *Leonard J. Cowley* and *Cygnus*
- Inspectors from the EU and the Russian Federation joined two other patrols aboard Canadian Coast Guard vessels
- The U.S. Coast Guard cutter *Willow* conducted a patrol in September involving Canadian inspectors
- The EU-chartered patrol vessel *Tyr* is planning a patrol in October involving a French inspector from St. Pierre et Miquelon and Canadian inspectors
- Joint port inspections were conducted by Canadian inspectors and a French inspector from St. Pierre et Miquelon
- Port inspections involving Canada and the EU observers are planned for later in the fall of 2011

## **6. Review of current IUU list pursuant to NAFO CEM Article 57.3**

Two vessels were removed from the Northeast Atlantic Fisheries Commission (NEAFC) illegal, unregulated, or unreported (IUU) list because they were scrapped (STACTIC WP 11/19). Following a 30-day comment period by CPs as provided for in the NAFO CEM, these two vessels were deleted from the NAFO IUU list because no objections to removing these vessels were raised (GFS/11-177 dated 03 June 2011). There have been no other vessels identified to be included on the IUU list since the last annual meeting. No other issues regarding the NAFO IUU list were raised by CPs during STACTIC discussions at the 2011 NAFO annual meeting.

***STACTIC noted continued improvements in addressing IUU in the NAFO Regulatory Area. At this time, STACTIC did not recommend any further action on issues related to the NAFO IUU list.***

## **7. Inspectors Web Page**

The Secretariat provided an update on the development of a three-phase plan to create and implement an inspectors web page based upon the NEAFC inspectors web page.

This plan was outlined in STACTIC WP 11/7 presented at STACTIC's May 2011 intercessional meeting. The web page would provide information that could assist with at-sea or port inspection efforts by CPs. The Secretariat presented cost estimates to develop such a web page as part of STACTIC WP 11/7 (Revised) as requested by STACTIC at the intercessional meeting. The Secretariat stated that phase 1 of the web page would involve a vessel registry and could be ready for testing by May 2012, with implementation by July 2012. The Secretariat confirmed that STACFAD had allocated sufficient funds to cover the costs of the implementation of phase 1 of the inspector's web page.

***STACTIC recommends that the FC approve the creation of the inspector's web page, as outlined in STACTIC WP 11/7 (Revised).***

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

### **a. Ongoing Edits and Clarifications to the NAFO CEM**

During the past two years, the EDG has been working to comprehensively revise existing NAFO CEM to enhance organization and structure, eliminate redundancy, and clarify existing NAFO measures. The EDG completed a draft of the recommended revisions and circulated it to CPS for review prior to this annual meeting. Based on comments received from other CPs, the Scientific Council, and further work by the EDG, STACTIC WPs 11/21 (a comprehensive set of revisions to the CEM), 11/22 (points of clarification based on comments received from CPs on STACTIC WP 11/21), 11/23 (recommendations by the Scientific Council (SC) to revise existing references within the CEM), and 11/36 (additional editorial modifications to the CEM) were presented to STACTIC for discussion and possible adoption. Following a brief discussion, STACTIC considered and accepted minor revisions to some text proposed within these WPs. The EDG prepared a final WP summarizing all accepted revisions to the CEM for consideration by the FC (STACTIC WP 11/21 (Revised) and STACTIC agreed to forward the WP to the FC for its adoption. CPs indicated their preference to present the WP without editorial comments and notations. However, the EDG reported that it would not be possible to revise the document prior to the end of the annual meeting. The EDG will work with the Secretariat in making the proposed revisions to the NAFO CEM.

The Chair and several CPs joined in expressing their appreciation and congratulations to the EDG for completing STACTIC WP 11/21 Revised, noting that it would significantly improve and enhance the utility of the NAFO CEM.

***STACTIC agreed to forward the STACTIC WP 11/21 (Revised) to the FC for consideration and approval.***

### **b. Further Revisions to the NAFO CEM for Exploration by STACTIC**

Canada presented STACTIC WP 11/37 proposing the need for the continuation of the EDG to make further revisions to the NAFO CEM as part of Phase II to the work conducted by the EDG. Canada included a list of the types of measures that needed further review, including stowage, labeling, bycatch reporting, and inspector interference measures. The EU and other CPs expressed concern that the scope and type of revisions contemplated by STACTIC WP 11/37 may be too broad and beyond the mandate of the original purpose of the EDG and its work. Further, they suggested that the WP did not include the possible revision of some parts of the NAFO CEM identified by the EDG during its work. Concerns were also expressed that the proposed scope of revisions suggested by the WP were more substantive than the more editorial and clarification revisions of STACTIC WP 11/21. Canada clarified that the proposed second phase of work by the EDG would be to identify issues that impede the implementation and effective enforcement NAFO CEM, and to identify possible revisions needed to strengthen the effectiveness of the NAFO CEM and to close loopholes that detract from achieving the objectives and management goals embedded in the CEM. The Chair pointed out that the second phase could also be used to address recommendations of the NAFO performance review panel (GC WP 11/2).

While there was a consensus that exploration of revisions to other measures was necessary, after lengthy discussions, several CPs were concerned that the original mandate of the EDG (FC Doc. 09/21) was not explicit enough to allow the group to continue working on such issues, and that STACTIC WP 11/37 could not be adopted as drafted. EU and Canada agreed to work together to draft general terms of reference for follow-up of

editorial redrafting of the NAFO CEM, which was presented in STACTIC WP 11/40. This WP requests that the FC authorize the EDG to continue work with the intent to streamline the issues identified during the initial review of the NAFO CEM that could not be addressed and propose new measures to address them. It was understood that this follow-up may also entail addressing recommendations of the performance assessment review including those already forwarded to STACTIC by the FC, as reflected in FC WP 11/13.

DFG recommended that a process be established that would ensure that any future revisions to the NAFO CEM would be consistent with the style and format of revised NAFO CEM.

***STACTIC requests that the FC authorize STACTIC to continue the work of the EDG to streamline issues identified during the initial review of the NAFO CEM and propose new measures to address issues identified, including issues raised by the performance assessment review (STACTIC WP 11/40).***

## **9. Possible revisions of the NAFO CEM**

### **a. Discussion points on "Communication of Catches"**

Several issues regarding the communication of catches required by the CEM were discussed based upon proposals submitted by Iceland and the EU in STACTIC in WPs 11/25 (harmonizing field codes for catch reports throughout the CEM), 11/26 (streamlining communication of catch), and 11/35 (weekly posting of catch).

Some CPs were concerned with part of the proposal included in STACTIC WP 11/26, which proposed that a vessel only need an observer for 25 percent of its time in the NAFO Regulatory Area because all vessels and observers would have the capability to submit electronic observer reports and daily catch reports. The US cautioned STACTIC that not all vessels of CPs may be able to comply with mandatory electronic reporting requirements proposed in STACTIC WP 11/26.

Based on concerns raised and the need for modifications of the proposals EU and Iceland submitted, revised versions of STACTIC WPs 11/25 (Revised 2) and 11/26 (Revised 2) were prepared. Of note, STACTIC WP 11/26 (Revised 2) deleted the proposed revision regarding the editorial reference to observer coverage. CPs approved these revised WPs for FC consideration.

***STACTIC recommends that the FC approve changes to the communication of catches, as outlined in STACTIC WPs 11/25 (Revised 2) and 11/26 (Revised 2).***

Under this agenda item, DFG presented STACTIC WP 11/35, which would require the Secretariat to email to CPs updated catch statistics (reported catch, estimated catch not reported, and estimated catch available) for each stock listed in Annex 1.A of the CEM. These updates would be distributed on a weekly basis and would be based on vessel catch reporting requirements outlined in Article 27. Russia noted that they could not agree to this WP until after implementation of a cancel report. Discussion regarding this proposal centered on the utility of this proposal. The EU expressed concern that this proposal would be unduly burdensome on the Secretariat, and noted that not all CPs have the same access to daily catch data as others. Accordingly, Iceland, with the support of the EU, suggested that making daily catch reports available on the proposed inspector's web page (see Agenda Item 7 above) would accomplish DFG's purpose in proposing STACTIC WP 11/35, without unnecessarily burdening the Secretariat. CPs felt that further reflection was needed on this proposal and to postpone further consideration until the next STACTIC meeting.

***STACTIC agreed to postpone further consideration of STACTIC WP 11/35 until the next STACTIC meeting, and suggested that CPs discuss the purpose of this proposal with other CPs.***

### **b. Amendment of Article 15.2**

According to Article 15.2 of the NAFO CEM, all fishing for shrimp within Division 3L must be conducted in depths greater than 200 meters. This article then specifies certain coordinates to apparently reflect the 200 meter depth contour with three coordinates. However, these coordinates did not accurately reflect the 200 meter

depth contour for reasons unknown to CPs. DFG states that the current coordinates do not accurately outline the 200 meter depth contour in Division 3L where shrimp fishing can occur. STACTIC WP 11/1, offered by DFG, proposed to specify different coordinates designed to more accurately outline the 200 meter contour. Following discussions with Canada, the coordinates were further refined such that all coordinates are now outside the 200 meters and better reflect the overall 200 meter contour through STACTIC WP 11/01 Rev 2.

***STACTIC recommends that the FC adopt the proposed revisions to the coordinates outlined in Article 15.2 of the NAFO CEM, as specified in STACTIC WP 11/01 Rev 2.***

#### **c. Modification to Shark Bycatch Reporting Provisions**

The US presented STACTIC WP 11/10 (revised) proposing a revision to Article 27, paragraph 1 (f) which allows the reporting of the total quantity of species amounting to less than 1 ton to be done without specifying the species. The US proposal would change the amount triggering this exception to 100 kg, and would require that shark species in amounts less than 100 kg to be reported by species. This WP, as revised, deleted the prohibition against shark finning that was in the original WP submitted at the intercessional meeting and removed the expanded definition of sharks to include sharks, skates, rays, and chimeras.

Japan suggested adding “to the extent possible” to the proposed text because of the difficulty in identifying shark species. DFG suggested that a generic shark 3-Alpha code could be used instead of a species-specific code when species could not be ascertained. To address the concerns raised by Japan and partially incorporate the suggestion made by DFG, the US revised their proposal to state that when it is not possible to identify shark species, an observer or master must identify species as either large sharks or dogfishes using the applicable existing 3-Alpha code (STACTIC WP 11/10 (Revision 3)). The US also offered to lead the development of a shark species identification guide to facilitate observer identification of shark species and improve the accuracy of shark bycatch data.

***STACTIC recommends that the FC adopt the proposed revisions to the shark bycatch reporting measures of the NAFO CEM in Article 27, as outlined in STACTIC WP 11/10 (Revision 3).***

#### **d. Cancel Message**

At the May 2011 intercessional meeting, STACTIC decided that a Russian proposal to implement a cancel report in the communication of catches (STACTIC W.P. 10/15 Rev) would be referred to the NEAFC’s AGDC for technical review, and that consideration of its adoption would be deferred to this meeting. The Secretariat provided updates on this proposal in STACTIC WPs 11/30 and 11/31. This update indicated that the AGDC agreed that the creation of a cancel message was technically feasible and suggested the format. While most CPs acknowledged the need for cancel messages, several CPs, including the EU and Iceland, opposed allowing the master to submit cancel reports, suggesting that it was the duty of the fishery monitoring center instead. Norway suggested that it might be helpful to explore whether cancel messages are needed for other types of messages. After a short discussion, STACTIC was unable to come to a consensus on the issues raised by CPs at this meeting, and deferred further consideration of the WP until the intercessional meeting.

***STACTIC concluded that further discussion on the proposed cancelation message was necessary, and postponed action until their next intercessional meeting. Russia agreed to develop a revised proposal for consideration at that meeting.***

#### **e. Modification of Annex V.A of NAFO CEM**

Article 2.1 of the NAFO CEM defines “fishing vessel” very broadly to include vessels actively harvesting fish, transshipping fish, or engaging in any other activity related to fishing activities. However, Annex V.A of the NAFO CEM does not specify fishing vessel codes for support vessels, bunker vessels, or other non-fishing vessels. Therefore, Russia proposed to create fishing vessel codes for these types of vessels following the FAO vessel codes, as described in STACTIC WP 11/17. Following a brief discussion, CPs agreed that the proposed codes for other types of fishing vessels were needed.

***STACTIC recommends that the FC adopt changes to Annex V.A of the NAFO CEM, as outlined in STACTIC WP 11/17.***

**f. Amendment of Article 27 of NCEM**

Noting the broad definition of fishing vessels as described above, Russia also proposed to clarify that only vessels taking part in catch harvesting or transportation of catch from the fishing areas are required to submit the reports outlined in Article 27.1 (STACTIC WP 11/18).

Although many CPs supported the underlying intent of the proposal to reduce unnecessary reporting requirements, some CPs (Canada, France-in respect of St. Pierre et Miquelon, Norway) were concerned that the proposal, as written, would unintentionally exempt more vessels from reporting requirements than desirable. Norway indicated that it was important to know, for example, which support vessels are operating within the NAFO Regulatory Area. Several CPs, including Canada, Iceland, Korea, and Norway explored ways to exempt particular vessels from specific reports outlined in Article 27.1, particularly the catch report (CAT), and suggested revisions to STACTIC WP 11/18 that would be acceptable while still addressing some of Russia's concerns. Russia prepared a revised proposal (STACTIC WP 11/18 (Revised)) in response to these suggestions. However, despite these efforts, several CPs did not think the revised proposal was specific enough to address their concerns. Consensus could not be reached on this WP.

***STACTIC did not adopt changes proposed in STACTIC WP 11/18 (Revised). It is STACTIC's understanding that Russia may submit a new paper at the next STACTIC intercessional meeting on this issue.***

**g. Revisions to Article 18 of the NAFO CEM Regarding Authorization to Fish**

DFG offered STACTIC WP 11/34 with the intent to improve the transparency and effectiveness of inspection. In this proposal, CPs would be required to authorize vessels to fish for specific species in designated areas within the NAFO Regulatory Area, as listed in Annex I.A. This list would be required to be transmitted to the Secretariat in electronic format before 1 January of each year and include the information listed in Annex IV.B for each authorized vessel. The Secretariat would be required to make this vessel registry available to all CPs.

Several CPs were confused as to the intent of this proposal and whether it was redundant with existing authorization requirements. DFG clarified that it was intended to provide more fishery/area-specific information on the authorized operations of a particular vessel to facilitate inspections. The EU observed that such information already exists in the reports submitted when a vessel enters or exits the NAFO Regulatory Area. Norway favored the proposal, stating that it would offer more specific information of a vessel's activity, would not cause an excessive burden on flag states, and would not affect quota management. Canada expressed general support for the proposal, as it would facilitate inspections. Korea offered edits to the text to clarify that CPs are not obligated to authorize any vessel to fish for any species or in any area. A question was also raised about the cost of implementing this proposal. Because of the concerns expressed DFG and CPs agreed to defer further consideration of this WP until the intercessional meeting.

***STACTIC agreed to defer further consideration of this proposal (STACTIC WP 11/34) until the next intercessional meeting. Further, STACTIC requested that the Secretariat explore any costs associated with the additional messaging requirements.***

**h. Alternative Reporting for Defective VMS Devices**

Currently, the NAFO CEM requires VMS devices to communicate vessel position at least once per hour. Article 26.5 states that if a VMS device is defective, alternative reports must be submitted at least every six hours. In STACTIC WP 11/28, the EU proposed to reduce the alternative reporting deadline from six hours to four hours. Canada, France, Iceland, Norway, and Russia supported the proposal by the EU, and consensus was reached to accept this proposal.

***STACTIC recommends that the FC approve the alternative reporting requirements for defective VMS units outlined in STACTIC WP 11/28.***

### **i. Reclassifying Tampering with Evidence and Falsifying Documents as Serious Infringements**

In STACTIC WP 11/29, the EU proposed to classify concealing, tampering with, or disposing of evidence related to an investigation, or presenting falsified documents or false information as “serious infringements” under Article 37.1. Korea stated that it was concerned that these infringements did not include an intentionality element and suggested adding language to reflect that these infringements must first be based on intentional wrongdoing. Russia expressed a similar concern. Korea mentioned that without the intentionality element, a master may inadvertently make a mistake on a catch report and be cited for a serious infringement under the EU’s proposal.

The EU preferred not to insert text regarding the intention of a vessel master, stating that a vessel master would always claim that an activity was unintentional to avoid a citation, and that listing the aforementioned activities as serious infringements would help ensure that such activities are minimized. The US, Norway, Canada and others supported the EU, suggesting that inserting references to a master’s intention introduces ambiguity into the NAFO CEM and make it difficult to enforce. Norway cautioned that if STACTIC added reference to a master’s intention for classifying these activities as serious infringements, it is likely that similar additions would be necessary for other activities considered serious infringements.

After considerable discussion, Korea and Russia indicated they could support the proposal regarding paragraph k relating to tampering with evidence and seals, but not paragraph l regarding false information. EU suggested revising paragraph l to specify that providing falsified documents or false information would only be a serious infringement if the activity would prevent a serious infringement from being detected (STACTIC WP 11/29 Revised 2). This revision appeared to address concerns previously expressed by CPs, as no further objections were offered to the proposal, although the Chair recognized that Korea’s and Russia’s reservations would be noted in this report.

***STACTIC recommends that the FC approve reclassifying tampering with evidence and falsifying documents as serious infringements, as outlined in STACTIC WP 11/29 Revision 3.***

### **10. Observers Scheme – NAFO CEM Chapter VII and Article 28**

The EU proposed revising Article 28 and Chapter VII of the NAFO CEM regarding the observer program requirements for participating vessels (STACTIC WP 11/27). The EU contends that the existing observer requirements are very costly to implement, produce very little usable data to control the fishery, and do not contribute to the scientific data used by the Scientific Council. The EU indicated that observer reports are often late and have never been used to identify apparent infringements. Therefore, the EU recommended that the observer program be restructured to more strategically deploy observers in fisheries. They contend that this risk-based approach would more effectively achieve the management objectives of the NAFO CEM.

DFG and Norway supported considering revising the observer program measures in light of the new requirement for daily catch reports and comments from the Scientific Council concerning the utility of observer information (STACTIC WP 11/20), but noted that additional data needs to be collected before a truly risk-based scheme can be employed for distributing observer coverage. Specifically, DFG advocated for the collection of haul-by-haul catch data by both vessel masters and observers to evaluate reporting accuracy. Norway recognized that efforts are underway to move away from traditional observer programs and move toward electronic monitoring techniques. Canada acknowledged Norway’s observations, and suggested that the current observer program could be improved. However, Canada is reluctant to move away from the existing observer program at this time. CPs agreed that the proposal of EU needs further development and consideration. At the suggestion of some CPs, the Chair encouraged CPs to conduct an operational analysis of data collected from current observer requirements and explore whether any changes to current observer program are warranted by the next meeting.

***In light of the discussion described above, STACTIC agreed to further consider the concept of the proposal in STACTIC WP 11/27 at the next intercessional meeting.***

## 11. HTTPS NAF Gateways

At the May 2011 STACTIC intercessional meeting, Norway highlighted challenges when its security certificate expired (STACTIC 11/2). The Secretariat was asked to review current procedures for data communication via HTTPS to determine if existing systems are operating according to accepted best practices. Guidance on appropriate protocols was also sought from the NEAFC's AGDC. The Secretariat's response (STACTIC WP 11/24) highlights a suggested strategy to apply encryption protocols and ensuring that digital certificates correctly identify and validate the party submitting information electronically. Following a brief discussion, all CPs supported implementing the Secretariat's proposal.

*STACTIC recommends that the FC adopt the proposal to improve the security of data communications, as recommends by Secretariat in STACTIC WP 11/24.*

## 12. Other Matters

### a. Clarifying the application of minimum mesh size requirements for the redfish fishery Area 3M

In FC WP 11/9, the FC is considering revising the minimum mesh size for the redfish fishery when using mid-water trawl gear. Russia noted that there are several references to the use of mid-water trawl gear throughout the NAFO CEM. However, there is currently no definition of mid-water trawl gear within Article 2 of the NAFO CEM. If the FC's redfish mesh size proposal is adopted, Russia contends that a definition of mid-water trawl gear would be necessary to help enforce effectively this provision.

Canada agreed that a definition for this gear type is needed, and agreed to help draft of a proposed definition for this gear type which was put forth in STACTIC WP 11/39, as follows:

Mid-water trawl (pelagic trawl) means trawl gear that is designed to fish for, is capable of fishing for, or is being used 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 may not include discs, bobbins, or rollers on its footrope, or chafing gear as part of the net.

Japan did not oppose the definition, but suggested eliminating reference to chafing gear in the definition. This suggestion was accepted by Russia and incorporated into STACTIC WP 11/39 (Revision 1). However, the EU disagreed that a definition for this gear type be adopted at this time, noting that it is not the role of STACTIC to provide international definitions of fishing gears. They felt that additional gear definitions to distinguish other gear types would likely also be necessary before deciding on the definition of only mid-water trawl gear. Given that this proposal was only presented for the first time at this meeting and for other reasons noted above, the EU suggested more time is necessary to consider the implications of this proposal. Norway could accept the revised version of the proposal (STACTIC WP 11/39 (Revision 1)), but expressed sympathy to the arguments made by the EU. CPs agreed to defer consideration of mid-water trawl gear to the intercessional meeting.

*STACTIC deferred further consideration of this proposal (STACTIC WP 11/39 (Revision 1)) until the next STACTIC intercessional meeting.*

### b. Consideration of NAFO participation in the IMCS Network

The IMCS Network is a voluntary organization providing an informal way for fisheries monitoring and enforcement experts to cooperate, share experiences, and exchange information to address IUU fishing practices. The IMCS sent a questionnaire to the Secretariat seeking information on NAFO's interest in participating in the IMCS network. The Secretariat prepared draft answers to the IMCS questionnaire for consideration by STACTIC (STACTIC WP 11/33).

After a brief introduction to the IMCS Network by the Chair, CPs reviewed the Secretariat's draft responses to the IMCS questionnaire. CPs expressed general support for NAFO participation in the IMCS Network in some capacity, noting that many individual CPs already send representatives to IMCS workshops. Like other CPs, EU supported the overall concept of the network, but suggested that it is not

clear at this stage how NAFO would derive benefits from participating in the network. The EU highlighted that NAFO has been actively engaged in collaborative efforts to address IUU fishing practices for many years, and has demonstrated that there are many means to address IUU through other collaborative mechanisms. The IMCS Network could offer a means to further improve international collaboration against IUU fisheries. Both the EU and Canada noted that it would be beneficial to express NAFO's interest in participating in IMCS network to reinforce NAFO's commitment to addressing IUU fishing practices. However, the EU recommended some caution before NAFO offers any formal commitment to the IMCS Network and the status of IMCS needs to be clarified before any formal commitments are made. Korea expressed support for the position offered by the EU. CPs were invited to offer edits to the proposed answers to the questionnaire prepared by the Secretariat which were incorporated into STACTIC WP 11/33 (Revised).

***STACTIC recommends that the FC approve the responses to the IMCS Network questionnaire, as presented by the Secretariat in STACTIC WP 11/33 (Revised).***

**c. Clarification of the relationship of NAFO with the NEAFC's AGDC**

NAFO has recently utilized the NEAFC's AGDC, a technical advisory group, to review NAFO initiatives that involve technical issues and data management. In October 2011, the AGDC will update its terms of reference and rules of procedure to give NAFO a more formal role and status in the AGDC. The Secretariat sought STACTIC's input regarding the role of NAFO in the AGDC, the role of NAFO Secretariat participation in the AGDC, the exchange of information between the two groups and the reporting of results, and STACTIC's interest in the AGDC, as outlined by the Secretariat in STACTIC WP 11/32.

STACTIC briefly discussed the questions raised by the Secretariat regarding NAFO roles in the AGDC. The EU emphasized the importance of AGDC to STACTIC, noting that they are the only source of technical advice for electronic data issues. The EU indicated that it was in STACTIC's key interests in work with this group and to be fully integrated into AGDC process. The Chair suggested that STACTIC has an interest in participating in the AGDC to extent necessary. While STACTIC did not address each of the topics identified in STACTIC WP 11/32, the Chair offered to provide further feedback to the Secretariat at a future STACTIC meeting, as necessary.

***STACTIC recommends that the FC approve participation of the NAFO Secretariat in meetings of the AGDC.***

**d. Consideration of Recommendations from the Performance Assessment Review Panel**

The FC requested STACTIC to consider several recommendations specified in FC WP 11/13. STACTIC briefly considered the recommendations of the review panel and agreed to take them up at the intercessional meeting because there was insufficient time to take action on the recommendations at this meeting.

***STACTIC agreed to consider recommendations of the Performance Assessment Review Panel specified in GC WP 11/2 and FC WP 11/13 at STACTIC's next intercessional meeting.***

**e. STACTIC WPs Adopted**

The following WPs have been adopted by STACTIC at the 2011 NAFO Annual Meeting:

<b>STACTIC WP</b>	<b>TITLE</b>
11/01 REV 2	Proposal to Amend Article 15.2
11/7 REV	NAFO inspector's web site
11/10 REV 3	Modifications to Shark By catch reporting
11/14 REV	NAFO CEM - Annex XX c - Product Form Codes (STACTIC May 2011)
11/17	Proposal to improve NCEM – Vessel type
11/21 REV	Proposed Revisions to NAFO's Conservation and Enforcement Measures – Final Product of the Editorial Drafting Group (EDG) (Printed separately)
11/24	Security provisions in NCEM –ISO 27001 Best Practices
11/25 REV 2	Communication of catches – Editorial correspondence for CA,OB,RJ and US field codes – NCEM Annexes X; XXa and XXIIc
11/26 REV 2	Communication of catches - NCEM Chapter VII; Annexes X, XXa, and XXIIc
11/28	Communication in case of defective VMS
11/29 REV 3	Serious infringement
11/33 REV	IMCS Network questionnaire
11/38 REV	Annual Compliance Review 2011
11/40	Follow-up of editorial redrafting of the NCEM by EDG

### **13. Time and Place of Next Meeting**

The Chair reported that the EU has indicated it is willing to host the next meeting of STACTIC in Brussels, Belgium in May 2012. STACTIC will solicit input from CPs as to the best date for the meeting, with the intention of holding a 3-day meeting in close coordination with the meeting of the NEAFC's Permanent Committee Control and Enforcement (PECCOE). Tentative dates of 2-4 May 2012 were proposed by the Chair. Given existing time constraints, it is not possible to host the STACTIC intercessional meeting during the same week.

### **14. Adoption of Report**

STACTIC agreed that the first draft of the meeting report will be completed and circulated for review by the morning of September 22, 2011. Following the review by CPs and the incorporation of edits, the report was adopted on September 22, 2011.

### **15. Adjournment**

Participants expressed thanks to the Chair, Rapporteur, and the Secretariat for the efficient conduct of the meeting. The meeting was adjourned at 1348 hrs on September 22, 2011

## **Annex 1. Agenda**

1. Opening by the Chair, Gene Martin (United States)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Compliance Review 2010 including review of reports of apparent infringements
5. Review and Evaluation of NAFO Practices and Procedures
6. Review of current IUU list pursuant to NAFO CEM Article 57.3
7. Inspectors Web Page
8. Editorial Drafting Group of the NAFO CEM (EDG)
  - a) Ongoing Edits and Clarifications to the NAFO CEM
  - b) Further Revisions to the NAFO CEM for Exploration by STACTIC
9. Possible revisions of the NAFO CEM
  - a) Discussion points on "Communication of Catches"
  - b) Amendment of Article 15.2
  - c) Modification to Shark Bycatch Reporting Provisions
  - d) Cancel Message
  - e) Modification of Annex V.A of NCEM
  - f) Amendment of Article 27 of NCEM
  - g) Revisions to Article 18 of the NAFO CEM Regarding Authorization to Fish
  - h) Alternative Reporting for Defective VMS Devices
  - i) Reclassifying Tampering with Evidence and Falsifying Documents as Serious Infringements
10. Observers Scheme – NCEM Chapter VII and Article 28
11. HTTPS NAF Gateways
12. Other Matters
  - a) Clarifying the application of minimum mesh size requirements for the redfish fishery Area 3M
  - b) Consideration of NAFO participation in the IMCS Network
  - c) Clarification of the relationship of NAFO with the NEAFC's AGDC
  - d) Consideration of Recommendations from the Performance Assessment Review Panel
  - e) STACTIC WPs Adopted
13. Time and Place of Next Meeting
14. Adoption of Report
15. Adjournment