

Northwest Atlantic Fisheries Organization



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

36<sup>th</sup> Annual Meeting of NAFO, 22-26 September 2014  
Vigo, Spain

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

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**PART I**  
**Report of the Fisheries Commission**  
**36th Annual Meeting of NAFO, 22-26 September 2014**  
**Vigo, Spain**

**I. Opening Procedure**

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

The meeting was opened by the Chair, Sylvie Lapointe (Canada), at 1415 hrs on Monday 22 September 2014. Delegations from the following Contracting Parties were in attendance: Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), European Union (EU), France (in respect of Saint-Pierre et Miquelon), Iceland, Japan, Republic of Korea, Norway, Russian Federation, and the United States of America (USA). The delegation from Ukraine was absent (Annex 1).

The presence of observers was acknowledged. They represented the Food and Agriculture Organization of the UN (FAO), Permanent Commission for the South Pacific (CPPS), North Pacific Anadromous Fisheries Commission (NPAFC), International Monitoring, Control and Surveillance Network (IMCS), Ecology Action Centre (EAC), International Coalition of Fisheries Associations (ICFA), Marine Stewardship Council (MSC), PEW Environmental Foundation, and the 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 (FC) 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 FC is currently twelve (12). All Contracting Parties (CPs) have voting rights.

**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 2014 Intersessional Meeting which was held in Copenhagen, Denmark (FC Doc. 14/3). He reported on the status of the proposals on changes in the NAFO Conservation and Enforcement Measures (NCEM). The STACTIC advised that it would continue at the meeting the discussions and deliberations on Port State Measures, Annual Compliance Review, bycatch, availability of haul-by-haul data, information security and data management and the Joint Advisory Group on Data Management.

FC **accepted** the report and commended STACTIC for its hard work. It acknowledged the work of STACTIC on the catch reporting issues and encouraged STACTIC to continue working on the pending issues, specifically on observer scheme, port State measures, and the provision of haul-by-haul data.

**II. Implementation Review of the  
Performance Review Panel (PRP) Recommendations**

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

The Secretariat introduced FC WP 13/03 presenting the status of implementation of PRP recommendations addressed to FC and STACTIC.

In this review, three recommendations identified last year as action items were highlighted. They relate to framework for the presentation of key management decisions, management of fishing capacity, and allocation of fishing rights to new members. Concerning presentation of key management decisions, it was noted that FC decisions have been clearly documented in meeting reports and that no further action is necessary except to continue the practice. Concerning management of fishing capacity, no action is being undertaken as this recommendation did not garner unanimous support. Concerning allocation of fishing rights to new members, there has been no opportunity to act on it and it is unlikely that there will be one in the near future.

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

The Secretariat introduced FC WP 13/04 presenting the status of implementations of PRP addressed to more than one NAFO Body including the FC.

It was noted that the implementation statistics (the number of completed and on-going) remain practically unchanged from last year as the implementation of the PRP recommendations is meant to be continuing or on-going on a medium- or long-term basis. Nonetheless, FC continues to address major PRP recommendations covering FC-Scientific Council (SC) dialogue, catch estimate discrepancies, catch reporting and data sharing, conservation plans and rebuilding strategies, ecosystem approach to fisheries management, Precautionary Approach, etc. through the newly established FC ad hoc working group (WG) and three joint FC-SC WGs. In 2014, the new WGs met for the first time. The recommendations from these WGs and actions taken by FC are reflected in various sections of this report (see items 10, 14, 17, 18).

It was decided that next year's implementation review of all PRP recommendations would be conducted by the General Council (GC).

## III. Scientific Advice

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

The SC Chair, Don Stansbury (Canada), presented the comprehensive and detailed scientific advice. The scientific advice on fish stocks and on other topics were mainly formulated during the June 2014 SC meeting (SCS Doc 14/17). The multi-year advice provided in the previous year was also reviewed or updated at that meeting. Advice on shrimps was formulated during its meeting in September 2014 (SCS Doc 14/19). The scientific advice represents the response of SC to the request from FC. The FC request was formulated at the 35<sup>th</sup> annual meeting (FC Doc. 13/22).

The following represents an overview of the scientific advice on the fish stocks which were fully assessed or monitored at the SC meetings. For brevity, only selected topics from special request items on fish stocks, Risk-based Management Strategies (including Conservation Plans and Rebuilding Strategies), Ecosystem Approach Framework to Fisheries Management (including Vulnerable Marine Ecosystems) are presented here. The complete list of requests and the advice thereon are documented in FC Doc. 13/22 and in the above-mentioned SC meeting reports. The advice may contain special comments and caveats. The SC Chair urged FC to consult the details in the relevant SC meeting reports when considering conservation and management measures.

#### 8.1 Scientific advice on fish stocks

- **Shrimp in Div. 3M.** No directed fishery.
- **Shrimp in Div. 3LNO.** No directed fishery as there is a very high probability that the stock is below  $B_{lim}$ .
- **Witch flounder in Div. 3NO.** Future removals, if allowed to increase, should only increase in an adaptive, gradual manner.
- **American plaice in Div. 3LNO.** No directed fishery in 2015 and 2016.
- **Redfish in Div. 3LN.** Fishing mortality up to  $1/3 F_{msy}$  corresponding to a catch of 10 200 t in 2015 and 2016 has low risk (<10%) of exceeding  $F_{lim}$ .

- **Thorny skates in Div. 3LNO.** The stock has shown little improvement at recent catch levels (approximately 5 000 t, over 2006-2013). SC advises no increase in catches.
- **American plaice in Div. 3M.** For 2015- 2017 no directed fishery. Bycatch should be kept at the lowest possible level.
- **Redfish in Div. 3M.** For 2014-2015, recommends not increasing current TAC (6 500 t).
- **White hake in Div. 3NO.** For 2014-2015, catches of white hake should not exceed their current levels of 100-300 t.
- **Greenland halibut in 2+3KLMNO.** The TAC for 2015 derived from the Harvest Control Rule (HCR) is 15 578 t.
- **Cod in Div. 3M.** In the short term the stock can sustain values of  $F$  up to  $F_{max}$ , however any fishing mortality over  $F_{max}$  will result in an overall loss in yield in the long term. Yield at  $F_{max} = 10838$  t.

## 8.2 Scientific advice on Risk-based Management Strategies (RBMS) including Conservation Plans and Rebuilding Strategies (CPRS)

- **Reference points  $B_{msy}$  and  $F_{msy}$  for 3M Cod.**  $F_{30\%}$  (the fishing mortality which reduces Spawner Per Recruit (SPR) to 30% of its value at  $F=0$ ) is the best  $F_{msy}$  proxy at this moment.
- **Reference points  $B_{lim}$ ,  $B_{msy}$  and  $F_{msy}$  for 3NO witch flounder.** The average of the two highest Canadian spring research vessel survey points from 1984-2013 is considered to be a proxy for  $B_{msy}$ . 30% of this average is considered to be a proxy for  $B_{lim}$ . Following the same logic, a proxy for  $F_{msy}$  ( $=F_{lim}$ ) can be derived as 0.26 (based on catch/biomass ratio).
- **3M Cod reference points.**  $B_{lim} = 14000$ t;  $F_{lim}=F_{msy}(F_{30\%}) = 0.13$ ;  $F_{max} = 0.145$ .
- **Development of Management Strategy Evaluation (MSE) workplan for 3M cod.** SC suggests some changes in the proposed MSE proposed by FC-SC WG-RBMS to reduce the high number of scenarios.
- **Development of MSE for 3LN Redfish.** The Management Strategy proposed by FCSC WG-RBMS was tested and found to meet the specified management objectives and performance statistics. The SC also tested three other harvest control rules (HCR) two of which were found to meet the specified management objectives and performance statistics.

## 8.3 Scientific advice on Ecosystem Approach Framework to Fisheries Management (EAFFM) including Vulnerable Marine Ecosystems (VMEs)

- **Risk assessment for SAI on VME elements and species.** SC noted that work on significant adverse impacts (SAI) is on-going. Good progress has been made and the final results are expected to be available in 2016. Preliminary results indicated the important fractions of the recent effort are exerted in relatively small regions within the fishing footprint, and at least for some areas, this fishing effort seems to be concentrated in the near neighborhood of VMEs, suggesting a potential functional connection between some VMEs and commercially exploited fish species.
- **VMEs.** VMEs inside and outside existing closures were identified using scientific data obtained through the NEREIDA program. A set of priorities was established on the basis of VME presence and the proximity to high fishing activity and areas with no current protection measures. Considered high priority are Area 3 (Beothuk Knoll), Area 4 (Eastern Flemish Pass), Tail of the Grand Bank and Candidate Areas 13 and 14 (East Flemish Cap).

Concerning seamounts, SC advises that polygons of closure for New England and Corner Seamounts be revised to include all peaks that are shallower than 2000 meters. For seamount fisheries in areas where fishing has not historically taken place, Exploratory Fishing Protocol should be expanded to include all types of fishing, specifically mid-water trawl gears. For seamount fisheries in areas where fishing has historically taken place such as mid-water trawl fishing on splendid alfonsino, precautionary regulations such as special and temporal limitations should be put in place.

#### **8.4 Other issues (as determined by SC Chair)**

Last year the former SC Chair informed FC of SC's increasing workload within the last few years such that it is reaching the limits of its resources and capabilities. The increase was due to the increasing amount of request items and the diversity of the requests.

This issue was re-iterated by the SC Chair and was further discussed at the joint FC-SC session where FC and SC representatives had an open dialogue. Some SC representatives provided examples to illustrate the problem. It was noted that SC also has to accommodate requests from coastal States. The amount of request items and the diversity of the requests were compounded by delayed availability of some scientific data from the flag States and CPs to the scientists. SC appealed to FC to be more mindful in the formulation of requests for scientific advice and to CPs to send more scientists and experts to the SC meetings as well as to make scientific data available to scientists in a timely manner.

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

The SC Chair's presentation engendered questions and enquiries for further clarification to which the SC prepared responses during the meeting. The questions from FC and the responses from SC are compiled in Annex 4. These concern 3M Cod, 3LNO Redfish, 3LNO Skates, Seamount Fisheries, and Significant Adverse Impacts (SAI) on Vulnerable Marine Ecosystems (VMEs).

#### **9. Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 2016 and on other matters**

Katherine Sosebee (USA) replaced Rafael Duarte (EU), who has moved on, in the steering committee. The committee is tasked to coordinate with FC and SC in drafting the FC request (see FC Doc. 12/26). The other two committee members are Neil Campbell (SC Coordinator) and Estelle Couture (Canada).

FC **adopted** FC WP 14/16 Rev.3 containing its request to SC for scientific advice on management in 2016 and beyond of certain stocks in Subareas 2, 3, and 4 and on other matters (Annex 5).

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

#### **10. Meeting Report and Recommendations of the Joint Fisheries Commission – Scientific Council Working Group on Risk-based Management Strategies, February 2014**

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

The co-Chairs Kevin Anderson (Canada) and Carsten Hvingel (Norway) presented the meeting report (FC-SC Doc 14/02) and forwarded the recommendations addressed to FC and SC for consideration and adoption (Annex 6).

FC **adopted** the FC-specific recommendations -- Recommendation 2 regarding amendments to the interim management plan for 3NO Cod and Recommendation 3 regarding amendments to the General Framework on Risk-based Management Strategies in Annex 6.

#### **11. Management and Technical Measures for Fish Stocks in the Regulatory Area, 2015**

The Quota Table for 2015 and the Effort Allocation Scheme for the shrimp fishery in Division 3M are presented in Annex 7. Allocation schemes for the fish stocks mentioned in items 11 and 12 are the same as in 2014 (but see item 12.4).

### 11.1 Cod in Division 3M

It was **decided** that the Total Allowable Catch (TAC) be set at 13 795 t, representing a 5% reduction from the 2014 TAC.

The decision was reached through a voting procedure in accordance with Article XIV of the NAFO Convention. Two proposals were brought forward for consideration:

1) **TAC of 10 838 t representing the Yield at  $F_{max}$** . Canada, Iceland, Norway, and the USA voted in favour of the proposal, which they believe reflects the advice of the SC for the stock. Cuba, Denmark (in respect of the Faroe Islands and Greenland), EU, France (in respect of Saint-Pierre et Miquelon), Japan, Republic of Korea, and the Russian Federation voted against it. With a majority opposing the proposal it was thus rejected.

2) **TAC of 13 795 t representing a 5% reduction from the 2014 TAC**. Cuba, Denmark (in respect of the Faroe Islands and Greenland), EU, France (in respect of Saint-Pierre et Miquelon), Japan, Republic of Korea, and the Russian Federation voted in favour of the proposal, which they believe reflects the advice of the SC for the stock. Canada, Iceland, Norway, and the USA voted against it. With a majority in favour, this proposal was **adopted**.

There was considerable debate in the interpretation of the SC advice. CPs which voted for Proposition 1 believe that any TAC above  $F_{max}$  would constitute a divergence from the SC advice. Norway issued a statement expressing regret that SC advice was not followed and that the adopted TAC level was not sustainable in the long run (Annex 8). CPs which voted for Proposition 2 believe that a 5% reduction would still be within the realm of the SC advice.

### 11.2 Redfish in Division 3M

It was **agreed** to set the TAC at 6 700 t, with a closure of the directed fishery at 6 500 t. The remaining portion of the TAC can be retained as bycatch and is limited to 5% of catches of cod in Division 3M. Enforcement measure to this effect is reflected in the newly **inserted** footnote 8 of the Quota Table (see Annex 7).

The old footnote 8 which states that no more than 50% of the TAC should be fished by midyear was **deleted** (Annex 9). This footnote was seen as redundant as the provision was already covered by Article 5.5 of the NAFO Conservation and Enforcement Measures (NCEM).

Denmark (in respect of the Faroe Islands and Greenland) stated its concern on the decision on bycatch of redfish in 3M (Annex 10).

### 11.3 American plaice in Division 3M

It was **agreed** to extend the moratorium, applicable in 2015-2017.

### 11.4 Shrimp in Division 3M

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

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

## **12. Management and Technical Measures for Fish Stocks Straddling National Jurisdictions, 2015**

### **12.1 Redfish in Divisions 3LN**

It was agreed to **adopt** the risk-based management strategy for redfish 3LN as outlined in HCR 2 presented by the SC (Annex 11). This means that the TAC will be set at 10 400 t for 2015 and 2016 and at 14 200 t for 2017 and 2018 and at 18 100 t for 2019 and 2020. The SC will monitor the performance of the HCR by examining the trends in the survey indices and by conducting a full assessment every 2-3 years and for the first time in 2016. It will conduct a full review/evaluation of the management strategy at the end of the 7 year implementation period.

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

It was **agreed** to rollover the TAC which is set at zero, noting that the TAC might be adjusted in accordance with footnote 10.

The Russian Federation issued a statement regarding its position on this stock (Annex 12).

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

It was **agreed** to continue the moratorium, applicable in 2015 and 2016.

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

It was **agreed** to re-open the fishery with a TAC of 1 000 t.

The **adopted** management measures are presented in Annex 13. The allocation scheme is based on the quotas as in effect in 1994, the year before the moratorium was declared. A new footnote 28 was **inserted** in the Quota Table to this effect (see Annex 7).

USA expressed that the allocation scheme did not consider the input and contributions of all CPs during the time before and after the declaration of the moratorium and that all CPs should have opportunities to the re-opened fishery. In this regard, USA expressed its reservation on the allocation scheme.

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

It was **agreed** to set the TAC at 1 000 t, same as in 2014.

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

It was **agreed** to set the TAC 7 000 t, applicable in 2015 and 2016. Footnote 29 was **inserted** (see Annex 7).

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

Consistent with the Management Strategy Evaluation approach and applying the HCR, it was **agreed** to set the TAC 15 578 t, 11 543 t of which in Divisions 3LMNO.

### **12.8 Shrimp in Division 3LNO**

It was **agreed** to set the TAC at zero.

Denmark (in respect of the Faroe Islands and Greenland) expressed that notwithstanding the TAC decision, it maintains its reservation to the quota allocation scheme applied to this stock.

### 13. Other matters pertaining to Conservation of Fish Stocks

A proposal by EU and the USA requiring all sharks to be landed with their fins still naturally attached (FC WP 14/10) did not attain consensus. It was eventually withdrawn by the proponents.

The issue of the alfonsino fishery being conducted in one of the closed seamounts was brought forward. It was Norway's view that this unregulated fishery should not take place in the NAFO Regulatory Area and that precautionary actions should be taken. Norway's full statement is presented Annex 14.

## V. Ecosystem Considerations

### 14. Meeting Report and Recommendations of the Joint Fisheries Commission – Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management, July 2014

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

The co-Chairs Robert Day (Canada) and Andrew Kenny (EU) presented the meeting report (FC-SC Doc 14/03) and forwarded the recommendations addressed to FC and SC for consideration and adoption (Annex 15). FC **adopted** all FC-specific WG recommendations.

Two follow-up proposals were deliberated.

One proposal related to the revision of Article 16 in the NCEM (Annex 16). Regarding Recommendation 1 in Annex 16, the area closures identified in Article 16.1, 16.4, and 16.5 of the NCEM were **extended** to 31 December 2020. Regarding Recommendation 2 on the proposal to delete Article 16.2, 16.3 and 16.6, it was **decided** to forward this matter relating to Articles 16.2, and 16.3 to the WG (the proposal to delete Article 16.6 was addressed in Recommendation 4 in Annex 15). Articles 16.2 and 16.3 related to exploratory fisheries in the seamounts. Regarding Recommendation 3, the New England Seamount map was **revised** with new coordinates (Annex 17). The new map and coordinates will be reflected in Article 16.1.

Norway expressed disappointment that FC could not arrive at the decision to delete Articles 16.2 and 16.3. These articles allow exploratory fisheries in the seamounts which according to Article 16.1 should be closed to bottom fishing activities. In Norway's view, seamounts should also be closed to exploratory fisheries since there are VME elements highly likely to have VMEs. Norway's full statement can be found in Annex 18.

The other proposal was to revise the coordinates of the currently closed Area 4 and establish a new closed area (candidate Area 15) in consideration of Recommendation 6 in Annex 15 (Annex 19). The proposal concerns the protection of significant concentrations of sponge and large gorgonians on the Southeastern Flemish Cap and large gorgonians on the Beothuk Knoll.

FC decided to **adopt** the proposal outlined in Annex 19. The decision was reached through a voting procedure in accordance with Article XIV of the NAFO Convention. Canada, Cuba, Denmark (in respect of the Faroe Islands and Greenland), EU, France (in respect of Saint-Pierre et Miquelon), Iceland, Republic of Korea, Norway and USA voted in favour. Japan and the Russian Federation voted against.

Three CPs issued statements in reaction to FC's decision on the VME closures (Annex 20).

### 15. Other matters pertaining to Ecosystem Considerations

No other matter was discussed.

## VI. Conservation and Enforcement Measures

### 16. Review of Chartering Arrangements

A report on chartering arrangements was presented by the Secretariat (FC WP 14/2 Rev). There were four (4) arrangements made in 2013, one of which was not implemented. In the period of January – August 2014, there were three (3) arrangements. The Secretariat noted full compliance with all the chartering requirements, specifically with regards to documentation, notification of implementation date, and reporting of charter catches, as stipulated in Article 23 of the NCEM.

### 17. Meeting Report and Recommendations of the Joint Fisheries Commission – Scientific Council ad hoc Working Group on Catch Reporting, February 2014

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

Don Stansbury (SC Chair and co-Chair of the WG) presented the meeting report (FC-SC Doc 14/1) and forwarded the recommendations addressed to FC and SC for consideration and adoption (Annex 21).

FC **adopted** all the FC-specific WG recommendations. The WG will continue for at least another year with the same goals and objectives (see FC Doc. 13/24).

In consideration of the recommendations, FC **adopted** a proposal for a collaborative approach in catch validation (Annex 22). The WG would develop a framework for the validation of NAFO catch data and generation of catch estimates by looking at data requirements, data confidentiality, transparency, participation of NAFO bodies and governance.

### 18. Meeting Report and Recommendations of the Working Group on Bycatches, Discards, and Selectivity, July 2014

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

Sylvie Lapointe (FC and WG Chair) presented the meeting report (FC Doc. 14/6) and forwarded the recommendations addressed to FC for consideration and adoption (Annex 23).

FC **adopted** all the WG recommendations. The WG will continue for at least another year. Regarding Recommendation 3, 3M cod fishery was added.

In consideration of the recommendations, FC **adopted** a proposal to extend and expand the WG's terms of reference for bycatch and discard reporting (Annex 24). The WG would *inter alia* develop and recommend a comprehensive strategy relative to bycatch and discards in the NAFO Regulatory Area (NRA) that is consistent with the ecosystem approach to fisheries management and takes into account all bycatch and discard species.

### 19. Reports of STACTIC (May 2014 intersessional meeting and current Annual Meeting)

The May 2014 intersessional meeting report was presented under item 5. The STACTIC Chair presented the results of the STACTIC meeting. The following NCEM recommendations coming from both meetings were forwarded to FC.

- a) *Amend Annex II.D.D.2.B "Return error numbers" (Annex 25),*
- b) *Proposed changes to Chapter II – Bottom Fisheries in the NRA (Annex 26),*
- c) *Proposed changes to Chapter VIII – Non-Contracting Party Scheme (Annex 27),*
- d) *Provision of haul-by-haul logbook data to the Secretariat,*

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- e) *The use of the two letter code DS (Directed Species) in the NCEM (Annex 28),*
- f) *Closure of the RED 3M “directed fishery” (Annex 29),*
- g) *Consistent approach to address Serious Infringements detected at sea and in port (Annex 30),*
- h) *Amendment to Article 14 of the NCEM (Annex 31),*
- i) *Notification to Inspecting CPs regarding additional procedures for Serious Infringements (Annex 32)*

FC **adopted** Recommendations a) – i). Regarding Recommendation d), the proposal was revised. The **adopted** version is presented in Annex 33.

In addition, FC **accepted** the Annual Compliance Review 2014, for the fishing year 2013 (Annex 34). FC also **endorsed** the creation of a WG to review the observer scheme (Annex 35) and a WG on Port State Control Alignment (Annex 36) and the implementation of the NAFO Information Security and Management System (ISMS) (Annex 37).

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

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

A proposal requiring NAFO fishing vessels to use the IMO numbering scheme beginning 1 January 2016 was adopted (Annex 38). Canada requested that in the transition period STACTIC reviews the implication of this requirement as some NAFO fishing vessels may not be eligible to obtain an IMO number.

France (in respect of Saint-Pierre et Miquelon) tabled a proposal relating to access to the “Others” quota by a flag State Contracting Party (FC WP 14/20). It did not gain consensus. The proponent indicated that he would pursue this matter again at the next Annual Meeting.

## **VII. Closing Procedure**

### **21. Election of Vice Chair**

Temor Tairov (Russian Federation) was re-elected to the position.

### **22. Time and Place of Next Meeting**

This item was deferred to the General Council.

### **23. Other Business**

No other matter was discussed

### **24. Adjournment**

The Meeting was adjourned at 1315 hrs on Friday 26 September 2014.

## **Annex 1. Participant List**

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**Chair of the Fisheries Commission** - Lapointe, Sylvie (Canada)

**Chair of Scientific Council** - Stansbury, Don (Canada)

**Chair of STACFAD** - Warner-Kramer (USA)

**Chair of STACTIC** - Martin, Gene (USA)

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**Annex 2. Record of Decisions and Actions by the Fisheries Commission**  
(Annual Meeting 2014)

<b>Substantive Issues (Agenda item):</b>	<b>Decision/Action:</b>
8. Presentation of scientific advice by the Chair of the Scientific Council	<b>Noted</b> Scientific Council Chair's presentation of the scientific advice and the SC Meeting Reports that contained the scientific advice.
9. Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 2016 and on other matters	<b>Adopted</b> the FC Request to the SC for scientific advice.
10. Meeting Report and Recommendations of the Joint FC-SC WG on Risk-based Management Strategies, February 2014	<b>Adopted</b> all FC-specific recommendations. <b>Adopted</b> the revised interim plan for 3NO Cod. <b>Adopted</b> the revised <i>General Framework on Risk-based Management Strategies</i>
11. Management and Technical Measures for Fish Stocks in the Regulatory Area, 2015	(see 2015 Quota Table)
11.1 Cod in Division 3M	<b>Set</b> the TAC at 13 795 t.
11.2 Redfish in Division 3M	<b>Set</b> the TAC at 6 700 t. <b>Deleted</b> old footnote 8 which stated that no more than 50% of the TAC should be fished by midyear. <b>Inserted</b> new footnote 8 detailing specific enforcement measures.
11.3 American plaice in Division 3M	<b>Agreed</b> to continue the moratorium, applicable in 2015-2017.
11.4 Shrimp in Division 3M	<b>Agreed</b> to continue the moratorium.
12. Management of Technical Measures for Fish Stocks Straddling National Fishing Limits, 2015	(see 2015 Quota Table)
12.1 Redfish in Divisions 3LN	<b>Set</b> the TAC at 10 400t, applicable in 2015 and 2016. <b>Adopted</b> a Risk-based Management Strategy (HCR 2 presented by SC) to be applied on this stock.
12.2 Pelagic <i>Sebastes mentella</i> (oceanic redfish) in the NAFO Convention Area	<b>Agreed</b> to continue the moratorium.
12.3 American plaice in Divisions 3LNO	<b>Agreed</b> to continue the moratorium, applicable in 2015 and 2016.
12.4 Witch flounder in Divisions 3NO	<b>Re-opened</b> the fishery and <b>set</b> the TAC at 1000 t. <b>Inserted</b> new footnote 28 specifying the allocation key.
12.5 White hake in Divisions 3NO	<b>Set</b> the TAC at 1 000 t.

12.6 Thorny skate in Divisions 3LNO	<b>Set</b> the TAC at 7 000 t applicable in 2015 and 2016. <b>Inserted</b> new footnote 29 regarding adoption of new measure to further restrain in 2016 should catches exceed 5 000 t.
12.7 Greenland halibut in Subarea 2 and Divisions 3KLMNO	<b>Set</b> the TAC at 15 578 t (11 543 t in Divisions 3LMNO).
12.8 Shrimp in Division 3LNO	<b>Set</b> the TAC at zero.
14. Meeting Report and Recommendations of the Joint FC-SC WG on Ecosystems Approach Framework to Fisheries Management, July 2014	<b>Adopted</b> all FC-specific recommendations. <b>Extended</b> area closures to 31 December 2020. <b>Adjusted</b> the boundaries of the closed New England Seamounts. <b>Adjusted</b> the boundaries of the closed Area 4. <b>Established</b> a new closed area (Candidate Area 15).
17. Meeting Report and Recommendations of the Joint FC-SC ad hoc WG on Catch Reporting, February 2014	<b>Adopted</b> all FC-specific recommendations. <b>Adopted</b> a collaborative approach in catch validation.
18. Meeting Report and Recommendations of the ad hoc WG on Bycatches, Discards, and selectivity, July 2014	<b>Adopted</b> all FC –specific recommendations. <b>Adopted</b> a strategy for bycatch and discards reporting.
19. Reports of STACTIC (from May 2014 intersessional meeting and this Annual Meeting)	<b>Adopted</b> the STACTIC May 2014 Intersessional Meeting Report (FC Doc. 14/3) and the current meeting report (see Part II of this Report). <b>Adopted</b> Amend Annex II.D.2.B “Return error numbers”. <b>Adopted</b> Proposed changes to Chapter II – Bottom Fisheries in the NRA. <b>Adopted</b> Proposed changes to Chapter VIII – Non-Contracting Party Scheme. <b>Adopted</b> Provision of haul-by-haul logbook data to the Secretariat. <b>Adopted</b> The use of the two letter code DS (Directed Species) in the NCEM. <b>Adopted</b> Closure of the RED 3M “directed fishery”. <b>Adopted</b> Consistent approach to address Serious Infringements detected at sea and in port. <b>Adopted</b> Amendment to Article 14 of the NCEM. <b>Adopted</b> Notification to Inspecting CPS regarding additional procedures for Serious Infringements. <b>Accepted</b> Annual Compliance Review 2014, for fishing year 2013. <b>Endorsed</b> the creation of a WG to review the NAFO Observer Scheme. <b>Endorsed</b> the creation of a WG on Port State Control Alignment. <b>Endorsed</b> the implementation of the NAFO Information Security and Management System (ISMS).

20. Other matters pertaining to Conservation and Enforcement Measures	<b>Adopted</b> <i>Proposal to require the use of the IMO numbering Scheme for NAFO Vessels, applicable beginning 1 January 2016.</i>
21. Election of Vice Chair	<b>Re-elected</b> Temor Tairov as the Vice Chair of FC.

## Annex 3. Agenda

### I. Opening Procedure

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

### II. Implementation Review of Performance Review Panel (PRP) Recommendations

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

### III. Scientific Advice

8. Presentation of scientific advice by the Chair of the Scientific Council
  - 8.1 Scientific advice on fish stocks
  - 8.2 Scientific advice on Risk-based Management Strategies (RBMS) including Conservation Plans and Rebuilding Strategies (CPRS)
  - 8.3 Scientific advice on Ecosystem Approach Framework to Fisheries Management (EAFFM) including Vulnerable Marine Ecosystems (VMEs)
  - 8.4 Other issues (as determined by SC Chair)
  - 8.5 Feedback to the SC regarding the advice and its work during this Meeting
9. Formulation of Request to the Scientific Council for Scientific Advice on the Management of Fish Stocks in 2016 and on other matters

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

10. Meeting Report and Recommendations of the Joint Fisheries Commission – Scientific Council Working Group on Risk-based Management Strategies, February 2014
11. Management and Technical Measures for Fish Stocks in the Regulatory Area, 2015
  - 11.1 Cod in Div. 3M
  - 11.2 Redfish in Div. 3M
  - 11.3 American plaice in Div. 3M
  - 11.4 Shrimp in Div. 3M
12. Management and Technical Measures for Fish Stocks Straddling National Jurisdictions, 2015
  - 12.1 Redfish in Div. 3LN
  - 12.2 Pelagic *Sebastes mentella* (oceanic redfish) in the NAFO Convention Area
  - 12.3 American plaice in Div. 3LNO
  - 12.4 Witch flounder in Div. 3NO
  - 12.5 White hake in Div. 3NO
  - 12.6 Skates in Div. 3LNO
  - 12.7 Greenland halibut in Subarea 2 and Div. 3KLMNO
  - 12.8 Shrimp in Div. 3LNO
13. Other matters pertaining to Conservation of Fish Stocks

### V. Ecosystem Considerations

14. Meeting Report and Recommendations of the Joint Fisheries Commission–Scientific Council Working Group on Ecosystems Approach Framework to Fisheries Management, July 2014
15. Other matters pertaining to Ecosystem Considerations

## VI. Conservation and Enforcement Measures

16. Review of Chartering Arrangements
17. Meeting Report and Recommendations of the Joint Fisheries Commission – Scientific Council ad hoc Working Group on Catch Reporting, February 2014
18. Meeting Report and Recommendations of the Working Group on Bycatches, Discards, and Selectivity, July 2014
19. Reports of STACTIC (May 2014 intersessional meeting and this Annual Meeting)
20. Other matters pertaining to Conservation and Enforcement Measures

## VII. Closing Procedure

21. Election of Vice-Chair
22. Time and Place of Next Meeting
23. Other Business
24. Adjournment

## Annex 4. Answers to Questions to SC

(FC Working Paper 14/21)

The following requests were received during the current meeting (FC WP 14/09 and 12). Scientific Council noted that these responses are only for the clarification of the advice and do not in any way alter or change the advice published in the previous reports of the Scientific Council.

### **Cod in Div. 3M**

1. It is noted that the stock of cod in 3M is rebuilding following the reduction in fishing mortality and improved recruitment and that SSB is currently estimated to be well above  $B_{lim}$  with a high probability.

*The EU Flemish Cap survey taking place every year in June/July is the only fishery independent information available for the assessment of cod in Division 3M since 1988. This survey is the only tuning information used in the assessment for the years 1988-2013, since no fishing fleet catch/effort is used for tuning. The assessment of cod in Division 3M is therefore highly dependent on the data quality obtained from the EU Flemish Cap survey. In 2013, the survey was impacted by activity of oil and gas prospection by a seismic exploration vessel (see letter of 1 July 2013 of the Head of the scientific campaign to the Scientific Council Chair) and the estimates of Div. 3M cod 1 year olds and biomass decreased substantially in relation to 2012. The increasing trend of biomass observed since 2006 and projected by last year's assessment for 2014 and 2015 was this way inverted.*

*The Scientific Council is requested to:*

- a) Provide an opinion on the possible impact that the oil and gas prospection activity might have had in the abundance index of Div. 3M cod.*
- b) Compare the abundance indices of different demersal stocks of the 2013 EU Flemish Cap survey in order to assess if decreases were also observed for other demersal species in Div. 3M and if there might have been a year effect in the survey of 2013, possibly consequence of the oil and gas prospection.*
- c) Provide any preliminary information available of the 2014 Flemish Cap survey regarding cod in order to assess if the decrease in the abundance index is confirmed also in 2014.*

Scientific Council responded:

- a) Scientific Council cannot evaluate at this moment the impact of the activity of the seismic vessels on the abundance index of Div. 3M cod.
- b) With the exception of cod none of the declines were substantial, and in general were a continuation of recent trends. At present it is not clear whether the 2013 survey results are due to a year-effect.
- c) Preliminary information indicates the abundance decline has been confirmed, however, biomass has increased. SC will fully review these survey results during the next assessment.

2. *The Scientific Council reviewed document NAFO SCR Doc. 14/018 where different assumptions over the natural mortality parameter ( $M$ ) are analysed. The adopted stock assessment of 3M cod assumes a constant  $M$  over age, time and gender (estimate around 0.15) while the document indicated that  $M$  variable over three age classes and three periods of time provides estimates of around 0.2, which are more consistent with natural mortalities assumed for other cod stocks in the NAFO and ICES areas, Therefore, despite all the uncertainty around  $M$ , the constant  $M$  assumption adopted for scientific advice seems highly unlikely when considering the biology of the stock.*

*The Scientific Council is requested to:*

- a) Compare the estimated natural mortality value for Div. 3M cod to  $M$  values used in other cod stocks in the Atlantic and explain the rationale for a divergence and possible bias introduced due to cannibalism and other natural mortality factors.*
- b) Provide the value of  $F_{max}$  if  $M = 0.2$ . Please provide the Biomass, Spawning Stock Biomass and yield projections for these values of  $F_{max}$ .*
- c) A frequent approach to estimate  $F_{max}$  is by taking the mean of the last three years for the mean weights and exploitation pattern by age (PR). However, the SC decided to take only the values of the last year to estimate  $F_{max}$ . Explain what would have been the value of  $F_{max}$  if the mean of the last three years had been used for the mean weights and PR.*
- d) Estimate the projected biomass ( $B$  and  $SSB$ ) and the resulting fishing mortality in 2015 and 2016 with a TAC in 2015 of 14 521 tons. What is the probability of the biomass to fall below  $B_{lim}$  in 2016? Please compare with the projected biomass in 2015 and 2016 for the scenario  $F_{2015} = F_{max}$ .*
- e) Assuming that the TAC is set at 10 838 t for 2015 and is fished entirely, that the biomass evolves in accordance with the projections and  $F_{max}$  is constant, provide the foreseen yield at  $F_{max}$  ( $=0.145$ ) for 2016*

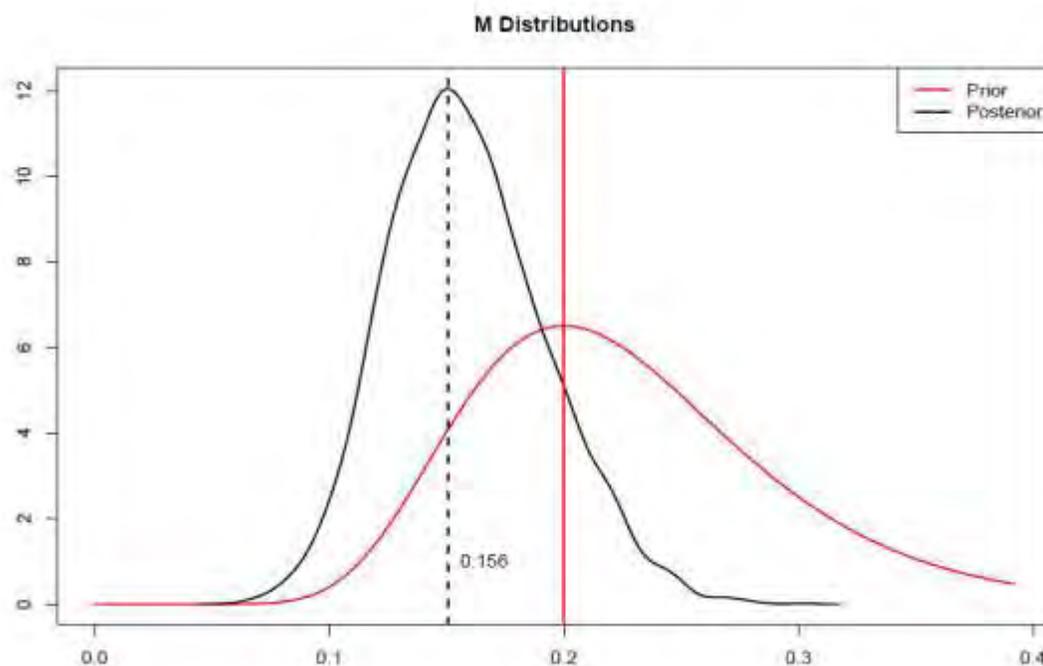
Scientific Council responded:

a) Mortality (F and Z) used in some assessments of cod are as follows:

Cod Stocks	M	Z
Northern Cod (Div. 2J3KL)		0.57*
Flemish Cap (Div. 3M)	0.16*	
Southern Grand Bank (Div. 3NO)	0.2	
Southern Newfoundland (Div. 3Ps)		0.44*
Gulf of St. Lawrence (Div. 3Pn4Rs)	0.2-0.4	
Southern Gulf of St. Lawrence (Div. 4TVn)	0.66*	
Eastern Scotian Shelf (Div. 4VsW)	0.36*	
Southern Scotian Shelf and the Bay of Fundy (Div. 4X5Yb)	0.76*	
Eastern Georges Bank (Div. 5Zjm)	0.8	
Gulf of Maine	0.2-0.4	
Georges Bank	0.2	
Norwegian Coastal Waters (ICES Subarea I and II (inshore))	0.2	
North-East Arctic (ICES Subareas I and II (offshore))	0.2	
Faroe Plateau (ICES Subdiv. Vb1)	0.2	

\*estimated values – others are fixed

The following figure shows the input (prior) and estimated (posterior) values of M for Div. 3M cod from the 2014 assessment. The probability that  $M \leq 0.2$  is 88.1%.



Scientific Council was not able to address divergence and possible bias introduced due to cannibalism and other natural mortality factors at this meeting.

- b) Scientific Council reiterates that the median value of  $M$  in Div. 3M Cod is estimated to be 0.156 in the 2014 assessment. The  $M=0.2$  scenario constitutes a new assessment. Scientific Council thus considers these figures to be illustrative only and not a basis for management advice. If a higher value of  $M$  is assumed, yield is increased.

	$F_{max}$ 2013 input data	
	$M=0.156$	$M=0.2$
5%	0.085	0.100
50%	0.145	0.165
95%	0.235	0.265

	$M=0.156$			$M=0.2$		
	Total Bio	SSB	Yield	Total Bio	SSB	Yield
2014	66953	44869	14521	74246	48902	14521
2015	85528	58341	10838	94311	62277	13073
2016	134970	79646		145070	81554	

- c) Scientific Council took only the values for the mean weight-at-age and exploitation pattern by age in 2014 due to the strong trends seen in these values over recent years. This approach was consistent with the approach taken for mean weights in the 2013 Div. 3M Cod assessment.

	$F_{max}$	
	SC Assessment	3-Year Average
5%	0.085	0.095
50%	0.145	0.130
95%	0.235	0.180

	SC Assessment			3-Year Average		
	Total Bio	SSB	Yield	Total Bio	SSB	Yield
2014	66953	44869	14521	76021	42770	14521
2015	85528	58341	10838	99414	61049	11962
2016	134970	79646		150535	81507	

Scientific Council considers the figures from the "3-year average" scenario to be illustrative only and not a basis for management advice.

- d) Estimate the projected biomass (B and SSB) and the resulting fishing mortality in 2015 and 2016 with TAC in 2015 of 14 521 t. What is the probability of the biomass to fall below  $B_{lim}$  in 2016? Please compare with the projected biomass in 2015 and 2016 for the scenario  $F_{2015} = F_{max}$ .

	$F=F_{max}$			Constant Catch = 14521		
	Total Bio	SSB	Yield	Total Bio	SSB	F
2014	66953	44869	14521	66953	44869	0.260
2015	85528	58341	10838	82450	58314	0.199
2016	134970	79646		120584	75315	

	P( $B < B_{lim}$ )		
	2014	2015	2016
Constant catch	<5%	<5%	<5%
Catch= $F_{max}$	<5%	<5%	<5%

- e) Due to uncertainty in recruitment of the 2010 and 2011 years classes, Scientific Council considers that projection of management options can be provided for 2015 only. Scientific Council considers the figures for 2016 yields, SSB and biomass are illustrative only and not a basis for management advice.

	Total Bio	SSB	Yield
2014	66953	44869	14521
2015	85528	58341	10838
2016	134970	79646	18588

### Redfish in Div. 3LNO

3. The Population Structure of *Sebastes mentella* and *Sebastes fasciatus* in NAFO Divisions 3LNO has been studied in the past, including the genetic markers. A conclusion is that redfish in Division 3LN and 3O are part of a same biological stock. However, at the moment, redfish in these Divisions is managed through two separated stocks. The scientific Council is therefore requested to:
- Indicate if there is any biological reason to define two different redfish management areas in NAFO Divisions 3LNO.
  - Assess the consequence of merging the 3O and 3LN redfish stocks into a single management area with a single TAC, taking into account the possibility that the fishing effort could be more concentrated in Divisions 3LN.

- a) In 2005, SC responded to a similar question from FC as follows:

*“Regarding redfish in Divisions 3L, 3N and 3O, Scientific Council is requested to: review all available information and provide advice regarding whether the current management units (3LN and 3O) or any alternative may be the most appropriate.”*

In 2005, SC responded as follows:

“The Council noted that results were available from a study of redfish population structure pertinent to the long standing recommendation on the appropriateness of Div. 3LN and Div. 3O as management units (SCR Doc. 05/50). The study compared genetic and morphometric characteristics of *S. fasciatus* and *S. mentella* based on samples within Div. 3LNO and Div. 3P area. For *S. fasciatus*, the results obtained suggested no

difference in the biological characters studied amongst Div. 3L, Div. 3N and Div. 3O. It further suggested that *S. fasciatus* from Div. 3LNO and from the Subdiv. 3Ps area adjacent to Div. 3O form a population that exchanges individuals with redfish in the Laurentian Channel (Div. 3P4V). Therefore Div. 3O could be influenced by migration events originating from or towards the Laurentian Channel area (Div. 3P4V). For *S. mentella*, the results suggested Div. 3L is different from the Laurentian Channel area. These results confirmed the findings of a study by Roques *et al.* (2001).

The latter study also found no genetic difference among samples of *S. mentella* from Div. 3LN, Div. 3O and Subarea 2 + Div. 3K. The Council noted statistically non-significant genetic differences between areas could be obtained from a relatively low mixing rate between these areas.

Most studies the Council has reviewed in the past have suggested a close connection between Div. 3LN and Div. 3O, particularly between Div. 3O and Div. 3N for both species of redfish. While many of the studies suggested a single management unit, differences observed in population dynamics between Div. 3O and Div. 3LN suggest that it would be prudent to keep Div. 3O as a separate management unit. This is also the suggestion of the 2005 study (SCR Doc. 05/50) with regard to the argument that Div. 3O may act as a buffer zone between surrounding populations."

There is no new information since 2005. SC reiterates that although there is a genetic connection between Div. 3O and Div. 3LN and other adjacent areas, differences observed in population dynamics, such as length- and age-structure of the populations, between Div. 3O and Div. 3LN suggest that it would be prudent to keep Div. 3O as a separate management unit.

b) The SC responded:

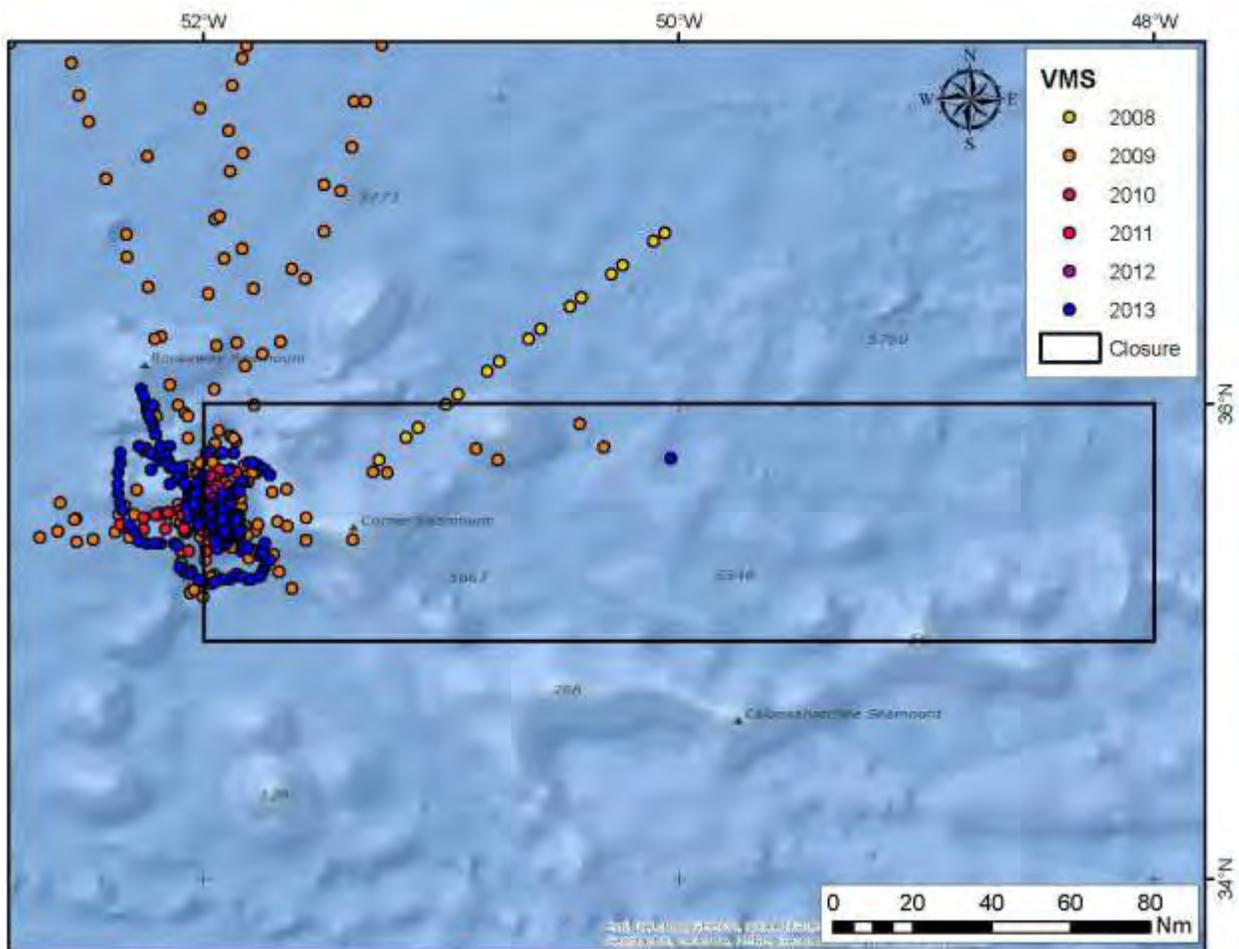
As noted in response to 3.a, the council considers that it would be prudent to keep Div. 3O as a separate management unit due to the differences observed in redfish population dynamics between the two zones and the uncertainty about the stock as a single biological unit. Given these uncertainties there would be a risk in combining the TACs from Div. 3O and Divisions 3LN. Concentrating fishing effort in Div. 3LN, with a combined TAC for Div. 3LNO, would lead to an exploitation level well above what is considered the MSY level for redfish in Div. 3LN.

### Seamount Fisheries

4. The SC is requested to present records of the spatial distribution of past seamount fisheries in the NRA, including seamount fisheries with mid-water trawls, or, if appropriate, confirm that the presentation in FC Working Paper 13/20 of 2013 provides a comprehensive record.

Existing bottom fishing areas were defined as areas where VMS data and/or other available geo-reference data indicating bottom fishing activities have been conducted at least in two years within a reference period of 1987 to 2007 (SCS Doc. 09-21). At the time footprint was developed there was an assumption that the seamounts were closed to bottom-trawling. The putative footprint polygons on the seamounts were therefore not included in the final footprint definition. As the exploratory protocol and management measures for seamounts evolved the perception that the seamounts were closed persisted but was not reflected in the NCEM.

Scientific Council has no reason to believe the data presented in SCS Doc. 13/21 (FC WP 13/20) is not comprehensive. In addition, the distribution of VMS data from 2008 – 2013 is presented below. Data from 2010 – 2013 is filtered to data at fishing speeds (0.5 – 5.0 knots).



5. *The SC is requested to define the use of the term "historical" in the advice statement concerning seamount fisheries.*

In this context, "historical" refers to the 20-year period used in the definition of the fishing footprint, although Scientific Council notes that the fishery for Alfonsinos on Corner Rise Seamount began earlier than this, in 1976 (Vinnichenko, 1997).

### **Significant Adverse Impacts**

6. *In 2006, UNGA adopted Resolution 61/105 calling for an assessment of the risk of significant adverse impacts (SAI) of fishing activities on Vulnerable Marine Ecosystem (VME). Then FAO was invited to develop guidance to support the implementation of the Resolution and adopted international Guidelines for the Management of Deep Sea Fisheries in the High Seas in 2008 taking into account the balance between the protection of VMEs and the rational utilization of fisheries resources.*

*The guidelines were adopted by NAFO as measures to avoid SAI on VMEs when fishing vessels encounter VME indicator species. Article 15.10 of NCEM states that "the term "encounter" means catch of a VME indicator species above threshold levels as set out in Article 22.3." It also states that "Any encounter with a VME indicator species or merely detecting its presence is not sufficient to identify a VME."*

*Scientific Council (2014) reported that there are high concentrations of VME indicator species in the areas proposed for the establishment of closed areas.*

*Are there VME indicator species in the areas in excess of the threshold levels stipulated in Article 22.3? Are there any quantified criteria adopted by FC other than the threshold levels stipulated in Article 22.3?*

Scientific Council responded:

The threshold levels indicated in Article 22.3 relate to amounts of VME indicator species expected to be observed in a typical commercial tow whose track goes over grounds that contain VME-indicator species at densities that correspond to VME habitats.

The thresholds used to delineate these VME habitats are not those of Article 22 of the CEM, but both reflect equivalent VME densities on the bottom.

Differences in threshold values are associated to their intended purposes: 1) a scientific threshold used to determine areas of significant concentrations of VME indicator species (i.e. VME habitat), and 2) the threshold used for the encounter provision during commercial operations mentioned in Article 22.3.

VME thresholds are determined quantitatively using a kernel density analysis. This analysis provides thresholds to identify "hotspots" in the biomass distribution derived from research vessel trawl survey data, by looking at natural breaks in the spatial distribution associated with changes in local density. These natural breaks allow defining of significant area polygons. The methodology was peer-reviewed and published in the primary literature (Kenchington *et al.*, in press). Current scientific thresholds from this method are:

Sponges:	75kg
Large gorgonian coral:	0.6kg
Small gorgonian coral:	0.15kg
Sea pens:	1.4kg

The by-catch thresholds for the encounter provision for sponges and seapens were calculated with a GIS model which used the VME indicator species data from research surveys and VMS fishing effort data to generate realistic commercial trawl by-catch. The thresholds generated for the purpose of the encounter provision in the NCEM are:

Sponges:	300kg
Sea pens:	7kg

The current by-catch threshold for coral was calculated by scaling up from a scientific threshold to the duration of a commercial tow (FC Doc. 09/06).

Corals:	60kg
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### **Thorny Skate in Div. 3LNO**

7. *For Div. 3LNO Thorny skate, if you were to apply the same method of calculating the reference points as has been recently adopted for 3NO witch flounder (where the two highest points in the time series of the biomass index is used as a proxy for  $B_{msy}$ ), can you comment on what the likelihood would be that thorny skate biomass index would be below  $B_{lim}$ .*

Scientific Council responded:

The method applied to define reference points for witch flounder cannot be directly applied to thorny skate. The rationale to use the two highest points in the survey series as a proxy for  $B_{msy}$  for witch flounder in Divs. 3NO was based upon both the survey biomass index as well as the corresponding trends in fishery landings, including those prior to the initiation of the survey. Given the shorter time-series of landings in Div. 3LNO thorny skate, it is unclear if there is justification to assume that this stock was near  $B_{msy}$  in the years when the highest survey values were observed. However, it is anticipated that reference points for Thorny Skate in 3LNOPs may be developed during June 2015.

### References

Kenchington, E., F.J. Murillo, C. Lirette, M. Sacau, M. Koen-Alonso, A. Kenny, N. Ollerhead, V. Wareham and L. Beazley. 2014. Kernel density surface modelling as a means to identify significant concentrations of vulnerable marine ecosystem indicators. PLOS ONE (accepted).

Vinnichenko, V.I., 1997. Russian investigations and deep water fishery on the Corner Rising Seamount in Subarea 6. *NAFO Scientific Council Studies*, **30**, 41–49.

## **Annex 5. Fisheries Commission's Request for Scientific Advice on Management in 2016 and Beyond of Certain Stocks in Subareas 2, 3 and 4 and Other Matters**

(FC Working Paper 14/16Rev4 **now** FC Doc. 14/28Rev)

1. Fisheries Commission requests that the Scientific Council provide advice for the management of the fish stocks below according to the assessment frequency presented below. The advice should be provided as a range of management options and a risk analysis for each option (rather than a single TAC recommendation).

<u>Yearly basis</u>	<u>Two year basis</u>	<u>Three year basis</u>
Northern shrimp in Div. 3LNO	American plaice in Div. 3LNO Cod in Div. 3M Redfish in Div. 3LN Redfish in Div. 3M Northern Shrimp in Div. 3M Thorny skate in Div. 3LNO White hake in Div. 3NO Witch flounder in Div. 3NO	American plaice in Div. 3M Capelin in Div. 3NO Cod in Div. 3NO Northern shortfin squid in SA 3+4 Redfish in Div. 3O Witch flounder in Div. 2J+3KL Yellowtail flounder in Div. 3LNO

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

In 2015, advice should be provided for 2016 for Northern Shrimp in NAFO Div. 3LNO

In 2015, advice should be provided for 2016 and 2017 for Cod in Div. 3M and Redfish in Div. 3M, White hake in Div. 3NO and shrimp in 3LNO.

In 2015, advice should be provided for 2016, 2017 and 2018 for Cod in Div. 3NO, Yellowtail Flounder in 3LNO and Capelin in Div. 3NO.

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

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 by-catches in other fisheries, provide updated advice as appropriate.

2. The Fisheries Commission adopted in 2010 an MSE approach for Greenland halibut stock in Subarea 2 + Division 3KLMNO (FC Document 10/12). This approach considers a survey based harvest control rule (HCR) to set a TAC for this stock on an annual basis. The Fisheries Commission requests the Scientific Council to:
  - a) Monitor and update the survey slope and to compute the TAC according to HCR adopted by the Fisheries Commission according to Annex 1 of FC Document 10/12.
  - b) Advise on whether or not an exceptional circumstance is occurring.
3. The Fisheries Commission requests the Scientific Council to analyze and provide advice on management measures that could improve selectivity in the 3M cod and 3M redfish fishery in the Flemish Cap in order to reduce possible by catches and discards. The objective is to reduce the mixed fisheries between cod and redfish, the by-catch of non-targeted stocks and to analyze if the selectivity pattern could be improved to reduce the catch of undersized fish.

4. The Fisheries Commission requests the Scientific Council to continue to develop work on Significant Adverse Impacts in support of the reassessment of NAFO bottom fishing activities required in 2016, specifically an assessment of the risk associated with bottom fishing activities on known and predicted VME species and elements in the NRA.

5. Recognizing the work done in NAFO to prevent significant adverse impacts to vulnerable marine ecosystems, and the need for effective stock assessments;

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

FC requests that SC investigate the impacts of removing the closed areas from the survey design for relevant stock surveys.

6. For the cod stock in Divisions 2J+3KL, the Scientific Council is requested to comment on the trends in biomass and state of the stock in the most recent Science Advisory Report from the Canadian Science Advisory Secretariat.

7. The Fisheries Commission requests the Scientific Council to conduct a full assessment of witch flounder in Div. 3NO.

8. Please provide a stock assessment for alfonsino and recommendation.

9. Could the SC liaise with the national institutes of the different CPs to see if – as recommended by STACTIC – acoustic surveys for capelin can be carried out?

10. There are some spatial and depth coverage deficiencies in the Greenland Halibut survey. It is suspected that there is a component of the Greenland Halibut stock of age-class 14+ that lives in depths under 1 500 meters and is therefore inaccessible to scientific trawling. Please

(a) comment on this hypothesis,

(b) indicate if information on this part of the stock would be useful for the stock assessment and the understanding of the stock dynamics,

(c) indicate if there are techniques available to assess the biomass below 1 500 meters and

(d) if useful and possible, implement such techniques in view of the next stock assessment.

11. The NAFO 2011 Performance Review Panel encouraged NAFO to consider whether activities other than fishing in the NAFO Convention Area may impact the stocks and fisheries for which NAFO is responsible as well as biodiversity in the NAFO Regulatory Area. Such activities might include oil exploration, shipping and recreational activities. Some work has been carried out as part of the ecosystem approach.

As the first step in the assessment of such impacts and for the implementation of the priorities of the Ecosystem Roadmap, could the Scientific Council provide a literature survey that would indicate what the risks are to the fish stocks and ecosystems in the NAFO Regulatory Area by looking at comparable situations.

12. The Fisheries Commission requests the Scientific Council to evaluate the impact of mid-water trawls on VME indicator species in those instances when the gear makes contact with or is lost on the bottom.

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

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

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

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

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

- For stocks opened to direct fishing: 2/3 Fmsy, 3/4 Fmsy, 85% Fmsy, 75% F2014, F2014, 125% F2014,
- For stocks under a moratorium to direct fishing: F2014, F = 0.

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

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

F in 2015 and following years*	Yield 2015 (50%)	Yield 2016 (50%)	Yield 2017 (50%)	Limit reference points						P(B2017 > B2014)								
				P(F>Flim)			P(B<Blim)				P(F>Fmsy)			P(B<BmsyP)				
				2015	2016	2017	2015	2016	2017		2015	2016	2017	2015	2016	2017		
2/3 Fmsy	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
3/4 Fmsy	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
85% Fmsy	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
0.75 X F2014	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F2014	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
1.25 X F2014	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
F=0	t	t	t	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%



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

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

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

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

And any information the Scientific Council deems appropriate.

## Annex 6. Recommendations from the WG-RBMS to forward to FC and SC

(FC-SC Working Paper 14/03 **now** FC Doc. 14/26)

The FC-SC Joint WG on Risk-based Management Strategies (WG-RBMS) met on 5-7 February 2014 in Halifax, Nova Scotia and agreed on the following recommendations (FCSC Doc 14/02):

1. In order for the WG to start the process of revising the PA framework the WG **recommends** SC provide feedback on the following:

- Discuss the relevance and implications of:
  - having Flim at Fmsy
  - Fmsy as a target

These analyses should include situations where quantitative analysis of uncertainty are limited and situations where uncertainty has been well incorporated into evaluation of Harvest Control Rules.

- Consider the utility of buffers (particularly  $B_{buf}$ ) in the framework and in management plans and provide advice on whether the use of buffers is considered appropriate for stocks which have  $B_{lim}$ .

Note: the WG **recommends** that  $B_{isr}$  is not considered part of the PA (but may be used as an interim milestone to aid decision making).

- The working group noted that SC, in its 2013 June report, concluded that reference points can theoretically be constructed for all stocks, and that this work is given high priority. The WG recommends SC provide a status report and possible timelines for this work for consideration of Fisheries Commission in September 2014.
  - In its assessments and advisory sheets, the working group recommends Scientific Council provide a table or list of reference points available for each stock that includes information on their derivation, and if reference points are missing, explain why.
2. The WG recommends FC adopt amendments to the interim management plan for Div. 3NO Cod (Annex 1).
  3. The WG recommends FC adopt amendments to the General Framework on Risk Based Management Strategies (Annex 2).
  4. The WG recommends SC discuss selection of operating models and evaluate the Div. 3LN Redfish management strategy relative to the performance statistics prior to the 2014 Annual Meeting (Annex 3).
  5. The WG recommends SC comment on likely by-catch levels associated with the implementation of the proposed HCR for 3LN Redfish (Annex 3)
  6. The WG recommends SC to discuss selection of operating models and evaluate the Div. 3M Cod management strategy prior to the 2015 Annual Meeting (Annex 4)

**Annex 1. Updated 3NO Cod Conservation Plan and Management Strategy**  
**Interim 3NO Cod Conservation Plan and Rebuilding Strategy**

**7. Objective(s):**

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

**8. Reference Points:**

- (a) Limit reference point for spawning stock biomass ( $B_{lim}$ ) – 60,000t<sup>1</sup>
- (b) An intermediate stock reference point or security margin  $B_{isr}^2$  – [120,000t]
- (c) Limit reference point for fishing mortality ( $F_{lim} = F_{msy}$ ) – 0.30
- (d)  ~~$B_{msy}$  – [248,000t]~~ Interim  $B_{target}$  – 185 000 t and interim  $F_{target}$  of  $F_{0.1}$  – 0.19<sup>3</sup>

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

- (a) A re-opening of a directed fishery should only occur when the estimated SSB, in the year projected for opening the fishery, has a very low<sup>4</sup> probability of actually being below  $B_{lim}$ .
- (b) An annual TAC should be established at a level which is projected to result in:
- (i) continued growth in SSB
  - (ii) low<sup>5</sup> probability of SSB declining below  $B_{lim}$  throughout the subsequent 3-year period, and
  - (iii) fishing mortality <  $F_{0.1}$

**10. 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  $B_{lim}$ :
- (i) no directed fishing, and

<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' ( $B_{buf}$ ) is not required under the NAFO PA given the availability of risk analysis related to current and projected biomass values; however, SC has advised that an additional zone(s) between  $B_{lim}$  and  $B_{msy}$  could be considered. An intermediate stock reference point ( $B_{isr}$ ) is proposed to delineate this zone. The proposed value is set at a level equivalent to twice  $B_{lim}$ . Should the SC review of the limit reference point ( $B_{lim}$ ) result in a change to that value then the intermediate stock reference point ( $B_{isr}$ ) should also be re-evaluated.

<sup>3</sup>  $B_{target}$  is a proxy of  $B_{msy}$ . The level of F has very low probability of being higher than  $F_{lim}$ . The  $B_{target}$  is the equilibrium SSB that results from  $F_{target}$ . These are interim targets until more stock recruitment and productivity regime information is available to better estimate MSY-based reference points.

<sup>4</sup> 'very low' means 10% or less

<sup>5</sup> 'low' means 20% or less

- (ii) by-catch should be restricted to unavoidable by-catch in fisheries directing for other species

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

- (b) When SSB is between  $B_{lim}$  and  $B_{isr}$ :

- (i) TACs should be set at a level(s) to allow for continued growth in SSB consistent with established rebuilding objective(s)
- (ii) TACs should result in a low probability of SSB declining below  $B_{lim}$  throughout the subsequent 3-year period, and
- (iii) Biomass projections should apply a low risk tolerance

- (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  $B_{msy}$   $B_{target}$ :

- TACs should be set at a level of F that has a low probability of exceeding  $F_{msy}$ , and
- Biomass projections should apply a risk neutral approach (i.e. mean probabilities)

#### 11. Ecosystem Considerations:

Considering the importance of capelin as a food source, consistent with the ecosystem approach, the moratorium on 3NO capelin will continue until at least 31 December 2015.

#### 12. By-catch Provisions

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

## Annex 2. Revised General Framework on Risk-based Management Strategies

### 1. Introduction:

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

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

### 2. Biological Synopsis / Fishery Overview:

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

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

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

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

### 3. Objective(s):

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

Objectives and milestones may take into account the following components:

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

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

### 4. Reference Points:

The level of information available to perform a quantitative assessment and to define biological reference points may vary considerably between stocks. There are currently stocks with an adopted quantitative assessment and with limit and/or potential target reference points defined but there are stocks with

inadequate information to perform a quantitative assessment and for which the definition of reference points is difficult or not possible.

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

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

#### 5. Guidance on Management Strategies and Harvest Control Rules<sup>6</sup>

- a) Stocks below limit reference point
  - no directed fishing, and
  - by-catch should be restricted to unavoidable by-catch in fisheries directing for other species
- b) Re-opening to direct Fishing:

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

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

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

Where quantitative risk analysis is available, reopening the fishery should only be considered when there is a very low<sup>7</sup> probability of Biomass actually being below  $B_{lim}$ .

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

- c) Open fisheries:

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

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

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

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

- d) Closing of Directed Fishing:

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

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<sup>6</sup> Noting the merits of quantifiable and testable harvest control rules, these aspects should be considered, on a stock by stock basis, in the development of risk-based management strategies.

<sup>7</sup> The actual level of risk should be specified by managers.

## e) Additional management measures

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

**6. Ecosystem Considerations:**

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

**7. By-catch provisions:**

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

**8. Monitoring and Review:**

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

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

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

**Annex 3. Development of a Risk-Based Management Strategy for 3LN Redfish**  
(FC-SC RBMS WP 14/4 Rev 3)

**Preamble**

NAFO identified the development of a risk-based management strategy for 3LN redfish as a priority in 2012, and reaffirmed that priority in 2013.

**1. Context**

This is a recently re-opened fishery and the response of the stock to fishing at higher levels is uncertain at this stage.

In addition, a high percentage of the fish are juveniles. **Implementation of the proposed HCR should allow for an increase in the spawning stock biomass but it is not possible to test this element at this time.**

The proposed management strategy is intended to initially focus on the short to medium term. A review/evaluation would be recommended at the end of the 7 year period (outlined below).

**2. Objectives and Performance Statistics:**

- f) Objective(s):* Maintain the stock at or above  $B_{msy}$ , achieve a TAC of 20 000t within 7 years, and maintain a TAC at or above<sup>8</sup> 20,000t for subsequent years.
- Rationale for 20 000t is that it represents the approximate average catch for the period 1965-1985 - a prolonged period of relative stability in the TAC/ resource.
  - The current average fish size in the stock and fishery is low and a slow increase in the TAC should promote survival and growth. This should result in an increased SSB.
- g) Performance Statistics:*
- i. Low (30%) probability of exceeding  $F_{msy}$  in any year
  - ii. Very low (10%) probability of declining below  $B_{lim}$  in the next 7 years
  - iii. Less than 50% probability of declining below 80%  $B_{msy}$  in the next 7 years

**3. Harvest Control Rule:**

Increase the TAC in constant increments starting in 2015 – i.e.  $TAC_{y+1} = TAC_y + 1,900t$  to a maximum of 20 000t. This would provide the following annual TACs:

2015: 8 900  
 2016: 10 800  
 2017: 12 700  
 2018: 14 600  
 2019: 16 500  
 2020: 18 400  
 2021: 20 000

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<sup>8</sup> Evaluating at 5 000t increments, i.e. 25 000, 30 000, etc.

**4. Proposed Next Steps:**

- The working group request Scientific Council to evaluate this management strategy relative to the performance statistics prior to the 2014 NAFO Annual Meeting.
- **SC is requested to comment on likely by-catch levels associated with the implementation of the proposed HCR for 3LN redfish.**

## **Annex 4. Development of a Risk-Based Management Strategy for 3M Cod** (FC-SC RBMS WP 14/2 Rev2)

### **Background**

The cod stock in Division 3M (Flemish cap) experienced very low biomass levels in the 1990s and was under moratorium to direct fishing between 1999 and 2009. The stock rebuilt and the direct fishery reopened in 2010. The spawning stock biomass increased substantially since mid-2000s and is now well above the limit reference point and among the highest levels observed since the 1970s. The rebuilding of this cod stock was a success for NAFO. NAFO identified the development of a risk-based management strategy for 3M cod as a priority in 2012, and reaffirmed that priority in 2013. The development of such a management plan should be based on scientific advice.

This paper presents the outline of a future 3M Cod Risk-based Management Strategy, indicating reference points with associated risks, options of candidate Harvest Control Rules (HCR) and performance statistics and targets to evaluate these HCR. Two candidate HCRs are proposed: 1) a model based HCR, with different options of target fishing mortality ( $F_{\text{target}}$ ) and 2) a model free HCR based on survey trends. The model based HCR would require a stock assessment each year, to estimate the necessary stock parameters, while the model free HCR would only be based on surveys and assessments would not be necessary.

These different HCR will give managers a wide range of options to choose from, based on the different risk and performances. The Scientific Council should review this plan, propose alternative HCRs and performance statistics and perform a Management Strategy Evaluation (MSE).

### **1. Objective**

The objective of this Conservation Plan is to maintain the 3M cod Spawning Stock Biomass in the safe zone as defined by the NAFO precautionary approach framework and to assure the optimum utilization, rational management and conservation of the 3M cod stock.

### **2. Reference Points:**

- (a) A limit reference point for spawning stock biomass ( $B_{\text{lim}}$ ) – 14 000 tons<sup>9</sup>
- (b) A target reference point for fishing mortality ( $F_{\text{target}}$ )

*$F_{\text{target}}$  is to be defined by Managers. Several options regarding risks of being above  $F_{\text{MSY}}$  are indicated in one of the HCRs.*

Reference points should be calculated and updated by the Scientific Council (SC).

### **3. Harvest Control Rule:**

- (a) When SSB is above  $B_{\text{lim}}$ , the future total allowable catch (TAC) shall be adjusted each year according to the following harvest control rule (HCR):
  - OPTION 1 (Model based HCR):  $TAC = \text{Biomass} \times F_{\text{target}} \times \text{Probability of SSB above } B_{\text{lim}}$

$F_{\text{target}}$ : Four different levels of  $F$  will be considered as  $F_{\text{target}}$ , corresponding to probabilities of 20%, 30%, 40% and 50% of exceeding  $F_{\text{MSY}}$ .

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<sup>9</sup> STACFIS 2008

If  $F_{MSY}$  is not available, an appropriate proxy (e.g.  $F_{max}$ , current proxy) should be used.

- OPTION 2 (Model free HCR):  $TAC_{y+1} = TAC_y \times (1 + \lambda \times \text{slope})$

Biomass projections should apply a risk neutral approach (*i.e.* mean probabilities).

(b) When SSB is below  $B_{lim}$ , no directed fishing and by-catch should be restricted to unavoidable by-catch in fisheries directing for other species

For this purpose, fisheries managers will consider the probability and establish risk tolerance, noting that the probability of biomass to be above  $B_{lim}$  is an integral part of the HCR proposed in option 1.

(c) Noting the desire for relative TAC stability, TAC should be constraint to a fixed percentage of annual change (+- [XX]%).

Level of constraint is to be defined by Managers. Different scenarii will be tested: 10%, 15% and 20%.

*The management objectives, performance statistics (PS) and performance target (PT) are indicated in Annex 1.*

#### **4. By-catch Provisions**

The by-catch provisions in the CEM for 3M cod are defined in Article 6.3.

#### **5. Reviews**

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

#### **6. Final provisions**

The current Risk-based Management Strategy (RBMS) for Cod stock in Subarea 3M shall be applied in consistency with the Precautionary Approach Framework and the General Framework on Risk-based Management Strategies.

It shall be in force initially until 2019.

**Annex 1: Parameters for the evaluation of the management strategy**

The priority regarding management objectives is (ranked from higher to lower priority): 1) low risk of breaching  $B_{lim}$ , 2) low risk of overfishing and 3) low risk of steep biomass decline, 4) maximise average catch and 5) limited annual catch variation.

The HCRs, PS and PT are not fully mathematically specified and are left open for the Scientific Council to propose adequate formulation. The length of the evaluation period is to be defined by the Scientific Council.

Management Objectives	Performance Statistics (PS)	Performance Targets (PT)
Low risk of steep decline	$SSB_{10}/SSB_0$ , where $SSB_{10}$ = spawning stock biomass in year 10 and $SSB_0$ = spawning stock biomass in year 0, where year 0 is the current year  $SSB_5/SSB_0$  $SSB_{lowest}/SSB_0$ , where $SSB_{lowest}$ = lowest spawning stock biomass level during projected evaluation period	The probability of the decline of 25% or more of spawning stock biomass from year 0 to year 5 is kept at 10% or lower.
Very low risk of breaching $B_{lim}$	$SSB / B_{lim}$	The probability of a spawning stock biomass under $B_{lim}$ at 10% or lower
Limited annual catch variation	Number of times the constraint (at the lower and at the higher boundaries) has been applied on average during the period.	This will be achieved through the constraint on the TAC variation.
Maximum average catch over the period	Yearly TAC for the period  Average TAC over the period	The average TAC over the period should be maximized
Low risk of overfishing	$F/F_{MSY}$  $F_{max}$ is used as a proxy for $F_{msy}$ .	For the model free HCR only: The probability of $F$ exceeding $F_{msy}$ during the evaluation period should be kept at 30% or lower.

### Annex 7. Quota Table and Effort Allocation Scheme, 2015

**QUOTA TABLE.** Total allowable catches (TACs) and quotas (metric tons) for 2015 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 Stock Specification	Cod			Redfish					American plaice		Yellowtail	
	COD 3L	COD 3M	COD 3NO	RED 3LN	RED 3M	RED 3O	REB 1F_2_3K (i.e. Sub-Area 2 and Div. 1F+3K)	PLA 3LNO	PLA 3M	YEL 3LNO		
% of TAC			% of 3M Cod TAC			% of 3LN Redfish TAC						
<b>Contracting Party</b>												
Canada		110	0.80	0	4430	42.60	500	6000	0 <sup>2,4</sup>	0	16575 <sup>5</sup>	
Cuba		511	3.70	-	1019	9.80	1750		0 <sup>2,4</sup>	-	-	
Denmark (Faroe Islands and Greenland)		3083	22.35	-	-		69 <sup>19</sup>		0 <sup>2,3</sup>	-	-	
European Union		7867 <sup>25</sup>	57.03	0 <sup>11</sup>	1896 <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		1276	9.25	-	-		-		0 <sup>2,3</sup>	-	-	
Russian Federation		893	6.47	0	2992	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		55	0.40	0	63	0.60	124	100	-	0	0	
<b>TOTAL ALLOWABLE CATCH</b>	<sup>*9</sup>	13795 <sup>23</sup>	100.0	<sup>*20,9</sup>	10400 <sup>16,24</sup>	100.0	6700 <sup>8</sup>	20000	0 <sup>10,17</sup>	<sup>*16,21</sup>	<sup>*9,20</sup>	17000 <sup>21,22</sup>

Species	Witch			White hake HKW 3NO	Capelin CAP 3NO	Skates SKA 3LNO	Greenland halibut GHL 3LMNO	Squid ( <i>Illex</i> ) <sup>1</sup> SQI 3_4 (i.e. Sub-areas 3+4)	Shrimp	
	WIT 3L	WIT 3NO							PRA 3L	PRA 3NO
% of TAC			% of 3NO Witch TAC							
<b>Contracting Party</b>										
<b>Canada</b>		600	60.00	294	0	1167	1731	N.S. <sup>6</sup>	0	
<b>Cuba</b>		-			0		-	510	0	
<b>Denmark (Faroe Islands and Greenland)</b>		-			-		199	-	0	
<b>European Union</b>		133 <sup>11</sup>	13.27	588	0 <sup>11</sup>	4408	6768 <sup>18</sup>	<u>N.S.</u> <sup>6</sup> 611 <sup>13</sup>	0 <sup>14</sup>	
<b>France (St. Pierre et Miquelon)</b>		-			-		189	453	0	
<b>Iceland</b>		-			-		-	-	0	
<b>Japan</b>		-			0		1183	510	0	
<b>Korea</b>		-			-		-	453	0	
<b>Norway</b>		-			0		-	-	0	
<b>Russian Federation</b>		257	25.73	59	0	1167	1473	749	0	
<b>Ukraine</b>							-		0	
<b>United States of America</b>		-			-		-	453	0	
<b>Others</b>		10	1.00	59	-	258	0 <sup>7</sup>	794	0	
<b>TOTAL ALLOWABLE CATCH</b>	<sup>*9,16</sup>	1000 <sup>28</sup>	100.00	1000 <sup>27</sup>	<sup>*9</sup>	7000 <sup>16,29</sup>	11543	34000 <sup>16</sup>	0	<sup>*9</sup>

## Report of Fisheries Commission, 22-26 Sept 2014

- \* Ban on fishing in force.
1. 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.
  2. 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.
  3. 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.
  4. Quota to be shared by vessels from Canada, Cuba, France (St. Pierre et Miquelon), Japan, Korea, Ukraine and USA.
  5. Contracting Parties shall inform the Executive Secretary before 1 December 2014 of the measures to be taken to ensure that total catches do not exceed the levels indicated.
  6. The allocation to these Contracting Parties are as yet undetermined, although their sum shall not exceed the difference between the total of allocations to other Contracting Parties and the TAC (= 29.458 tons).
  7. In 2005, the previous 935 t “Others” quota was assigned to three Contracting Parties. When the TAC exceeds 30,000 t the next 1,300 t beyond 30,000 will be allocated to an Others quota which can be accessed by those who do not hold Greenland halibut allocation. In deciding the relevant contributions of Contracting Parties to the 1,300 t Others quota, the Fisheries Commission will take into account the fact that some Contracting Parties received a benefit from the 935 t quota which was reassigned in 2005.
  8. Notwithstanding Article 5.3(b), in 2015, the Executive Secretary shall inform Contracting Parties by electronic means 5 calendar days in advance of the date on which the available data indicates that total reported catch reaches 6500 t. Subsequently, directed fishery will cease when 6500 t has been taken as determined by the Executive Secretary. The remainder of the TAC can be retained as bycatch and shall be limited to 5% of catches of cod in Division 3M. When 100% of the TAC has been taken as determined by the Executive Secretary, no more redfish in Division 3M shall be retained on board in accordance with Article 5(3)(c). The provisions of Article 6.3 of the Conservation and Enforcement Measures shall apply.
  10. In the case of the NEAFC decision which modifies the level of TAC in 2015 as compared to 2014, 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. Allotments 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 1.11% each for Estonia, Latvia, Lithuania and Poland out of the TAC, 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 2015 and 2016.
  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 379 tonnes for Estonia, Latvia, and Lithuania following their accession to the European Union.
  19. Notwithstanding the provisions of footnote 8 and Article 5.2 (b) and without prejudice to future agreements on allocations, these quotas may be fished in their entirety by these Contracting Parties.
  20. Applicable to 2015, 2016 and 2017.
  21. In lieu of Article 6.3 of the CEM, the following by-catch provisions for American plaice only in the 3LNO yellowtail fishery shall apply: Contracting Parties fishing for yellowtail flounder allocated under the NAFO allocation table will be restricted to an overall Am. plaice by-catch harvest limit equal to 15% of their total yellowtail fishery as calculated in accordance with Article 6.4. If a Scientific Council projection indicates that this rate is likely to undermine stock recovery or cause an unreasonable delay in reaching  $B_{lim}$ , this rate may be subject to a reassessment by the Fisheries Commission.
  22. Following the NAFO annual meeting and prior to 1 January of the succeeding year, at the request of the USA, Canada will transfer 1000 tonnes of its 3LNO yellowtail quota to the USA.
  23. The allocation key of this stock is based on the 1998 Quota Table. In 1999, a moratorium on cod in Division 3M was declared.
  24. The allocation key of this stock is based on the 1997 Quota Table. In 1998, a moratorium on redfish in Division 3LN was declared.
  25. Including fishing entitlements of 161 tons each for Estonia, Latvia, and Lithuania in accordance with sharing arrangements of the former USSR quota adopted by the Fisheries Commission at its Annual Meeting in 2003 (FC Working Paper 03/7) and allocation of 552 tons for Poland following their accession to the European Union.
  26. Including fishing entitlements of 514 tonnes each for Estonia, Latvia, and Lithuania in accordance with sharing arrangements of the former USSR quota adopted by the Fisheries Commission at its Annual Meeting in 2003 (FC Working Paper 03/7) following their accession to the European Union.
  27. Should a Contracting Party experience higher than normal catches per unit of effort (CPUE) and conclude that a shift to high availability levels of white hake during the fishing season – such as what was apparently the case in 2002 and 2003 – is taking place, then that Contracting Party shall notify the Executive Secretary and submit a summary of evidence for its conclusion (higher than normal CPUE and any other additional relevant information) within one month. On this basis, a mail vote will be submitted to the Fisheries Commission as to whether an exceptional increase in the availability of fish occurs. The TAC shall remain at 1,000t until the results of the vote are complete and the catch limitation provided for in Annex I. A. of the NCEM will apply. In case of a positive vote, the TAC is confirmed to be 2,000 metric tons. In the case of negative vote, the TAC shall remain at 1,000 metric tons.
  28. The allocation key of this stock is based on the 1994 Quota Table. In 1995, a moratorium on witch flounder in Division 3NO was declared.
  29. Should catches exceed 5000t, additional measures would be adopted to further restrain catches in 2016.

**Effort Allocation Scheme for Shrimp Fishery in the  
NAFO Regulatory Area Div. 3M, 2015**

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> – Faroe Islands – Greenland	0	0 0
<b>European Union</b>	0	0
<b>France (in respect of St. Pierre et Miquelon)</b>	0	0
<b>Iceland</b>	N/A	N/A
<b>Japan</b>	0	0
<b>Korea</b>	0	0
<b>Norway</b>	0	0
<b>Russia</b>	0	N/A
<b>Ukraine</b>	0	0
<b>USA</b>	0	0

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

**Annex 8. Norway's statement concerning the 3M Cod TAC decision**

The SC management advice for 2015 could be subject to interpretation. In this context the highest TAC option is 10 838 t. SC is very clear when advising that a fishing mortality over this level will result in an overall loss in yield. SC also pointed out that "yields at F-status quo is not a viable option". We therefore highly regret that NAFO once again has opted for a TAC at a level which is not sustainable in the long run. This is an approach to fisheries management to which Norway cannot subscribe.

**Annex 9. Redundancy of Footnote 8 in CEM Annex I.A**  
(FC Working Paper 14/08 now FC Doc. 14/08)

Preamble

According to CEM Art 5.5 (d), the directed fishery for RED 3M must be closed between the date on which catch is estimated at 50 % of the TAC, to be fixed by the Executive Secretary and communicated 5 calendar days in advance as per CEM Art 5.12 (d), and 1 July.

Footnote 8 in Annex I A duplicates the provision in 5.5 (d) and limits the permanent annual provision to 2014;

**Proposal**

1. To suppress footnote 8

### **Annex 10. DFG's statement concerning the decision on bycatch measures on 3M redfish**

DFG would have preferred that the working group on bycatch looked at the bycatch rules for redfish in 3M together with the other bycatch rules. It is difficult to see the logic in the need to raise the total TAC of redfish in order to address a bycatch issue in the cod fisheries, when FC has just decided to lower the cod quota. In addition, the bycatch requirements in the NCEM state that when a quota has been allocated to a Contracting Party, bycatch should be within the allocated quota. Therefore a more correct solution on the alleged bycatch issue would have been that CPs who have not agreed on the allocation of redfish in 3M would stop their fisheries when e.g. 90 or 95% of the total TAC in the Olympic fisheries have been reached.

## **Annex 11. Risk-Based Management Strategy for 3LN Redfish**

(FC-Working Paper 14/23Rev **now** FC Doc. 14/29)

*Recognizing* that Redfish in Divisions 3LN is a recently re-opened fishery (2010) and the response of the stock to fishing at higher levels is uncertain at this stage;

*Mindful* that fishing intensity on redfish has impacts on Div. 3NO cod, Div. 3LNO American plaice and SA 2 + Div. 3KLMNO Greenland Halibut through by-catch;

*Noting* the 2014 Scientific Council advice which indicates that a higher TAC should be reached by a stepwise increase from the current catch level;

*Consistent* with the NAFO Precautionary Approach and the recently adopted General Framework on Risk-based Management Strategies;

**It is recommended that Fisheries Commission:**

- 1. Adopt the risk-based management strategy for 3LN redfish as outlined in Harvest Control Rule 2 presented by the Scientific Council and implement the associated harvest control rule specified in Annex I;**
- 2. Request Scientific Council to monitor the performance of the HCR by examining the trends in the survey indices and by conducting a full assessment every 2-3 years and for the first time in 2016; and**
- 3. Conduct a full review/ evaluation of the management strategy at the end of the 7 year implementation period.**

**Annex I****3LN Redfish Management Strategy - Harvest Control Rule:**

HCR stepwise slow: this HCR is designed to reach 18 100 t of annual catch by 2019-2020 through a stepwise biannual catch increase, with the same amount of increase every two years between 2015 and 2020. 18 100 t is the equilibrium yield in the 2014 assessment under the assumption of an MSY of 21 000 t.

This provides the following annual TACs:

2015: 10 400 t  
2016: 10 400 t  
2017: 14 200 t  
2018: 14 200 t  
2019: 18 100 t  
2020: 18 100 t

## **Annex 12. Statement of the Russian Federation concerning *Sebastes mentella* in the NAFO Convention Area**

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

### **Annex 13. Reopening of Witch Flounder in Divisions 3NO**

(FC-Working Paper 14/22 **now** FC Doc. 14/11)

*Recalling* that Witch flounder in Divisions 3NO has been under moratorium to directed fishing since 1995;

*Reaffirming* the commitment by Fisheries Commission and Contracting Parties to develop a rebuilding strategy for this stock as noted in the 2013 Recommendations from the WGFMS-CPRS to the Fisheries Commission (FC Doc. 13/29);

*Noting* the 2014 Scientific Council advice which indicates that the biomass of 3NO Witch flounder has increased since 2010 and has been estimated to be at or above  $B_{lim}$  since 2011;

*Mindful* that recent catch of this stock have been about 300-400t and that SC has advised that increases from the current level should be gradual; and

*Recalling* the reopening procedures for 3LN redfish and 3M cod, where the allocation scheme was based on the scheme of the Quota Table the year before the moratorium was declared, noting FC WP 07/03.

**It is recommended that:**

1. A TAC for 3NO Witch flounder be set at 1 000t\* for 2015 only, and with quotas as in effect in 1994, the year before the moratorium was declared;
2. The WG-RBMS undertake, at its meeting in 2015, to develop a RBMS for this stock; and;
3. Article 6.3 (a) be amended to include 3NO Witch flounder.

<b>Contracting Party</b>	<b>2015 TAC (t)</b>	<b>% of 3NO Witch Flounder TAC</b>
<b>Canada</b>	600	60.00
<b>Russian Federation</b>	257	25.73
<b>European Union</b>	133	13.27
<b>Other</b>	10	1

**Annex 14. Norway's statement concerning alfonsino fishery in a seamount in the NRA**

Norway referred to the recent seamount fisheries in the NRA and noted that these fisheries had been conducted in a single seamount area. Norway therefore looked forward to the results of the future assessments to be conducted in 2015. It was further confirmed that it remains Norway's view that unregulated fisheries should not take place in the NRA and noted that the fishery for alfonsino was such an unregulated fishery. Hence precautionary action should be taken even without a stock assessment. It was recalled that Norway in 2013 had proposed to introduce a precautionary TAC for alfonsino. This remained the Norwegian view on this issue.

## **Annex 15. Recommendations from the WG-EAFFM to forward to FC and SC**

(FC-SC Working Paper 14/04 **now** FC Doc. 14/27)

The Joint FC-SC WG on Ecosystem Approach Framework to Fisheries Management met on 9-11 July 2014 in Halifax, Nova Scotia and agreed on the following recommendations (FCSC Doc 14/03):

Recognizing the ground-breaking work, significant achievements and ongoing efforts made by NAFO on the identification of VMEs and development of the ecosystem approach to fisheries management, the WG recommends:

1. That the FC maintains the delineated seamounts areas identified in Chapter II, Article 16.1 of the NCEM (Delete or amend "*Until 31 December 2014*").
2. That the FC maintains the Div. 30 closure identified in Chapter II, Article 16.4 of the NCEM (Delete or amend "*Until 31 December 2014*").
3. That the FC maintains the closures identified in Chapter II, Article 16.5 of the NCEM (Delete or amend "*Until 31 December 2014*").
4. That the FC considers deleting Article 16.6 recognizing that the NCEM are regularly updated and the ongoing review envisioned by Article 23.
5. That the FC considers deleting or amending Article 24 (Review) considering the ongoing review and update of the NCEM in general.
6. Recognizing that the scientific advice also noted some gaps in the protection of VMEs, that the FC considers adjustments to Area 4 (Southeastern Flemish Cap – sponge and large gorgonians), and new area 15 (Beothuk Knoll - large gorgonians).
7. That the FC and SC support continuing analysis by the WG of areas on the Tail of the Grand Bank (Div. 30 closure and related areas).
8. That the FC and SC support continuing analysis by the WG of areas 13 and 14 (Eastern Flemish Cap), and FC consider possible closed areas, if proposals are made at the Annual Meeting.
9. That the FC further considers whether to withdraw the encounter thresholds within the fishing footprint, taking into account the scientific advice, the review of VME closures and the review of UNGA 61/105 in 2015.
10. That priority attention by FC and SC and their constituent bodies be given to the areas identified in Annex 5 that include external factors (e.g. climate change and oil and gas development), bycatch and discards, multispecies interactions, and VMEs including concluding the assessment of bottom fisheries for 2016.
11. That FC and SC consider the revised Terms of Reference at their September 2014 joint session and have FC and SC adopt the revisions in their respective meetings. Consideration could also be given to making terms of reference consistent across all joint FC-SC working groups.
12. Request that the SC provide annual updates to the FC-SC Working Group on Ecosystem Approach Framework to Fisheries Management pertaining to the 2016 review of significant adverse impacts of NAFO bottom fisheries on VMEs in the NRA.
13. That the FC amend the text of the NCEM to reflect the replacement of the FC WG-VME with the Joint FC-SC WG-EAFFM,
14. Article 23.1 of the NCEM be rephrased such that the "*Fisheries Commission will request Scientific Council...*".

## **Annex 16. Revision of NCEM, Article 16.**

(FC Working Paper 14/06Rev **now** FC Doc. 14/07)

### **Background**

In Article 16 of the NCEM concerning 'Seamount, Coral, and Sponge Protection Zones', bottom fishing closures defined in 16.1, 16.4 and 16.5 are in force until 31 December 2014. Article 16.6. furthermore calls for a review of the closures (at least those of Art. 16.5) by 31 Dec 2014. Recommendations 1-3 from the Fisheries Commission and Scientific Council Working Group on the Ecosystem Approach Framework to Fisheries Management (WG-EAFF, 2014) concerned this issue and advised deletion or amendment of the in force dates.

WG-EAFF furthermore recommends deleting or amending Article 16.6. This article refers to Article 16.5 only, and furthermore appears superfluous since the NCEM is regularly updated and the review requirements are expressed in Article 23.

The SC recognizes in the 2013 report that that at the present time, seamount protection zones referred to in Article 16.1, due to provisions in Article 16.2 and 16.3, provide no additional protection to these areas than the ones afforded by the exploratory fishing protocol for all areas outside the NAFO fishing footprint, i.e. in the 'unfished bottom areas'. Seamounts, constituting "VME elements" (as defined by NAFO), i.e. areas with a high likelihood to have VMEs, should be closed to bottom fishing. Deleting Article 16.2 and 16.3 would facilitate closing of the selected subset of seamounts to bottom fishing.

The SC recommends extending the seamount closures to encompass neighbouring shallow seamounts. Norway notes that these other seamounts lie in "unfished bottom areas" and are afforded substantial protection by the exploratory fishing protocol.

The SC further remarks that a portion of the seamount closure at Corner Rise encompasses a portion of the EEZ around Bermuda. The coordinates of that closure should be amended to only comprise areas of the NAFO RA.

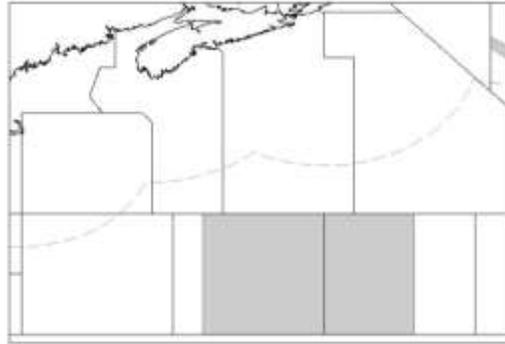
### **Recommendations**

1. In Article 16.1, 16.4, and 16.5, the text "Until 31 December 2014" is replaced by "Until 31 December 2020".
2. Articles 16.2, 16.3 and 16.6 are deleted.
3. Co-ordinates of the New England seamount closure defined in Article 16.1 shall be amended so that the closure is restricted to areas within the NAFO RA.

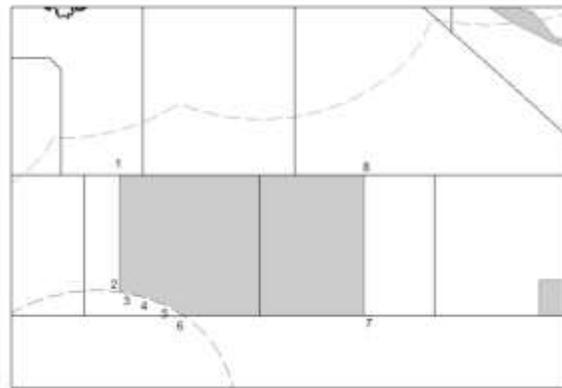
**Annex 17. Amendment of New England Seamounts closure defined in Article 16.1**  
(FC Working Paper 14/25 now FC Doc. 14/25)

Revised map and new coordinates of New England Seamounts in consideration of Recommendation 3 in FC Working Paper 14/06 which states: **“Co-ordinates of the New England seamount closure defined in Article 16.1 shall be amended so that the closure is restricted to areas within the NAFO RA.”**

Old Map of New England Seamounts closure:



Revised Map of New England Seamounts closure (*following the boundary of the Bermudan EEZ through points 2-6*):



New coordinates:

<b>Point No.</b>	<b>Latitude</b>	<b>Longitude</b>
1	39°00'00 N	64°00'00 W
2	35°40'19 N	64°00'00 W
3	35°40'08 N	63°57'22 W
4	35°30'43 N	63°16'19 W
5	35°15'29 N	62°37'55 W
6	35°00'00 N	62°14'24 W
7	35°00'00 N	57°00'00 W
8	39°00'00 N	57°00'00 W

### **Annex 18. Norway's statement concerning FC's decision on the proposal to amend Article 16 of the NCEM.**

Norway had put forward a proposal amending the NCEM (FC WP 14/06) i.a. "in order to remove the inconsistency resulting in the situation where we present "closures" of areas which are in fact not closed". Norway emphasized that the present Article 16.1 of the NCEM refers to the seamount protection zones as closed to bottom fisheries, whereas the subsequent sub-items essentially allow exploratory fisheries. As an immediate remedy Norway proposed to amend Article 16 so that current seamount protection zones become true closures. As the proposed amendments were not accepted, Norway stated: "We regret that the amendments are not accepted. The result is that seamounts within the so-called protection zones are afforded no more protection than any other areas classified as "unfished areas". Our strong preference was to close the seamount areas to bottom fishing. They are VME elements highly likely to have VMEs. When these seamounts now remain essentially open, it is our view that the map has to be changed as it is presently misleading and creating a false impression. We regret that the decision not to afford improved protection to seamounts will reflect negatively on the organization. Most seriously, not amending Article 16 will mean that we may report incorrectly to the United Nations General Assembly next year."

## **Annex 19. Proposal for a the Establishment of two Additional Area Closures to Protect VMEs in the NAFO Regulatory Area**

(FC Working Paper 14/19 **now** FC Doc. 14/10)

**Recalling** commitments made under the United Nations General Assembly resolution 61/105 (and subsequent resolutions), to manage the impacts of bottom contact fishing on vulnerable marine ecosystems;

**Acknowledging** NAFO's commitment to an ecosystem approach to fisheries management;

**Mindful** of the advice of the Scientific Council from their June 2014 meeting, which noted that the area closures that NAFO has established over the past several years, are effective;

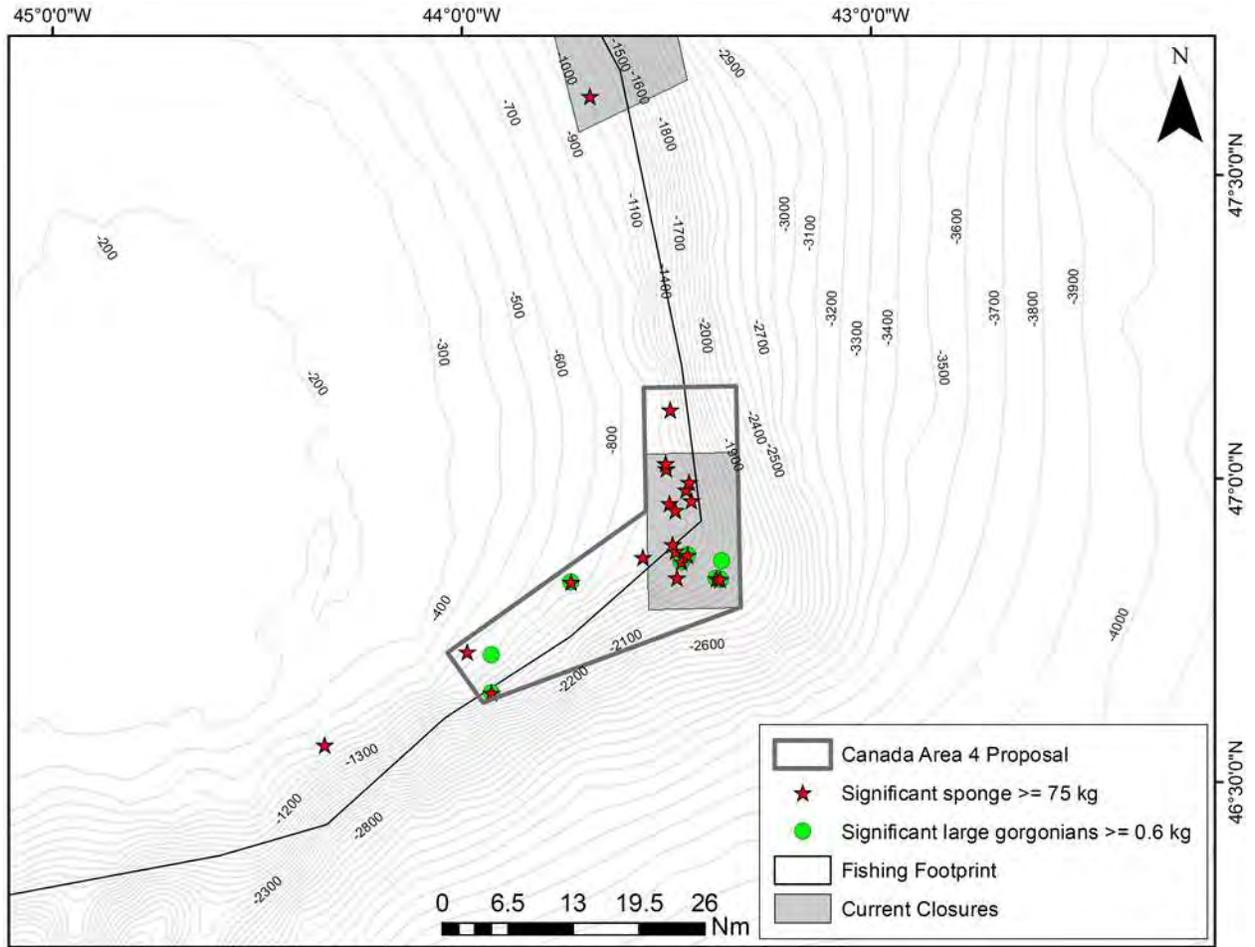
**Considering** the priority areas noted identified in 2014 Scientific Council advice (NAFO SCS Doc.14/17); and

**Noting** recommendation 6 of the Report of the Working Group of Fisheries Managers and Scientists on an Ecosystem Approach Framework to Fisheries Management, regarding significant concentrations of sponge and large gorgonians on the Southeastern Flemish Cap and large gorgonians on the Beothuk Knoll;

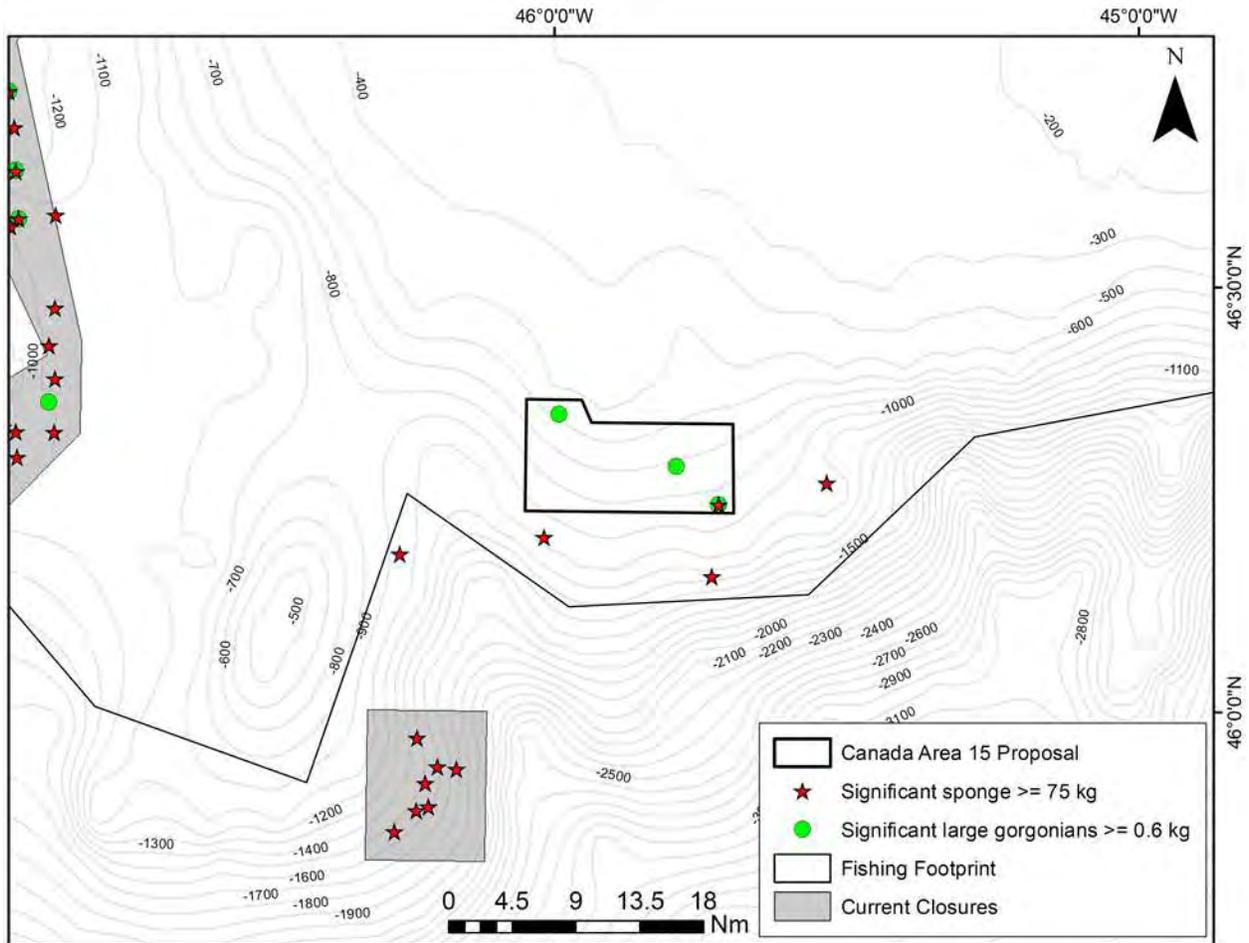
It is proposed that the Fisheries Commission:

- Adjust the current area closure 4 (outlined in Article 16 of the NCEMs), to capture additional significant concentrations of sponge and large gorgonian coral, as outlined in the map in Annex 1;
- Create a new area closure on the Beothuk Knoll to capture significant concentrations of large gorgonian corals, as outlined in the map in Annex 2; and,
- Adjust Article 16.5 of the NCEMs to include the coordinates of the adjustment to area 4 and the creation of a new area closure, as outlined in Annex 3.

**Annex 1**



**Annex 2**



**Annex 3**

Area 4 Point No.	Latitude	Longitude
4.1	46° 44' 34.80" N	44° 03' 14.40" W
4.2	46° 58' 19.20" N	43° 34' 16.32" W
4.3	47° 10' 30.00" N	43° 34' 16.32" W
4.4	47° 10' 30.00" N	43° 20' 51.72" W
4.5	46° 48' 35.28" N	43° 20' 51.72" W
4.6	46° 39' 36.00" N	43° 58' 8.40" W

New Area (15) Point No.	Latitude	Longitude
15.1	46° 13' 58.80" N	45° 41' 13.20" W
15.2	46° 13' 58.80" N	46° 02' 24.00" W
15.3	46° 21' 50.40" N	46° 02' 24.00" W
15.4	46° 21' 50.40" N	45° 56' 48.12" W
15.5	46° 20' 14.32" N	45° 55' 43.93" W
15.6	46° 20' 14.32" N	45° 41' 13.20" W

## **Annex 20. Statements from CPs concerning FC's decision on the VME closures**

**Denmark (in respect of Faroe Islands and Greenland)** expressed its concerns with the process: "It seems that there is a lack of understanding of the diverse views around this table on how to progress on these issues. Closing an area is a serious decision. Future proposals on area closures must be presented in due time before the annual meeting. Such proposals should clearly present relevant information e.g. the specified coordinates, historic fishing activities and the functional significance for the reproduction of fish stocks. There is a need to nuance the discussion e.g. whether closing an area is the only option or whether move on rules can be applied and by sharing information on best available techniques on how to prevent damages on the seabed."

**Japan** explained its vote: "Japan voted no to the proposals to establish closed areas 4 and 15 respectively because Japan believes that (1) the scientific threshold used to identify VMEs in the proposed areas was developed arbitrarily without in-depth discussions and recommendation by SC and without formal adoption by the FC as was done for commercial fisheries threshold stipulated in Article 22.3, and (2) move on rules which obliges fishing vessels to move away from areas of encounter with VME indicator species in excess of threshold stipulated in Article 22.3 is a legitimate, practical and effective means to protect VMEs and therefore have been used by such other RFMOs as CCAMLR, SEAFO, NEAFC and so forth."

**Norway** referred to the SC report where it is stated that candidate areas 13 and 14 (Northern and Northwestern Flemish Cap) cover seapen VME areas. Norway further stated: "As a matter of principle Norway wishes to follow guidance from the SC. We would need particularly good reasons not to take action with regard to the VME issues. For two subsequent years, the SC highlighted areas 13 and 14 as significant seapen areas. In June 2014, areas 13 and 14 are ranked as "high" priority for further consideration. Using the same methodology as elsewhere, areas 13 and 14 emerge as areas highly likely to have VMEs. The kernel density analysis even suggests that these two areas are connected. Norway accordingly maintains the position that areas 13 and 14, or one area joining the two, should be closed. Our position will remain until the SC provides new guidance that convinces us no VMEs exist in these areas."

**Annex 21. Recommendations from the WG-CR to forward to the FC and SC**  
(FC-SC WP 14/05 **now** FC Doc. 14/33)

The Joint FC-SC WG on Catch Reporting met on 3-4 January 2014 in Halifax, Nova Scotia and agreed on the following recommendations (FCSC Doc 14/01):

**It is recommended**

1. that this WG continues, with the same goals and objectives, for another year. At the 2015 Annual Meeting FC and SC give consideration to prolonging this joint working group
2. that this WG should meet, either by correspondence or at another meeting preceding the 2014 Annual Meeting, to continue moving towards a transparent and robust method for producing estimates of catch
3. that if agreed by FC and SC the work would continue on priority stocks for the June 2015 SC meeting, and again report at the 2015 Annual Meeting.
4. that a process for catch estimation be constructed by continuing dialogue within this working group, using a suite of available data considered in Annex 4, and any other data, such as scientific observer reports. The process should be fully documented and transparent, including documentation of data selection and validation and tools for data synthesis.
5. that in a timely manner, SC, with assistance from the Secretariat, conducts a pilot exercise to explore and document the use of all available data, focusing on VMS & VTI for all flag states operating in this fishery, for catch estimation of Div. 3M Cod.

Results of this exercise may guide the work of this group in the future, especially on other priority stocks, e.g. 2 + 3KLNMO Greenland halibut and Div. 3LNO American plaice.

6. to encourage Contracting Parties to reflect upon the discussions of this working group and be prepared to offer revisions to the existing CEM to improve catch reporting at future FC meetings.

The WG **recommends** FC give further consideration to:

7. the need for development of best practice/guidelines for data collection and clarification of roles/responsibilities for observers
8. make NAFO Observer catch and biological sampling information, in anonymized form, available to Scientific Council and working groups of FC and SC to support catch validation and development of catch estimates for stock assessment.
9. the provision of NAFO logbook data (NCEM Annex II.A) to the Secretariat by electronic means, and to making it available to Scientific Council and working groups of FC and SC for the purpose of supporting catch validation and development of catch estimates for stock assessment.
10. the available data for straddling stocks which may contribute to the assessment of catch estimates.
11. exchange of catch on entry and exit information with NEAFC to improve reliability, noting the specific role of Joint NEAFC-NAFO Advisory Group on Data Management in this matter.

## **Annex 22. Catch Validation – A Collaborative Approach**

(FC-SC WP 14/01 Rev **now** FC Doc. 14/30)

*Reminded* that an objective of the NAFO convention is to ensure that complete and accurate data concerning fishing activities within the Regulatory area are collected and shared among Contracting Parties in a timely manner (NAFO/GC Doc. 08/3);

*Mindful* that the availability of accurate catch data is critical for scientific assessment and the sustainable management of NAFO stocks;

*Concerned* that the reliability of catch data continues to be one of the most significant issues facing NAFO;

*Recognizing* the importance of communication between the Fisheries Commission and the Scientific Council and recent efforts to enhance this dialogue and information exchange through the establishment of joint working groups;

*Recalling* that the Peer-Review Expert Panel highlighted the need for a more coordinated analysis of data (GC Doc 13/4);

*Noting* the positive steps taken by NAFO to improve data accuracy and data-sharing including sharing daily catch reports with the Scientific Council, as well as the establishment of the Ad Hoc Working Group on Catch Reporting;

*Further noting* the positive steps taken by the Ad hoc Working Group on Catch Reporting during its initial meeting in February 2014, in particular, its review and evaluation of NAFO data sources which may be of utility for the validation of catch data;

*Convinced* of the need for a collaborative approach (FC and SC) to validate STATLANT data and where necessary generate catch estimates for use in assessments and overall management of NAFO stocks;

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

### **It is recommended that:**

1. The Ad hoc Working Group on Catch Reporting remain in place for 2015, and report to the Scientific Council in June 2015;
2. The Ad hoc Working Group on Catch Reporting provide advice to Fisheries Commission and Scientific Council at the 2015 Annual Meeting by developing a framework for the validation of NAFO catch data and generation of catch estimates - ensuring the best available science is used for management decisions. The elements in such an approach should consider, inter alia:
  - i. Data Confidentiality Requirements(e.g. use of aggregate and/ or anonymized data);
  - ii. Transparency, in particular, the need to be able to subject decisions to external/ peer review;
  - iii. Participation, including the roles and responsibilities of Contracting Parties, Fisheries Commission, Scientific Council, and the Secretariat;
  - iv. Governance, including reporting and mechanisms for decision making; and,
  - v. Data requirements.

### **Annex 23. Recommendations from the WG-BDS to forward to the FC**

(FC WP 14/24 now FC Doc. 14/32 Rev)

The Ad hoc Working Group on Bycatches, Discards, and Selectivity (WG-BDS) met on 7-8 July 2014 in Halifax, Nova Scotia and agreed on the following recommendations (FC Doc. 14/06):

Noting the negative impacts that bycatch and discards may have on regulated species in the NAFO Regulatory Area, it is **recommended**:

1. that the Fisheries Commission continue to address this issue by inter alia allowing this WG to continue;
2. that the objectives of this Working Group focus on effective management of bycatch and minimization of discards in the NAFO Regulatory Area, to the extent practicable, by recommending appropriate policy and regulatory changes that recognize the diverse factors influencing and incentivizing by-catch and discards in each fishery, the current biological status of affected species, and domestic legislation affecting bycatch and discards;
3. that the Fisheries Commission consider amendments to the management measures and approach for managing 3M cod and redfish ~~fishery~~ fisheries that address factors promoting discards;
4. that the FC task STACTIC to support the WG as necessary including the development of standardized language for by-catch and discards throughout the CEM, including clarifying ambiguous or inconsistent terminology;
5. that the FC include SC on this issue as necessary through this WG. To start with the FC-SC dialogue will give specific consideration to the discussions of this WG;
6. that the Secretariat continue to analyze data about bycatch and discards in NAFO fisheries. The analysis in particular should identify areas and fisheries of concern; identify anomalies and trends regarding bycatch and discards; and give priority to species under moratorium or instances where there may be conservation issues;
7. that Contracting Parties continue to share available information on domestic practices and/or policies to address bycatch and discards;
8. that the FC give further consideration to improving bycatch and discards data availability and quality, including options already identified in other NAFO bodies. This would be made available to the Secretariat, SC and the WGs of the FC and SC for the purpose of undertaking bycatch and discard analysis;
9. that the FC work jointly with SC to task appropriate NAFO bodies to develop a draft definition of bycatch and to compile a draft list of bycatch species per GC Action Plan (GC Doc 12/1).

## **Annex 24. Bycatch and Discard Reporting in NAFO Fishing Operations**

(FC WP 14/15 Rev **now** FC Doc. 14/31)

### **Background/Explanatory Memorandum:**

The United States commends the outcomes of the first meeting of the Ad hoc Working Group to Reflect on Rules Governing Bycatch, Discards and Selectivity and believes that the Working Group should continue to meet. Additionally, the United States supports building upon the WG's original objectives to enable the development of recommendations on appropriate policy and regulatory changes for consideration by both the Fisheries Commission (FC) and the Scientific Council (SC).

Within that expanded mandate, the United States notes the need to examine the efficacy of current bycatch and discard reporting requirements. NAFO members have recognized the importance of ensuring robust data collection on all catches and discards throughout NAFO managed fisheries. The Conservation and Enforcement Measures (CEM) have several relevant reporting requirements generating bycatch data that are made available to the Secretariat and the Scientific Council, including:

- Article 28.6(c): Daily catch reports documenting the amount of each species kept and discarded;
- Article 28.8: Monthly catch reports submitted by each Contracting Party (CP) to the Secretariat; and
- Article 30.2(c): Observer reports recording each species kept and discarded on a haul-by-haul basis.

In addition, in 2006, NAFO adopted the Resolution to Reduce Sea Turtle Mortality in NAFO Fishing Operations (FC Doc. 06/7). The Sea Turtle Resolution and the CEMs require that the Secretariat compile and submit this information to the FC and the SC for their consideration. The United States has been disappointed in the implementation of this Resolution, and sees the Ad-Hoc Working Group (WG) as an opportunity to renew and expand NAFO's responsibility to manage bycatch and discards, consistent with the relevant provisions of the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.

The Ad-hoc WG notes the lack of information available on discards. Furthermore, the WG recommends the FC improve bycatch and discard data availability and quality. To that end, the United States contends that the WG should evaluate the collection of bycatch and discards data, the sharing and use of that data by relevant NAFO bodies, and the improvement of these activities.

### **Proposal:**

#### **Proposal to Improve Bycatch and Discard Data Reporting**

##### *Preamble:*

*Recognizing* NAFO's commitment to implementing an ecosystem based approach to fisheries management;

*Recalling* the commitments in Articles 6 and 28 of the NAFO CEM to effectively manage, reduce and report on bycatch and discards in NAFO fisheries;

*Further recalling* 2006 adoption by NAFO of the Resolution to Reduce Sea Turtle Mortality in NAFO Fishing Operations (FC Doc. 06/7), which urged NAFO CPs to report sea turtle fishery interaction data to the NAFO Secretariat, including data collected by national observer programs and sea turtle-specific training provided to these observers;

*Taking into account* the need to improve collection of data and other relevant information relating to bycatch and discards;

**It is resolved that:**

1. NAFO recognizes and endorses the FAO's International Guidelines on Bycatch Management and Reduction of Discards.
2. The FC agree to renew the mandate of the Ad Hoc WG to Reflect on the Rules Governing Bycatches, Discards and Selectivity in the NAFO Regulatory Area, and authorize it to meet between the 36<sup>th</sup> and 37<sup>th</sup> Annual Meetings of NAFO.
3. The FC agree to direct the WG to develop and recommend a comprehensive strategy relative to bycatch and discards in the NAFO Regulatory Area that is consistent with the Ecosystem Approach to Fisheries management and takes into account all bycatch and discard species.
4. To support this strategy, the FC agree to also direct the WG to review current bycatch and discard data recording and reporting, including observer data, taking into account other ongoing NAFO initiatives, with the objective to develop an action plan to improve the effectiveness of the collection and use of this data for FC's consideration prior to the Annual Meeting in 2015.
5. NAFO CPs continue to implement the FAO Guidelines to Reduce Sea Turtle Mortality in Fishing Operations, and enhance the implementation of their existing turtle mitigation measures (including relevant observer training) using best available scientific information.

## **Annex 25. The proposal to amend Annex II.D.D.2.B "Return error numbers" of the NAFO Conservation and Enforcement Measures to prevent loss of correct VTI reports**

(STACTIC Working Paper 14/05 now FC Doc. 14/12)

### **Background**

In the NAFO Conservation and Enforcement Measures there are some Return error numbers relating to communication of VTI reports and requiring a follow-up action:

302 - "Transshipment" prior to "Catch on entry"

303 - "Catch on exit" prior to "Catch on entry"

304 - No "Position" received (TRA, COX)

The first two Return error numbers (302 and 303) means that if TRA or COX report was transmitted to the NAFO database before COE report these reports are rejected by database. In other words, these correct reports will be lost.

The return error number 304 means that if POS messages do not reach the NAFO database (e.g., satellite devise onboard is out of order) all following correct reports TRA, COX will be rejected by database and will be lost.

To prevent the loss of correct VTI reports in the NEAFC the similar Russian proposal was considered by PECCOE and AGDC during 2012-2013. As a result of those discussions at the AGDC meeting in 2013 the table of return error numbers has been restructured. The updated table of return error numbers was approved at the NEAFC annual meeting in 2013 (see NEAFC Recommendation 13:2014).

In order to:

- prevent the loss of correct VTI reports transmitted by FMCs to NAFO database;
- improve the quality of information exchange between FMCs and NAFO Secretariat;
- harmonize with the return error codes adopted by NEAFC

We are submitting the following proposal.

### **Proposal**

Add two new codes into NAFO table of Return error numbers (the same as in NEAFC):

301 – Catch prior to Catch on Entry

252 – Species not AUT or SUS.

Report of Fisheries Commission, 22-26 Sept 2014

Replace the table of Return error numbers (Annex II.D.D.2.B) "Return error numbers" with the following one:

Subject/Article	Error Numbers			Error cause
	Rejected (NAK) Follow-up action required	Accepted and Stored (ACK) Follow-up action required	Accepted and Stored (ACK) with warning	
<b>Communication</b>	101			Message is unreadable
	102			Data value or size out of range
	104			Mandatory data missing
	105			This report is a duplicate; attempt to re-send a report previously rejected
	106			Unauthorized data source
			150	Sequence error
			151	Date / Time in the future
			155	This report is a duplicate; attempt to re-send a report previously accepted
<b>Article 25</b>			250	Attempt to re-notify a vessel
		251		Vessel is not notified
		252		Species not AUT or SUS
<b>Article 28</b>		301		Catch prior to Catch on Entry
		302		Transshipment prior to Catch on Entry
		303		Catch on Exit prior to Catch on Entry
		304		No position received (CAT, TRA, COX)
			350	Position without Catch on Entry

**Recommendation to Amend Annex IX D 2b) of the NEAFC Scheme of Control  
and Enforcement on Return Error Numbers**

The Commission hereby adopts the following recommendation pursuant to Article 5 of the Convention

**Annex IX D 2b) Return error numbers:**

Subject/Annex	Error Numbers			Error cause
	Rejected (NAK) Follow-up action required	Accepted and Stored (ACK) Follow-up action required	Accepted and Stored (ACK) with warning	
<b>Communication</b>	101			Message is unreadable
	102			Data value or size out of range
	104			Mandatory data missing
	105			This report is a duplicate; attempt to re-send a report previously rejected
	106			Unauthorised data source
			150	Sequence error
			151	Date / Time in the future
			155	This report is a duplicate; attempt to re-send a report previously accepted
<b>Annex II</b>			250	Attempt to re-Notify a vessel
		251		Vessel is not Notified
		252		Species not AUT, or LIM or SUS
<b>Annex VIII</b>		301		Catch prior to Catch on Entry
		302		Transshipment prior to Catch on Entry
		303		Catch on Exit prior to Catch on Entry
		304		No Position received (CAT, TRA, COX)
			350	Position without Catch on Entry
<b>Annex X</b>	401			Surveillance Exit prior to Surveillance Entry
		450		Observation without Surveillance Entry
		451		Inspectors or craft not notified

## **Annex 26. Proposed Changes to NCEM Chapter II – Bottom Fisheries in the NRA**

(STACTIC Working Paper 14/06 Rev2 now FC Doc. 14/13)

### Introduction

This working paper proposes revisions to Chapter II (vulnerable marine ecosystem (VME) measures) of the NAFO Conservation and Enforcement Measures (CEM). This is part of an ongoing effort by the Editorial Drafting Group (EDG) to revise the existing CEM to enhance article organization, structure, and format; eliminate redundancy; and clarify ambiguous or unclear measures to more accurately reflect the original intent of such measures.

This revised working paper includes revisions to the original EDG proposal (STACTIC WP 14/6 (rev)) based on comments provided by several Contracting Parties following the May 2014 STACTIC intersessional meeting.

A brief description of the proposed revisions to the existing CEMs is provided below. The proposed revisions to the CEMs are organized based on their current structure. Cross-references to the corresponding article and paragraph, based on the 2014 CEMs, and a brief description of any changes have been placed in the right column of the attached addendum for ease of reference.

### Proposed Changes to Existing CEMs:

- Article 15 – Revised definitions for consistency and placed them in alphabetical order
- Article 16 – Renumbered Article 17 as Article 16 and inserted table/figure headings
- Article 17 – Switched Articles 16 and 17 and added subtitle and table/figure headings
- Article 18.2(c) – Replaced term “scientific observer” with “observer with sufficient scientific expertise”
- Article 18.2(d) – Replaced “fishing trip” with “exploratory bottom fishing activities”
- Article 19 – Reorganized, revised format, and incorporated Article 20.1
- Article 20 – Reorganized and revised format
- Article 21 – Reorganized and revised format
- Article 22 – Eliminated “interim” from title, reorganized format, and inserted subtitles
- Article 22.1(b) – Replaced term “scientific observer” with “observer with sufficient scientific expertise”
- Article 22.5 – Deleted last sentence, as encounter thresholds can be revised in any year
- Article 23 – Reorganized Article 23.1 into two sub-paragraphs

Paragraph	Text	Old reference/ comments
	<b>PROTECTION OF VULNERABLE MARINE ECOSYSTEMS (VMEs) IN THE REGULATORY AREA FROM BOTTOM FISHING ACTIVITIES</b>	Change title for clarity on the scope of this chapter
	<b>Article 15 – Definitions</b>	Revised subtitle for clarity because existing paragraph 1 was removed due to redundancy. Definitions rearranged into alphabetical order.
	In addition to the definitions listed in Article 1, the following definitions apply to this Chapter.	Added for clarity.
		Deleted term “Bottom fishing activities” because it is already defined in Article 1
1	"Encounter" means catch of a VME indicator species above threshold levels as set out in Article 22.1. 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.	Revised reference to reflect reorganization.
2	"Exploratory bottom fishing activities" means bottom fishing activities conducted outside the footprint, or within the footprint with significant changes to the conduct or in the technology used in the fishery;	Revised for clarity and replaced “unfished bottom areas” with “outside the footprint” for consistency
3	“Footprint”, otherwise known as "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 4 and illustrated in Figure 2;	Revised for clarity and update table/figure references
		Removed definition of “unfished bottom area” and replaced throughout text with “outside the

		footprint”
4	"Significant adverse impacts" refers to paragraphs 17 to 20 of the FAO International Guidelines for the Management of Deep Sea Fisheries in the High Seas;	Revised for concision
5	"Vulnerable Marine Ecosystems (VME)" refers to paragraphs 42 and 43 of the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas;	Revised for concision
6	"VME indicator element" refers to topographical, hydrophysical or geological features which potentially support VMEs, as specified in Part VII of Annex I.E;	Revised for concision
7	"VME indicator species" refers to species that signal the occurrence of a vulnerable marine ecosystem, as specified in Part VI of Annex I.E;	Revised for concision
	<b>Article 16 - Map of Footprint (Existing Bottom Fishing Areas)</b>	Switched articles 16 and 17 to improve flow
	The map of existing bottom fishing activities in the NAFO Regulatory Area illustrated in Figure 2 is delimited on the western side by the Canadian EEZ boundary and the eastern side by the coordinates shown in Table 4. The map shall be revised regularly to incorporate any new relevant information. Contracting Parties may propose revising the map on the basis of any information available, in particular on the haul by haul catch data . Table 4. Boundary Points Delineating the Eastern Side of the Footprint [insert current table of coordinates] Figure 2. NAFO Regulatory Area footprint map (shaded).	Revised for clarity and consistency and to update table and figure references.
	<b>Article 17 - Areas Restrictions for Bottom Fishing Activities</b>	Article 16 renumbered, with new title for clarity
	<b>Seamount Closures</b>	New subtitle for clarity
1	Until December 31, 2014, no vessel shall engage in bottom fishing activities in the areas illustrated in Figure 3 and defined by connecting the coordinates specified in Table 5 in numerical order and back to coordinate 1, except to conduct exploratory bottom fishing activities, in accordance with Article 18 and the Exploratory Protocol in accordance with Annex I.E. Table 5. Boundary Points Delineating the Seamount Closures in the NAFO Regulatory Area Referenced in Article 17.1 [insert current table of coordinates] Figure 3: Polygons Delineating Seamount Closures Referenced in Article 17.1	Art. 16.1 with updated table and figure references and headings  Revised reference to just Annex I.E to minimize confusion.
2	A request to conduct exploratory bottom fishing activities in any of the areas defined in paragraph 1 shall be in accordance with Article 18 and the Exploratory Protocol (Annex I.E).	Article 16.2
3	If a vessel fishing in the areas defined in paragraph 1 encounters a VME indicator species, as defined in Article 22.5, the	Art. 16.3 renumbered

	encounter provisions set out in Article 22 shall apply.	and revised for concision
	<b>30 Coral Area Closure</b>	New subtitle for clarity
4	Until December 31, 2014, no vessel shall engage in bottom fishing activities in the area of Division 30 illustrated in Figure 4 and defined by connecting the coordinates specified in Table 6 in numerical order and back to coordinate 1: Table 6. Boundary Points Delineating the 30 Coral Area Closure in the NAFO Regulatory Area Referenced in Article 17.3 [insert current table of coordinates] Figure 4. Polygon Delineating Area of 30 Coral Closure Referenced in Article 17. 3	Art. 16.4 renumbered and inserted table reference and heading and correct figure number.
	<b>High Sponge and Coral Concentration Area Closures</b>	New subtitle for clarity
5	Until December 31, 2014, no vessel shall engage in bottom fishing activities in the areas illustrated in Figure 5 and defined by connecting the coordinates specified in Table 7 in numerical order and back to coordinate 1: Table 7. Boundary Points Delineating the High Sponge and Coral Concentration Area Closures in the NAFO Regulatory Area Referenced in Article 17.4 [insert current table of coordinates] Figure 5. Polygons Delineating Areas of High Sponge and Coral Concentrations Referenced in Article 17.4	Article 16.5 renumbered with inserted table reference and heading and correct figure number.
		Deleted existing 16.6 because redundant with Article 24
6	Contracting Parties are encouraged to the extent possible to record all catch of corals and sponges in their annual government and/or industry research programs and to consider non-destructive means for the long-term monitoring of corals and sponges in the closed areas.	Article 16.7 renumbered
	<b>Article 18 - Exploratory Bottom Fishing Activities</b>	
1	Exploratory bottom fishing activities shall be subject to a prior exploration conducted in accordance with the exploratory protocol set out in Annex I.E.	Article 18.1 revised to clarify application of Annex I.E
2	Contracting Parties whose vessels wish to engage in exploratory bottom fishing activities shall, for the purpose of the evaluation referred to in Article 20:	

	(a) communicate to the Executive Secretary the “Notice of Intent to Undertake Exploratory Bottom Fishing” in accordance with Annex I.E together with the assessment referred to in Article 19.1;	Article 18.2 revised to reflect revised references in Annex I.E and Article 19
	(b) require vessels flying their flag to start exploratory bottom fishing activities only after they have been authorized in accordance with Article 20;	Revised Article 18.3
	(c) have an observer with sufficient scientific expertise on board for the duration of the exploratory bottom fishing activity; and	Revised 18.4  Replaced “scientific observers” with “sufficient scientific expertise” to avoid using an undefined designation for an observer and allow the SC to evaluate if an exploratory fishing proposal has sufficient scientific expertise aboard to record catch accurately.
	(d) provide to the Executive Secretary an “Exploratory Bottom Fishing Trip Report” in accordance with Annex I.E. within 3 months of the completion of the exploratory bottom fishing activities.	Article 18.5 revised to replace “fishing trip” with “exploratory bottom fishing activities” and include reference to Annex I.E
	<b><i>Duties of the Executive Secretary</i></b>	New Subtitle for clarity

3	The Executive Secretary:	
	(a) promptly forward the documents referred to in paragraph 2(a) of this Article to the Scientific Council and the Fisheries Commission; and	Article 19.1 (b) revised to insert reference to documents in paragraph 2(a).
	(b) circulates the "Exploratory Bottom Fishing Trip Reports" to the Scientific Council and to all Contracting Parties.	Article 18.5
	<b>Article 19 - Preliminary Assessment of Proposed Exploratory Bottom Fishing Activities</b>	Revised title
		Deleted chapeau as unnecessary
1	Any Contracting Party proposing to participate in exploratory bottom fishing activities shall submit, in support of their proposal, a preliminary assessment of the known and anticipated impacts of the bottom fishing activity which will be exercised by the vessels flying their flag on VMEs.	Article 19.1 reformatted
2	The preliminary assessment referred to in paragraph 1 of this Article shall:	
	(a) be sent to the Executive Secretary no less than two weeks in advance of the opening of the June meeting of the Scientific Council;	Article 19.1(a) Clarified reference to identify to whom the preliminary assessment should be submitted.
	(b) be in accordance with guidance developed by the Scientific Council, or, in the absence of such guidance, to the best ability of the Contracting Party; and	Article 19.2
	(c) address the elements in accordance with Annex I.E.	Article 19.1(a) Revised reference to just Annex I.E to minimize confusion.
3	The Scientific Council:	
	(a) shall undertake an analysis of the preliminary assessment submitted in accordance with Article 19.1 at its meeting immediately following the submission by the Contracting Parties, according to procedures and standards it develops, and taking into account the risks of significant adverse impacts on VMEs;	Article 19.3 Clarified reference to identify what

		documents will be reviewed by the SC.
	(b) may consider any available additional information, including information from other fisheries in the region or similar fisheries elsewhere; and	
	(c) in line with the precautionary approach, shall provide advice to the Fisheries Commission on possible significant adverse impacts on VMEs and on the mitigation measures to prevent them.	Article 19.4.
4	The Working Group on Ecosystem Approach Framework to Fisheries Management shall:	Article 20.1
	(a) examine the advice of the Scientific Council delivered in accordance with Article 19.3; and	
	(b) make recommendations to the Fisheries Commission in accordance with its mandate.	
	<b>Article 20 – Management of Exploratory Bottom Fishing Activities</b>	
1	The Fisheries Commission shall adopt conservation and management measures to prevent significant adverse impacts of the exploratory fishing activities on VMEs, taking account of advice and recommendations provided by the Scientific Council and the Working Group on Ecosystem Approach Framework to Fisheries Management, including data and information arising from reports pursuant to Article 22. These measures may include:	Article 20.2 Inserted reference to correct working group.
	(a) allowing, prohibiting or restricting bottom fishing activities;	Article 20.2.(a)
	(b) requiring specific mitigation measures for bottom fishing activities;	Article 20.2.(b)
	(c) allowing, prohibiting, or restricting bottom fishing with certain gear types, or changes in gear design and/or deployment; and	Article 20.2(c)
	(d) any other relevant requirements or restrictions to prevent significant adverse impacts to vulnerable marine ecosystems.	Article 20.2(d)
	<b>Article 21 – Evaluation of Exploratory Bottom Fishing Activities</b>	
1	The Scientific Council shall:	
	(a) evaluate the results of the exploratory bottom fishing activities at its meeting immediately following the reception of the 'Exploratory Bottom Fishing Trip Report' circulated in accordance with Article 18.2; and	Article 21.1
	(b) in line with the precautionary approach, provide advice to the Fisheries Commission on the decision to be taken in accordance with Article 21.3, taking into account the risks of significant adverse impacts on VMEs.	Revised reference.
2	The Working Group on Ecosystem Approach Framework to Fisheries Management shall examine the advice of the Scientific Council delivered in accordance with Article 21.1 and shall make recommendations to the Fisheries Commission in accordance with its mandate.	Article 21.2 Updated reference to correct renamed Working Group.

3	The Fisheries Commission shall, taking account of advice and recommendations provided by the Scientific Council and Working Group on Ecosystem Approach Framework to Fisheries Management either to:	Unchanged  Updated reference to correct renamed Working Group.
	(a) authorize the bottom fishing activity for part or all of the area in which exploratory bottom fishing was carried out, and include this area in the footprint; or,	
	(b) discontinue the exploratory bottom fishing activity and, if necessary, close part or all of the area where exploratory bottom fishing was carried out; or,	
	(c) authorize the continued conduct of exploratory bottom fishing activity, in line with Article 18, with a view to gather more information.	
	<b>Article 22 – Provisions in Case of Encounter</b>	Revised title to eliminate “interim”
	<b><i>Encounter Threshold</i></b>	New sub-title.
1	An encounter with VME indicator species is defined as catch per set (e.g. trawl tow, longline set, or gillnet set) of more than 7 kg of sea pens and/or 60 kg of other live coral and/or 300 kg of sponges.	Article 22.3.
2	Each Contracting Party shall:	
	<b><i>Duties of the Master</i></b>	New subtitle
	(a) require that masters of vessels flying their flag and conducting bottom fishing activities in the NAFO Regulatory Area abide by the following rules, where evidence of VME indicator species, in accordance with Annex I.E, are encountered during the course of fishing operations:	Revised chapeau to reference duties of masters instead of vessels  Revised reference to just Annex I.E to minimize confusion.
	(1) quantify the catch of VME indicator species; and	Article 22.1(a) and 22.2(a) merged
	(2) 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 1 of this Article:	Article 22.1.(b) and 22.2.(b) merged and revised to make the move-on requirement consistent with similar measures in
	(i) report the encounter without delay to the flag State Contracting Party, 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; and	

		Article 6.6(b)(i).
	(ii) cease fishing and move at least two nautical miles away from endpoint of the tow/set in the direction least likely to result in further encounters. The master shall use his best judgment based on all available sources of information.	STACTIC notes that the use of “endpoint” is inconsistent with the use of “any position” to reflect how vessels must move away from excessive bycatch events in Article 6.6(i).
	<b><i>Duties of the observer</i></b>	New subtitle
	(b) require that an observer with sufficient scientific expertise deployed in accordance with Article 18.2(c) for areas outside the footprint:	Article 22.2(a) revised to update reference and revise term for scientific observer to state “an observer with sufficient scientific expertise” to avoid using an undefined designation for an observer and allow the SC to evaluate if an exploratory fishing proposal has sufficient scientific expertise aboard to record catch accurately.
	(1) identifies corals, sponges and other organisms to the lowest possible taxonomical level, using the “Exploratory Fishery Data Collection Form” in accordance with Annex I.E (templates); and	Revised reference to just Annex I.E to minimize confusion.
	(2) delivers the results of such identification to the master of the vessel to facilitate quantification referenced in paragraph 1(a)(1) of this Article;	New paragraph to ensure accuracy of VME catch data and to provide a gender-neutral reference.

	<b><i>Duties of the Contracting Party</i></b>	New subtitle
	(c) forward, without delay, the encounter information reported by the master to the Executive Secretary if the quantity of the VME indicator species caught in a fishing operation (such as trawl, tow, set, of a gillnet or longline) is beyond the threshold defined in paragraph 1 of this article. The Contracting Party may allow the master of their vessels to also report the encounter directly to the Executive Secretary;	Article 22.1(b) and 22.2(b)
	(d) issue an immediate alert of the encounter to all fishing vessels flying their flag; and	
	(e) consider temporarily closing a two mile radius around any reported VME encounter location outside of footprint upon notification by the Executive Secretary in accordance with Article 23.2(c). Contracting Parties may reopen temporarily closed areas upon notification from the Executive Secretariat in accordance with Article 22.3(e).	New paragraph added for clarity
	<b><i>Duties of the Executive Secretary</i></b>	
3	The Executive Secretary:	
	(a) archives the information on incident information reported by masters and without delay transmits it to all Contracting Parties;	Article 22.1(b) and 22.2(b) merged
	(b) makes an annual report to the Scientific Council on single and multiple encounters in discrete areas within the footprint. This report should also include reports from the exploratory bottom fishing activities conducted in the last year;	
	(c) requests all Contracting Parties to implement a temporary closure of a two mile radius around the reporting position of an encounter with VME indicator species outside the footprint, as identified in accordance with paragraph 2(c) of this Article. The reporting position is that provided by the master;	Article 22.2(b) and revised for clarity
	(d) requests Contracting Parties to maintain the temporary closure until such time that the Fisheries Commission has adopted conservation and management measures in accordance with paragraph 5 of this Article if the Scientific Council concludes that the area covered by a temporary closure consists of a VME;	
	(e) inform the Contracting Parties that they may reopen the area to their vessels if the Scientific Council does not conclude that the area covered by a temporary closure consists of a VME; and	
	(f) makes an annual report to the Scientific Council on archived reports from encounters in areas outside the footprint. This report shall also include reports from the exploratory bottom fishing activities that were conducted in the last year.	
	<b><i>Duties of the Scientific Council</i></b>	
4	The Scientific Council shall:	
	(a) analyze the information received from the Executive Secretary pursuant to paragraph 3(b) and (f) of this Article;	Article 22.1(b) and 22.2(b)
	(b) examine any temporary closures implemented in accordance with paragraph 3(c) of this Article at the meeting immediately following the implementation of such closures; and	Article 22.2(b) revised for clarity
	(c) provide advice to the Fisheries Commission on whether a VME exists following encounters with VME indicator species on a case-by-case basis and on the appropriateness of the temporary closures or other measures. The advice shall be based on annually updated assessments of the accumulated information on encounters as well as other scientific information. The Scientific Council's advice on the need for action, using FAO guidelines as a basis.	Article 22.1(b) and 22.2(b) merged and clarified.

	<b><i>Duties of the Fisheries Commission</i></b>	
5	The Fisheries Commission shall:	Article 22.1(b) and 22(b)
	(a) consider the advice provided by the Scientific Council pursuant to paragraph 4(c) of this Article; and	
	(b) adopt conservation and management measures in accordance with Article 21;	
		Paragraph moved to paragraph 1.
	<b>Article 23 – Reassessment of bottom fishing activities</b>	Article 23.1 reformatted
1	The Scientific Council shall:	Text clarified to reference updated name of Working Group.
	(a) identify VMEs, on the basis of best available scientific information and with the co-operation of Contracting Parties;	
	(b) map sites where these VMEs are known to occur or likely to occur; and	
	(c) provide such data and information to the Executive Secretary for circulation to all Contracting Parties.	
2	The Fisheries Commission shall:	
	(a) conduct a reassessment of bottom fishing activities in 2016 and every 5 years thereafter, or when there is new scientific information indicating a VME in a given area, in collaboration with the Scientific Council and the Working Group on Ecosystem Approach Framework to Fisheries Management; and	
	(b) take the necessary actions to protect VMEs following the reassessment specified in paragraph 2(a) of this article.	
	<b>Article 24 - Review</b>	
	The provisions of this Chapter shall be reviewed by the Fisheries Commission at its Annual Meeting in 2014.	

**Annex I.E****Templates for the conduct of exploratory bottom fishing activities****I. Exploratory Protocol for New Fishing Areas**

[INSERT EXISTING TEXT FROM PART IV]

**II. Notice of Intent to Undertake Exploratory Fishing**

[INSERT EXISTING TEXT FROM PART I]

**III. Exploratory Fishing Trip Report**

[INSERT EXISTING TEXT AND FOOTNOTES FROM PART II]

**IV. Exploratory Fishery Data Collection Form**

[INSERT EXISTING TABLE FROM PART III]

**V. Assessment of Bottom Fishing Activities**

[INSERT EXISTING TEXT]

**VI. List of VME indicator species**

[INSERT EXISTING LIST]

**VII. List of Physical VME Indicator Elements**

[INSERT EXISTING LIST]

## **Annex 27. Proposed Changes to NCEM Chapter VII – Non-Contracting Party Scheme**

(STACTIC Working Paper 14/07Rev2 now FC Doc. 14/14)

### Introduction

This working paper proposes revisions to Chapter VIII (non-Contracting Party measures) of the NAFO Conservation and Enforcement Measures (CEM). This is part of an ongoing effort by the Editorial Drafting Group (EDG) to revise the existing CEM to enhance article organization, structure, and format; eliminate redundancy; and clarify ambiguous or unclear measures to more accurately reflect the original intent of such measures.

This revised working paper includes revisions to the original EDG proposal (STACTIC WP 14/7 (rev)) based on comments provided by several Contracting Parties following the May 2014 STACTIC intersessional meeting.

A brief description of the proposed revisions to the existing CEMs is provided below. The proposed revisions to the CEMs are organized based on their current structure. Cross-references to the corresponding article and paragraph, based on the 2014 CEMs, and a brief description of any changes have been placed in the right column of the attached addendum for ease of reference.

### Proposed Changes to Existing CEMs:

- Article 1.11 – Revised “IUU List” to “IUU Vessel List” to use term consistently
- Article 26.2(d) – Eliminated “activities” to reflect use of “IUU Fishing” throughout
- Article 48.1 – Deleted reference to “RA” and added reference to IUU
- Article 48.2(b) – Replaced “investigation” with “inspection” for consistency with FAO
- Article 48.3(a) – Deleted reference to UNCLOS and WTO
- Article 49 – Revised formatting and for clarity, and title to reference IUU activity
- Article 49.1(c) – Removed unnecessary justification to integrate the NEAFC IUU list
- Article 50 – Reorganized and reformatted
- Article 51 – Reorganized and reformatted
- Article 53.1 – Merged several other paragraphs and reference updated from GC to FC
- Article 54 – Reorganized and reformatted
- Article 55 – Reorganized and reformatted

Paragraph	Text	Old reference/ comments
	<b>Article 1 - Definitions</b>	
11	"IUU Vessel List" means the list, established in accordance with Articles 52 and 53;	Revised "IUU List" to "IUU Vessel List" for consistent use of terms.
		STACTIC notes that while the current definition of "IUU fishing" in Article 1.10 does not explicitly refer to other activities such as transhipments referenced in the term "Fishing Activities" in Article 1.5, STACTIC interprets "IUU fishing" to also include transhipments.
	<b>CHAPTER III - VESSEL REQUIREMENTS AND CHARTERING</b>	
	<b>Article 26 - Chartering Arrangements</b>	
2	(d) the authorized vessel is not a vessel that has previously been identified as having engaged in IUU fishing.	Article 26.2(d) revised to remove reference to "activities" per STACTIC's interpretation of the definition of "IUU fishing" in Article 1.10.
	<b>CHAPTER VIII - NON-CONTRACTING PARTY SCHEME</b>	
	<b>Article 48 - General Provisions</b>	
1	The purpose of this Chapter is to promote compliance with non-Contracting Party vessels with recommendations established by NAFO and to prevent, deter and eliminate IUU fishing by non-Contracting Party vessels (hereinafter referred to as "NCP" vessels) that undermine the effectiveness of the CEM established by the Organization.	Article 48.1 revised include reference to IUU.
2	Nothing in this Chapter shall be construed to:	

	(a) affect the sovereign right of any Contracting Party to take additional measures to prevent, deter and eliminate IUU fishing by NCP vessels or, where evidence so warrants, take such action as may be appropriate, consistent with international law; or	Articles 48.2 + 50.2 merged and reformatted  Replaced “IUU fishing activities” with “IUU fishing” throughout to reflect consistent use of term.
	(b) prevent a Contracting Party from allowing an NCP vessel entry into its ports for the purpose of conducting an inspection of, or taking appropriate enforcement action against the vessel.	Article 48.3 Reformatted, changed “investigation” to “inspection” as per the FAO PSMA (article 9.5)
3	This Chapter shall be:	
	(a) interpreted in a manner consistent with international law, including the right of port access in case of <i>force majeure</i> or distress; and	Article 48.4 revised to remove duplicative reference to UNCLOS and WTO
	(b) applied in a fair and transparent manner.	Article 48.4
4	Each Contracting Party shall ensure that vessels entitled to fly its flag do not engage in joint fishing activities with NCP vessels referred to in Article 49, including receiving or delivering transshipments of fish to or from a NCP vessel.	Article 52.1
	<b>Article 49 - Presumption of IUU fishing</b>	Revision of title for congruence with existing concept in 53.2 Replaced “IUU fishing activities” with “IUU fishing”.
1	An NCP vessel is presumed to have undermined the effectiveness of the CEM, and to have engaged in IUU fishing, if it has been:	Replaced “IUU fishing activities” with “IUU fishing”.
	(a) sighted or identified by other means as engaged in fishing activities in the Regulatory Area;	Article 49.1 revised for reformatting
	(b) involved in transshipment with another NCP vessel sighted or identified as engaged in fishing activities inside or outside the Regulatory Area; and/or	Article 49.1 revised for reformatting and clarity
	(c) included in the IUU list of the North East Atlantic Fisheries Commission (NEAFC).	Article 49.2 revised formatting and eliminated unnecessary

		justification
	<b>Article 50 - Sighting and Inspection of NCP Vessels in the NRA</b>	
1	Each Contracting Party with an inspection and/or surveillance presence in the Regulatory Area authorized under the Joint Inspection and Surveillance Scheme that sights or identifies an NCP vessel engaged in fishing activities in the NRA shall:	Edits to reflect that not all Contracting Parties have an inspection presence.
	(a) transmit immediately the information to the Executive Secretary using the format of the surveillance report set out in Annex IV.A;	Article 49.3  Revised annex order and title
	(b) attempt to inform the Master that the vessel is presumed to be engaged in IUU fishing and that this information will be distributed to all Contracting Parties, relevant Regional Fisheries Management Organizations (RFMOs) and the flag State of the vessel;	Article 49.4  Replaced "IUU fishing activities" with just "IUU fishing".
	(c) if appropriate, request permission from the Master to board the vessel for inspection; and	Article 50.1 revised for formatting
	(d) where the Master agrees to inspection: (i) transmit the inspector's findings to the Executive Secretary without delay, using the inspection report form set out in Annex IV.B; and (ii) provide a copy of the inspection report to the Master.	Article 50.1 revised for formatting  Revised annex order & title
	<b><i>Duties of the Executive Secretary</i></b>	
2	The Executive Secretary, within one business day, posts the information received pursuant to this Article to the secure part of the NAFO website and distributes it to all Contracting Parties, other relevant RFMOs, and to the flag State of the vessel as soon as possible.	Articles 49.3 merged with Article 50.1
	<b>Article 51 - Port Entry and Inspection of NCP vessels</b>	
	<b><i>Duties of the Master of a NCP vessel</i></b>	
1	Each Master of a NCP vessel shall notify the competent authority of the port State Contracting Party of its intention to call into a port in accordance with the provisions of Article 45.	Article 51.1  Revised to reinsert the first sentence of the original Article 51.1.
	<b><i>Duties of the Port State Contracting Party</i></b>	Added "Port State" for

2	Each port State Contracting Party shall:	clarity
	(a) forward without delay to the flag State of the vessel and to the Executive Secretary the information it has received pursuant to Article 45;	Article 51.1 revised for concision and formatting.
	(b) refuse port entry to any NCP vessel where: (i) the Master has not fulfilled the requirements set out in Article 45 paragraph 1; or (ii) the flag State has not confirmed the vessel's fishing activities in accordance with Article 44 paragraph 2;	Article 51.2 revised for formatting
	(c) inform the Master the flag State of that vessel, and the Executive Secretary of its decision to refuse port entry, landing or transshipment of any NCP vessel; and	Article 52.3 revised to clarify combination of Art 51 & 52
	(d) where it permits entry, ensure the vessel is inspected by duly authorized officials knowledgeable in the CEM and that the inspection: (i) includes an examination of log books, fishing gear, catch on board, and any other matter relating to the vessel's activities in the Regulatory Area; and (ii) is documented in the format set out in Annex IV.C; and	Article 51.3 revised for formatting
	(e) send a copy of the inspection report and details of any subsequent action it has taken to the Executive Secretary without delay.	Article 51.4 revised for formatting
3	Each Contracting Party shall ensure that no NCP vessel engages in landing or transshipment operations in its ports unless the vessel has been inspected by its duly authorized officials knowledgeable in the CEM and the Master establishes that the fish species on board subject to the NAFO Convention were harvested outside the Regulatory Area or in compliance the CEM.	Article 51.3 & Article 52.2 revised for formatting
	<b><i>Duties of the Executive Secretary</i></b>	
4	The Executive Secretary without delay posts the information received pursuant to this Article to the secure part of the NAFO website, and distributes it to all Contracting Parties, relevant RFMOs, and the flag State of the vessel.	Article 51.4 revised for formatting
	<b>Article 52 – Provisional IUU Vessel List</b>	
1	In addition to information submitted from Contracting Parties in accordance with Articles 49 and 51, each Contracting Party may, without delay, transmit to the Executive Secretary any information that may assist in the identification of any NCP vessel that might be carrying out IUU fishing in the Regulatory Area.	Article 53.2 revised for concision
2	If a Contracting Party objects to a NEAFC IUU-listed vessel being incorporated into or deleted from the NAFO IUU Vessel List in accordance with Article 53, such vessel shall be placed on the Provisional IUU Vessel List.	Article 54.8
	<b><i>Duties of the Executive Secretary</i></b>	
3	The Executive Secretary:	

	(a) establishes and maintains a list of NCP vessels presumed to have engaged in IUU fishing in the Regulatory Area referred to as the Provisional IUU Vessel List;	Replaced "IUU fishing activities" with just "IUU fishing".
	(b) upon receipt, records the information received pursuant to paragraph 1, including, if available, the name of the vessel, its flag State, call sign and registration number, and any other identifying features, in the Provisional IUU Vessel List;	Article 53.1 revised for clarity
	(c) posts the Provisional IUU Vessel List and all updates to the secure part of the NAFO website; and	Article 53.1
	(d) advises the flag State of the NCP vessel listing, including:	Article 53.3
	(i) the reasons and supporting evidence;	Article 53.3a
	(ii) a copy of the CEM and a link to its place on the NAFO website;	Article 53.3(b) with new text regarding electronic copy of CEM
	(e) requests that the flag State of the NCP vessel:	
	(i) take all measures to ensure that the vessel immediately ceases all fishing activities that undermine the effectiveness of the CEM;	Article 53.3c revised for formatting; fishing added for clarity
	(ii) report within 30 days from the date of the request on the measures it has taken with respect to the vessel concerned; and	Article 53.3d moved to Article 52.2(d)
	(iii) state any objections it may have to including the vessel in the IUU Vessel List;	New paragraph to establish congruence with existing 53.6
	(f) transmits to the flag State of the NCP vessel any additional information received pursuant to Articles 49-51 in respect of vessels flying their flag that have already been included in the Provisional IUU Vessel List;	Articles 53.2 + 53.4 combined and revised
	(g) distribute any information received from the flag State to all Contracting Parties;	Article 53.5
	(h) advises the flag State of the NCP vessel of the dates STACTIC and the General Council will consider listing the vessel in the IUU Vessel List, and invites the flag State to attend the meeting as an observer where it will be given the opportunity to respond to the report submitted in accordance with paragraph 2(e)(ii);	Article 53.3e revised for formatting and insert reference to NCP vessel
	(i) transfers the vessel from the Provisional IUU Vessel List to the IUU Vessel List in accordance with Article 53 if the flag State does not object; and	Article 53.6
	(j) places all vessels included in the NEAFC IUU List on the IUU Vessel List unless a Contracting Party objects to such inclusion, in which case it places the vessel on the Provisional IUU Vessel List. Article 53 shall not apply to vessels placed on the Provisional IUU Vessel List in accordance with this paragraph.	Article 54.8
	<b>Article 53 - IUU Vessel List</b>	

	<b><i>Listing a Vessel on the IUU Vessel List</i></b>	Revised for clarity
1	STACTIC recommends to the Fisheries Commission whether each vessel listed in the Provisional IUU Vessel List should be: (a) deleted from the Provisional IUU Vessel List; (b) retained in the Provisional IUU Vessel List, pending receipt of further information from the flag State, or (c) transferred to the IUU Vessel List only upon expiration of the period referred to in Article 52.2(e)(ii).	Articles 54.1 + 54.2 + 54.4 are merged, with reference updated from GC to FC and include the expiration of the comment period to reflect when STACTIC may act following the timing of the report required under the current Article 52.2(e)(ii).
		Article 54.4 moved to Article 53.3
	<b><i>Deleting a Vessel from the IUU Vessel List</i></b>	
2	STACTIC may advise that the Fisheries Commission recommend that General Council delete a vessel from either the Provisional IUU Vessel List or the IUU Vessel List where it is satisfied that the flag State of a vessel concerned has provided sufficient evidence to establish that:	Article 54.3 revised for formatting and for clarity
	(a) it has taken effective action to address the IUU fishing of such vessel, including prosecution and imposition of sanctions of adequate severity;	Article 54.3a
	(b) it has taken measures to prevent such vessel from engaging in further IUU fishing under its flag;	Article 54.3b  Replaced "IUU fishing activities" with just "IUU fishing".
	(c) such vessel has changed ownership, and (i) the previous owner no longer has any legal, financial or real interest in such vessel, or exercises no control over it; or (ii) the new owner has no legal, financial or real interest in, nor exercises control over, another vessel listed in the IUU Vessel List or any similar IUU list maintained by an RFMO;	Article 54.3c revised for formatting
	(d) such vessel did not take part in IUU fishing; or	Article 54.3d  Replaced "IUU fishing activities" with just "IUU fishing".
	(e) such vessel has sunk, been scrapped or been permanently reassigned for purposes other than fishing activities.	Article 54.3(e) revised for clarity.

		STACTIC notes that the last sentence of Article 54.3 is included in the chapeau for this paragraph.
3	The Fisheries Commission may recommend to the General Council any changes to listings in the IUU Vessel List. The General Council determines the final composition of the IUU Vessel List.	Article 54.4 moved from Article 53.2.
	<b><i>Duties of the Executive Secretary</i></b>	
4	The Executive Secretary:	
	(a) posts the IUU Vessel List on the NAFO website, including the name and flag State and, if available, the call sign, hull number, IMO number, previous name(s) and flag(s) or any other identifying features for each vessel;	Article 54.5 revised to include "hull number" as another ID. This is consistent with the Provisional IUU Vessel List in Article 52.3(b).
	(b) notifies the flag State of the name of each vessel entitled to fly its flag listed in the IUU Vessel List;	Article 54.7
	(c) transmits the IUU Vessel List and any relevant information, including the reasons for listing or de-listing each vessel, to other RFMOs, including, in particular, the NEAFC, the South East Atlantic Fisheries Organisation (SEAFO), and the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR);	Article 54.6 revised for clarity and to insert "de-listing."
		Article 54.6 deleted to integrate "de-listing" into Article 53.4(c).
	(d) transmits the amendments to the NEAFC IUU list, upon receipt, to all Contracting Parties and amends the IUU Vessel List consistent with amendments to the NEAFC IUU List, within 30 days of such transmittal; unless within the 30 days the Executive Secretary receives from a Contracting Party a written submission establishing that: <ul style="list-style-type: none"> <li>(i) any of the requirements in paragraph 3 have been met with regard to a vessel placed on the NEAFC IUU List; or</li> <li>(ii) none of the requirements in paragraph 3 have been met with regard to a vessel taken off the NEAFC IUU List; and</li> </ul>	Article 54.8 reformatted and revised for clarity.
	(e) advises STACTIC of any action taken pursuant to this Article.	
	<b>Article 54 - Action against vessels listed in the IUU Vessel List</b>	
1	Each Contracting Party shall take all measures necessary to deter, prevent, and eliminate IUU fishing, in relation to any vessel listed in the IUU Vessel List, including:	Article 55

	(a) prohibiting any vessel entitled to fly its flag, from, except in the case of force majeure, participating in fishing activities with such vessel, including but not limited to joint fishing operations;	Added paragraph numbering to maintain consistency of format.
	(b) prohibiting the supply of provisions, fuel or other services to such vessel;	
	(c) prohibiting entry into its ports of such vessel, except in the case of force majeure;	
	(d) prohibiting change of crew, except as required in relation to force majeure;	
	(e) refusing to authorize such vessel to fish in waters under its national jurisdiction;	
	(f) prohibiting chartering of such vessel;	
	(g) refusing to entitle such vessels to fly its flag;	
	(h) prohibiting landing and importation of fish from onboard or traceable to such vessel;	
	(i) encouraging importers, transporters and other sectors concerned, to refrain from negotiating transshipment of fish with such vessels; and	
	(j) collecting and exchanging any appropriate information regarding such vessel with the other Contracting Parties, non-Contracting Parties and RFMOs with the aim of detecting, deterring and preventing the use of false import or export certificates in relation to fish or fish product from such vessels.	
	<b>Article 55 – Action Against Flag States</b>	
1	Contracting Parties shall, jointly and/or individually request the cooperation of the flag State of each NCP vessel listed in the IUU Vessel List with a view to prevent, deter and eliminate future IUU activities by such vessel.	Article 56.1
2	The Fisheries Commission shall review annually the actions taken by the flag States referred to in paragraph 1 with a view to identifying for follow-up action any that has not taken action sufficient to prevent deter and eliminate IUU activities by any vessel entitled to fly its flag listed in the IUU Vessel List.	Article 56.2
3	Each Contracting Party should, to the extent possible and consistent with its international obligations and in accordance with applicable legislation, restrict the export and transfer of any fishing vessel entitled to fly its flag to any State identified pursuant to paragraph 2.	Article 56.3

**Annex 28. The use of the two-letter code DS (Directed Species) in the NAFO  
Conservation and Enforcement Measures**  
(STACTIC Working Paper 14/23Rev2 now FC Doc. 14/16)

**Background**

At the Annual Meeting in 2012 NAFO approved an “authorization” message (AUT), which contains the data-element DS. This has raised some implementation issues since the Observer Report (OBR) already had a DS field with a different content.

***Description of the current format mismatch***

**Occurrence of the code DS in reports for electronic data exchange:**

**Annex II.G Observer report TM = OBR**

Data Element	Code	Mandatory/Optional	Requirements for the field
Directed Species <sup>6</sup>	DS	M	Activity detail; FAO code species code

<sup>6</sup> Directed species is the species which represents the greatest catch for that day.

**Annex II.C 3) Format for authorization to conduct fishing activities TM = AUT**

Data Element	Code	Mandatory/Optional	Requirements for the field
Directed Species	DS	M6	License detail; species allowed for directed fishery. Regulated species of Annex I.A or I.B must refer to the stock. Allow for several pairs of fields species and divisions e.g. //DS/GHL 3LMNO COD 3M RED 3LN RED 3M//

<sup>6</sup> For transport vessels the DS field is optional

**Occurrence of the code DS in format descriptions:**

**Annex II.D C. Format for electronic exchange of fisheries monitoring information (NAF)**

Category	Data Element	Code	Type	Content	Definition
Authorization details	Directed Species	DS	Char*3 Num*6	FAO Species Code Area Code	License detail; species for which the authorization applies. In case of regulated species from Annex I.A or I.B the content must refer to the stock (format GHL 3LMNO)
Activity details	Directed Species	DS	Char*3	FAO species codes	Code for species the vessel is targeting. Allow for several species, separated by a space. E.g. //DS/ species species species//

This issue was discussed by the Joint Advisory Group on Data Management (JAGDM) in June 2014. JAGDM agreed that it is important that the description of data-elements in Annexes of the NCEM is detailed and unique enough to easily be used in IT systems, and that a duplicated use of code will create implementation

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problems. The group further agreed that there should be a more consistent use of coding and that some changes should be made to the relevant annexes of the NCEM.

This proposal seeks to incorporate the comments given by JAGDM, and at the same time make as few changes as possible to the current NCEM.

Since the OBR-report is generated by the observers onboard the vessels, and the data-element Directed Species with the code DS has been used for many years in this report, no changes in the format of the OBR report are proposed.

The AUT report is however generated by the Contracting parties, and amendments will not affect any vessel systems. Thus, it is proposed that the current DS field in the AUT report be replaced by a new data element **Targeted species and Area** with the two-letter code **TA**.

The 2014 Annual Quota Table (Annex I.A) and the Effort Allocation Scheme for Shrimps Fishery in NAFO Regulatory Area Div 3M (Annex I.B) describe in text the information to be sent in the proposed new data element. The current listing in Annexes I.A and I.B is not specified enough to be implemented into an IT system. It is therefore proposed adding the necessary specifications in the headings of these tables.

**Proposed amendments:****Annex I.A – Annual Quota Table**

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

(Stock specifications are to be used in the electronic Authorization report.)

Species	Cod				Redfish					American plaice		Yellowtail
	COD 3L	COD 3M		COD 3NO	RED 3LN		RED 3M	RED 3O	REB 1F_2_3K  (that is Sub-Area 2 and div 1F+3K)	PLA 3LNO	PLA 3M	YEL 3LNO
% of TAC			% of 3M Cod TAC			% of 3LN Redfish TAC						
Contracting Party												

<b>Species</b>	<b>Witch</b>		<b>White hake</b>	<b>Capelin</b>	<b>Skates</b>	<b>Greenland halibut</b>	<b>Squid(<i>Illex</i>)<sup>1</sup></b>	<b>Shrimp</b>	
<b>Stock specification</b>	<b>WIT 3L</b>	<b>WIT 3NO</b>	<b>HKW 3NO</b>	<b>CAP 3NO</b>	<b>SKA 3LNO</b>	<b>GHL 3LMNO</b>	<b>SQI 3_4  (that is Sub-areas 3+4)</b>	<b>PRA 3L</b>	<b>PRA 3NO</b>
<b>% of TAC</b>									
<b>Contracting Party</b>									

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

(In the electronic Authorization report, use PRA 3M.)

*The table remains unchanged*

**Annex II.C 3) Format for authorization to conduct fishing activities.**

The data element Targeted species and Area (TA) replaces the current Directed species (DS).

Data Element	Code	Mandatory/Optional	Requirements for the field
Targeted species and Area	TA	M <sup>6</sup>	License detail; species and area allowed for directed fishery. Regulated species of Annex I.A or I.B must refer to the stock specification. For unregulated species use Sub Area or division or "ANY". Allow for several pairs of fields. e.g. //TA/GHL 3LMNO COD 3M RED 3LN RED 3M HER ANY//

<sup>6</sup> For transport vessels the TA field is optional

**Annex II.D C. Format for electronic exchange of fisheries monitoring information (NAF)**

Category	Data Element	Code	Type	Content	Definition
Authorization details	Targeted species and Area	TA	Char*3 Char*10	Stock specifications, FAO Species code and NAFO defined area code or "ANY"	Species and area allowed for directed fishery. Regulated species of Annex I.A or I.B must refer to the stock specification. For unregulated species use Sub Area or division or "ANY". Allow for several pairs of fields. e.g. //TA/GHL 3LMNO COD 3M RED 3LN RED 3M HER ANY//

**Annex 29. Closure of the RED 3M "directed fishery"**  
(STACTIC Working Paper 14/26 **now** FC Doc. 14/17)

Preamble

- a. According to CEM Art 5.5 (e), the directed fishery for RED 3M is closed "*once*" the catch is estimated to reach 100 % of the TAC. To avoid confusion, it is proposed to replace the word "*once*" by "*on the date*";
- b. According to CEM Art 5.12 (d), the NAFO Secretariat must notified in advance the date on which 50 % of the RED 3M TAC is reached, but nothing is stated for the date when 100 % of that TAC is reached.

Proposal

1. in CEM Art 5.5 (e) - to replace the word "*once*" by the words "*on the date*"
2. In CEM Art 5.12 (d) - to insert "*and then 100%*" after 50%

## **Annex 30. Consistent Approach to Address Serious Infringements Detected At Sea**

(STACTIC Working Paper 14/28 now FC Doc. 14/18)

### Introduction:

At the May 2014 STACTIC Intersessional Meeting, the Secretariat presented a summary of serious and non-serious infringements recorded during 2013, including those detected during at-sea and in-port inspections. The Secretariat noted that there was not a clear distinction between serious and non-serious infringements, and that some apparent infringements were not adequately covered in Article 47. Further, the Secretariat indicated that the process for how to record apparent infringements detected by port inspectors, especially non-serious infringements, is not clear in the current NAFO Conservation and Enforcement Measures (CEM).

The United States recognizes that differentiating serious and non-serious infringements in the CEM can be an effective deterrent to non-compliance, especially the follow-up procedures and implications for further inspection associated with the detection of a serious infringement. The United States also believes that detecting, recording, and disseminating infringements are critical components of the control regime established by NAFO.

To address the concerns noted by the Secretariat, the United States proposes several revisions to Articles 38 and 47 of the CEM. These revisions are intended to consolidate all serious infringements under Article 38, and to clarify in Article 47 that serious infringements detected during in-port inspections should be handled consistent with the process for addressing serious infringements detected at sea.

The United States is not proposing any additional changes to improve the process by which infringements detected in port are recorded and submitted, noting that Article 43.14 and the associated Port State Control Inspection Report (PSC-3 form) specified in Annex IV.C provide adequate opportunity to record both serious and non-serious infringements detected in port.

### Proposed Changes to Existing CEMs:

#### **1. Move the serious infringements outlined in Article 47(b)10 - (d) to Article 38.1(p) - (r) as follows:**

##### *List of Serious Infringements*

1. Each of the following violations constitutes a serious infringement::
  - (a) fishing an "Others" quota without prior notification to the Executive Secretary contrary to Article 5;
  - (b) fishing an "Others" quota more than seven working days following closure by the Executive Secretary contrary to Article 5;
  - (c) directed fishing for a stock which is subject to a moratorium, or for which fishing is otherwise prohibited, contrary to Article 6;
  - (d) directed fishing for stocks or species after the date of closure by the flag State Contracting Party notified to the Executive Secretary contrary to Article 5;
  - (e) fishing in a closed area, contrary to Article 9.6 and Article 11;
  - (f) fishing with a bottom fishing gear in an area closed to bottom fishing activities, contrary to Chapter II;
  - (g) using an unauthorized mesh size contrary to Article 13;
  - (h) fishing without a valid authorization issued by the flag State Contracting Party contrary to Article 25;
  - (i) mis-recording of catches contrary to Article 28;

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<sup>10</sup> The type of infringement identified in Article 47(a) is already included in the list of serious infringements under Article 38.1(l).

- (j) failing to carry or interfering with the operation of the satellite monitoring system contrary to Article 29;
- (k) failure to communicate messages related to catch contrary to Article 10.6 or Article 28;
- (l) obstructing, intimidating, interfering with or otherwise preventing inspectors or observers from performing their duties;
- (m) committing an infringement where there is no observer on board;
- (n) concealing, tampering with or disposing of evidence related to an investigation, including the breaking or tampering of seals or gaining access to sealed areas;
- (o) presentation of falsified documents or providing false information to an inspector that would prevent a serious infringement from being detected;
- (p) landing or transshipping in a port not designated in accordance with the provisions of Article 43.1;
- (q) failure to comply with the provisions of Article 45.1; and
- (r) landing or transshipping without authorization of the port State as referred to in Article 43.6.

**2. Revise the title of Article 47 to read:**

***“Serious Infringements Detected During In-Port Inspections”***

**3. Reorder, revise, and number the paragraphs under Article 47 to read:**

1. The provisions in Articles 39 and 40 shall apply to any serious infringements listed in Article 38 detected during in-port inspections.
2. Serious infringements detected during in-port inspections shall be followed up in accordance with domestic law.

**Annex 31. Amendment to Article 14 of the NCEM**  
(STACTIC Working Paper 14/29 **now** FC Doc. 14/19)

**Background**

Currently, Article 14 of the NAFO Conservation and Enforcement Measures (NCEM's) contains the following provision that allows Canadian vessels to comply with domestic regulations requiring the landing of all catch:

***3. Notwithstanding paragraphs 1 and 2, Canadian vessels shall abide by their equivalent national regulations which require landing of all catch.***

A recent amendment to Canadian legislation was effected to more closely align Canadian domestic law with the spirit of the NCEM's. This amendment now authorizes, under the conditions of a commercial fishing licence, Canada to require Canadian vessels to release groundfish that are subject to minimum size requirements found in Article 14 of the NCEM's.

Accordingly, it is proposed that Article 14 (3) be removed from the measures to allow for the consistent application of *Minimum Fish Size Requirements* for all Contracting Parties when fishing in the NAFO Regulatory Area. Article 14 would be renumbered and the current 14.4 would become 14.3.

**Proposed amendment**

It is proposed that Article 14 be edited as follows:

Article 14 – Minimum Fish Size Requirements

1. No vessel shall retain on board any fish smaller than the minimum size established in accordance with Annex I.D, which it shall immediately return to the sea.
2. Processed fish which is below a length equivalent prescribed for that species in Annex I.D is considered to derive from fish that is smaller than the minimum fish size prescribed for that species.
- ~~3. ***Notwithstanding paragraphs 1 and 2, Canadian vessels shall abide by their equivalent national regulations which require landing of all catch.***~~
3. Where the number of undersized fish in a single haul exceeds 10% of the total by number of fish in that haul, the vessel shall for its next tow maintain a minimum distance of 5 nautical miles from any position of the previous tow.

## **Annex 32. Notification to Inspecting Contracting Party Regarding Additional Procedures for Serious Infringements**

(STACTIC Working Paper 14/34Rev2 now FC Doc. 14/20)

### **Background**

Currently the NCEM specify that in the case of a serious infringement, a flag state that does not order a vessel to port must provide written justification to the Executive Secretary no later than 3 working days following the notice of infringement.

As the inspecting Contracting Party often has inspectors remaining on the vessel to provide information to the Flag State Contracting Party to support the investigation, it is necessary for the Inspecting Contracting Party to know whether or not the infringement has been dealt with in order to better understand which information needs to be collected for investigation purposes.

### **Proposed Amendment**

#### **Add the following text to Article 38.10**

1. The Executive Secretary:
  - (a) informs without delay the Contracting Parties having an inspection presence in the Regulatory Area of the serious infringement referred by its inspectors;
  - (b) informs without delay to the inspecting Contracting Party, the justification provided by the flag State Contracting Party, where it did not order its vessel to port in response to the finding of a serious infringement; and**
  - ~~(b)~~ **(c)** makes available to any Contracting Party, on request, the justification provided by the flag State Contracting Party where it did not order its vessel to port in response to the finding of a serious infringement.

### **Annex 33. Provision of Haul by Haul Logbook Data to the Secretariat** (STACTIC Working Paper 14/13Rev3 now FC Doc. 14/15)

#### **Background**

Pursuant to Article 28.2 (a), the NAFO Conservation and Enforcement Measures require that fishing vessels record the catch of each tow/set and complete the fishing logbook according to Annex II.A. The adoption of this provision has proven to be very beneficial in ensuring compliance with various reporting requirements in the NCEM. At the February meeting of the Fisheries Commission and Scientific Council Ad hoc Working Group on Catch Reporting, there was general consensus that haul by haul logbook data would be extremely useful if submitted to the Secretariat. In addition, the Ad-Hoc Working Group to Reflect on the Rules Governing By-catches, Selectivity and Discards noted that the provision of tow by tow data to the Secretariat would allow for more precise by-catch and discard analysis. In June, 2014, Scientific Council stated that it considers the provision of haul by haul data to be of critical importance in the auditing process for the reliability of STATLANT data. The SC further recommended that such data be submitted to the Secretariat for use by the SC for assessment purposes.

The information can be provided in electronic format containing at a minimum the information contained in Annex II.N. As most vessels fishing in the NRA have some form of electronic reporting capacity, this should not be a problem. In the case where vessels have paper logbooks, the information may be provided in the current observer program data format.

All information must be treated according to the rules of confidentiality contained in Article II.B

#### **Proposed Amendments**

##### **Replace Article 28.8 with the following:**

Each Contracting Party shall:

- (a) report its provisional monthly catches by species and stock area, and its provisional monthly fishing days for the 3M shrimp fishery, whether or not it has quota or effort allocations for the relevant stocks. It shall transmit these reports to the Executive Secretary within 30 days of the end of the calendar month in which the catch was taken.
- (b) ensure that logbook information is submitted in an electronic format to the Executive Secretary containing at a minimum the information outlined in Annex II.N within 60 days following the completion of each fishing trip. If the information is not available electronically, it may be provided in the current observer program data format, as outlined in Annex II.M. Part 2.**

Add the following text to Article 28.9

**(f) makes the logbook data specified in Article 28.8 (b) available to Scientific Council upon their request, without the vessel's and flag State identification, in line with the data confidentiality rules as specified in Annex II.B. If the request includes VMS data under Article 29.10 (d), a vessel codification should permit the cross analysis of both catch and VMS data by vessel and this way allow the Scientific Council to carry out their mandated responsibilities. Data made available shall be used only for the purpose of research within the functions of the Scientific Council and publication of scientific results should be in an aggregated format without any detailed information regarding individual vessels or flag States.**

ANNEX II.N

FISHING LOGBOOK INFORMATION BY HAUL

Page #

Vessel Name

Flag State

Side Number

Home Port

Gear Type

Call Sign

Year

Tow #	NAFO Division	Date (DDMMYYYY)	START OF TOW			END OF TOW			Catch of top 3 species caught (FAO 3-alpha Species Code) (kg live weight) (indicate kept or discard)						Comments	
			Latitude (decimal degrees)	Longitude (decimal degrees)	Time (UTC) (HHMM)	Latitude (decimal degrees)	Longitude (decimal degrees)	Time (UTC) (HHMM)	Total Catch All Species (kg)	Species (largest catch weight kg)		Species (second largest catch weight kg)		Species (third largest catch weight kg)		
										Kept	Discard	Kept	Discard	Kept		Discard



**Annex 34. Annual Compliance Review 2014  
(Compliance Report for Fishing Year 2013)**  
(STACTIC Working Paper 14/17Rev now FC Doc. 14/21)

## 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>11</sup>

This review utilizes information for the years 2004 to 2013 from the following sources: vessel monitoring system (VMS) and hail messages delivered by the vessels (Vessel Transmitted Information – VTI), Port Inspection Reports, At-sea Inspection Reports and Reports on Dispositions of Apparent Infringements provided by the Contracting Parties, and Observer Reports sent to the Secretariat.

As discussed at the Intersessional Meeting of the Standing Committee on International Control (STACTIC) in May 2014, a new section *Bycatch* is included in this review.

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

NAFO identifies three main fisheries in its Regulatory Area: the groundfish (GRO - primarily in Div. 3KLMNO), shrimp (PRA - primarily in Div. 3LM) and pelagic redfish fisheries (REB - primarily in Div. 1F and 2J). Shrimp and pelagic redfish fisheries utilize shrimp trawls and midwater trawl gears, respectively. In the groundfish fisheries, trawling and longlining operations account for 94.8% and 5.2%, respectively.

In 2013, there were 64 fishing vessel spending a total of 4 779 days in the NAFO Regulatory Area (NRA) (Table 1). 160 trips were identified. Groundfish fishery accounted for 94.3% of the total fishing effort, shrimp for around 4.0%, and the pelagic redfish fishery for around 1.7%.

An overall 13.3% decrease of the total fishing effort was observed (Table 1) compared to 2012. The net decrease could be attributed largely to the pelagic redfish fishery and shrimp fishery in 2013. Shrimp fishing effort has continued its decline since the 3M shrimp moratorium in 2010. The groundfish fishery effort decreased at a 10.7% (Table 1).

**Table 1. 2012-2013 Comparison of Fishing Effort in the NAFO Regulatory Area.**

Number of fishing vessels					Fishing effort (days present)				
Year	Groundfish (GRO)	Shrimp (PRA)	Pelagic Redfish (REB)	TOTAL	Year	Groundfish (GRO)	Shrimp (PRA)	Pelagic Redfish (REB)	TOTAL
2012	44	5	8	57	2012	5050	250	210	5510
2013	54	7	4	64	2013	4510	190	79	4779
% change	22.70%	40.00%	-50.00%	12.30%	% change	-10.70%	-24.00%	-62.40%	-13.30%

<sup>11</sup>For the purpose of this compliance analysis, only fishing trips which ended in 2013 were considered. Fishing trip for a fishing vessel includes “the time from its entry into until its departure from the Regulatory Area and continues until all catch on board from the Regulatory Area is unloaded or transhipped” (NCEM Art. 1.7).

For the period 2004–2013, the overall fishing activities in the NRA show a declining trend, from 134 active vessels in 2004 to 64 in 2013, representing a 53% decrease. The decline in terms of overall fishing days was a 71% decrease for the same period from 16 480 days in 2004 to 4 779 days in 2013. The average number of days each vessel operates in the NAFO Regulatory Area also declined from 123 days in 2004 to 75 days in 2013.

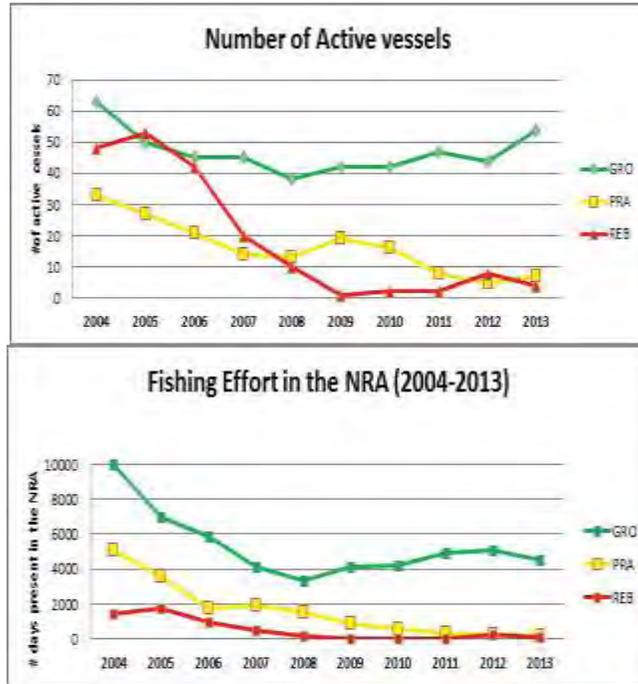


Figure 1. The trend of fishing effort in the NAFO Regulatory Area in the period 2004-2013.

Figure 1 illustrates the changes described above for each of the major fisheries. NAFO fisheries remain dominated by the groundfish category. After five years of steep decline, the groundfish effort has been stable since 2009. Figure 2 illustrates the current effort distribution compared to the historical average. By 2013, the fishing effort contribution of shrimp fisheries was reduced to 4% largely due to the shrimp fishing moratorium established in 2011.

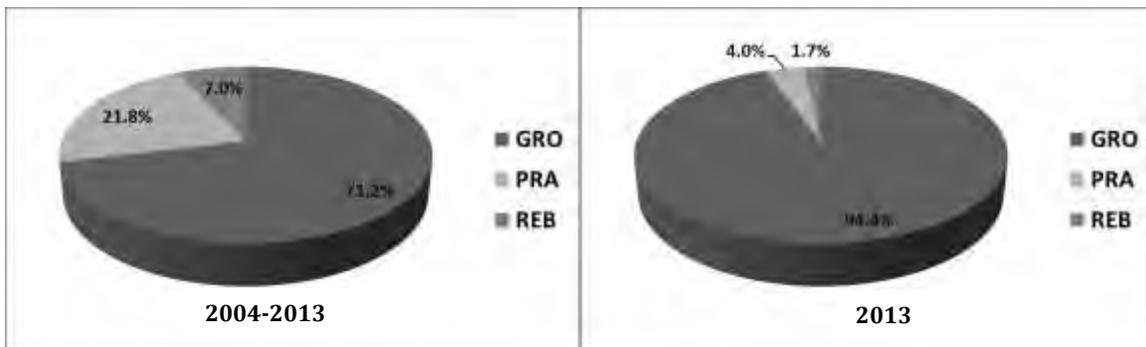
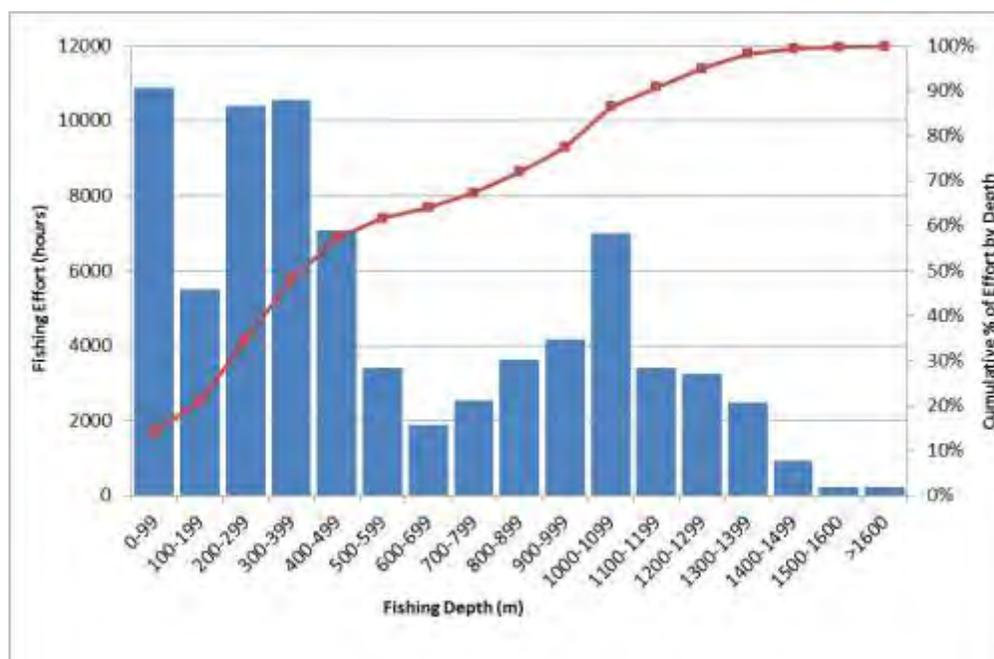


Figure 2. Comparative fishing effort (days present) in the NAFO Regulatory Area

**Effort distribution by depth of groundfish vessels**

The requirement of providing the speed and course information in the Vessel Monitoring System (VMS) reports facilitated the estimation of fishing effort in terms of fishing hours. Speeds between 1 and 5 knots

were considered fishing speeds. In Figure 3, the distribution of fishing effort in hours of groundfish vessel is presented. Figure 3 shows that about half of all groundfish effort is at depths 400 meters and below (skates, redfish and cod).



**Figure 3.** Distribution of groundfish fishing effort by depth in the NRA in 2013 (Divisions 3L, 3M, 3N, and 3O).

### 3. Compliance by Fishing Vessels

Monitoring, Control and Surveillance (MCS) measures are spelled out in Chapters III-VII of the NCEM. Through the at-sea and port inspections, NAFO monitors, controls and conduct surveillance of the fisheries in the NRA exposing infringements of the NAFO regulations and collecting evidence for the following prosecution within the legal system of each NAFO flag State Contracting Party.

#### **Position reporting – Vessel Monitoring System (VMS)**

Vessels in the NRA are required to transmit position reports at one hour intervals. In addition, the course and speed information must be included in the position reports. Examination of the position reports revealed that vessels were compliant to this requirement. The position reports were received by the Secretariat in practically real-time through the Fisheries Monitoring Centres (FMC) of individual flag States. When technical difficulties were encountered by the vessels in complying with the position reporting requirements, the position reports were transmitted electronically by email and promptly entered into the VMS database by the Secretariat. In cases of technical difficulties, VMS reports can be sent at least once every four hours. Generally, the technical issues were resolved at most within a few days through the coordination and communication between the Secretariat and the FMCs. The timeliness of submission of position reports was not an issue since VMS reports were being received by the Secretariat and CPs with inspection presence in real-time through satellite technology.

With an estimated total fishing effort of 4 779 vessel-days, the expected number of VMS reports is 114,696. A total of 128 158 VMS position reports within the vessel-days were received in 2013 fishing trips. This amount suggests that some vessels transmitted their positions at intervals less an one hour. Some vessels which were landing or calling on Canadian ports continued to transmit VMS reports. This also contributed to the higher-than-expected number of VMS reports received in the Secretariat.

**Activity and catch reporting – Vessel Transmitted Information (VTI): Catch-on-Entry, Catch-on-Exit, Daily Catches**

Catch quantities on board upon entry to (COE) and exit from (COX) the NRA must be reported for each fishing trip. While fishing in the NRA, fishing vessels are required to transmit daily catch reports (CAT) detailing catch quantities by species and division. Catch reports are transmitted through the same technology and communication channel as the transmission of VMS (positions) reports. (See section *Vessel Transmitted Information (VTI) – Catch-on-Entry (COE), Catch-on Exit (COX), Daily catch reports (CAT)* below.)

Daily catch reports are not limited to regulated (under TAC or moratorium) species. Vessels are required to report catches (and discards) at the species level to the extent possible. The catches of regulated and selected non-regulated species are presented in Table 2.

**Table 2.** Total reported catches (in tons) of regulated and selected non-regulated species in 2013 (Source: CAT reports).

Division	1F	2J	3L	3M	3N	3O	6G	?
<b>Species (FAO-3-alpha code)</b>								
<b>Regulated</b>								
COD			130.8	14801.0	641.3	263.5		13.9
GHL			6201.7	1653.6	767.4	9.9		2.2
HKW			1.2	0.1	14.2	132.8		0.1
PLA			78.1	248.8	1065.6	233.4		
PRA			1733.3					17.4
REB	1383.9	5.6						65.5
RED			1757.7	7538.6	1748.1	8146.8		28.5
SKA			36.7	72.4	3530.9	797.0		0.3
WIT			35.0	177.2	108.1	188.7		
YEL			1.2	7.8	4385.9	59.3		
<b>Unregulated</b>								
ALF							113.9	
ANG				0.0	20.0	26.3		
CAT			28.2	256.8	18.5	1.0		
HAD				74.9	68.1	103.6		
HAL			91.0	74.9	128.2	69.5		2.1
HKR			17.1	4.8	4.0			
HKS			0.1			82.5		
RHG			212.5	146.1	47.7	0.1		0.0
RNG			70.9	170.0	24.2	0.1		

**Vessel activity after 3M redfish 100%-TAC-uptake notification**

The fish stock 3M redfish is the only regulated stock which Total Allowable Catch (TAC) is considerably less than the sum of the quotas. The Secretariat monitors the TAC uptake through the daily catch reports (CATs) it receives from the fishing vessels. Contracting Parties are updated with the total accumulated catch (50%, 80% and 100% of the TAC) with the aim of preventing the TAC to be exceeded. When the TAC is reached, Contracting Parties are required to instruct their vessels to cease directed fishery on the stock.

According to Footnote 8 of the Quota Table (Annex I.A of the NCEM), not more than 50% of the TAC may be fished before 1<sup>st</sup> July. On 2<sup>nd</sup> May 2013, a 50%-TAC uptake notification was circulated by the Secretariat, on which time the fishery would be suspended until 30<sup>th</sup> June. Notifications of 95% and 103% were circulated on 25<sup>th</sup> and 29<sup>th</sup> July, respectively. Figure 4 shows the total daily catches and the percentage cumulative catch derived from CAT reports. The fishing vessels continued to conduct directed fishery of this stock for few days after the 103%-notification. When the fishing ceased the accumulated catch was exceeded by 16% of the TAC.

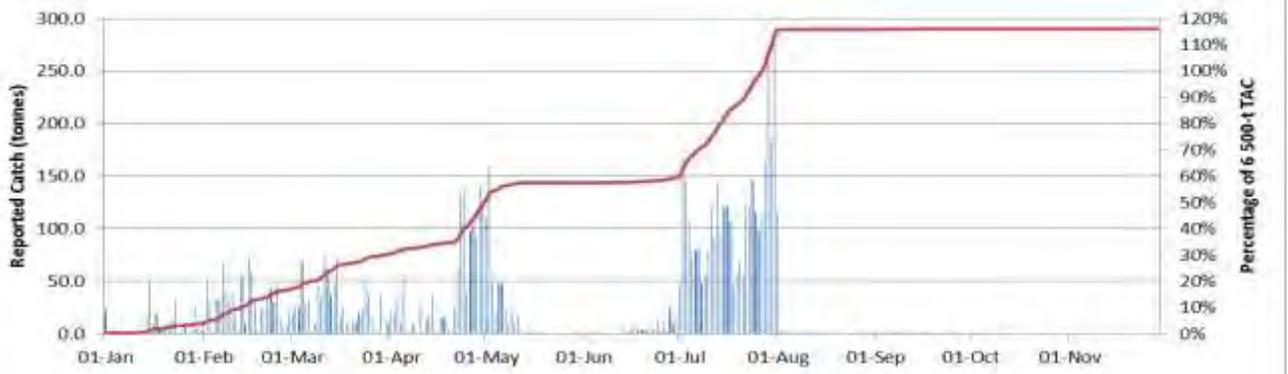


Figure 4. Daily 3M redfish catches of all vessels in 2013.

**Shrimp vessels**

Shrimp in Division 3M has been under moratorium since 2011. Examination of the VMS and VTI reports revealed that the moratorium is being respected. All fishing were confined in Division 3L. According to NCEM Art. 9.7, no vessel shall fish at the depth less than 200 meters. Figure 5 confirms that shrimp vessels complied with this regulation. Majority of fishing took place at depths 200-400m.

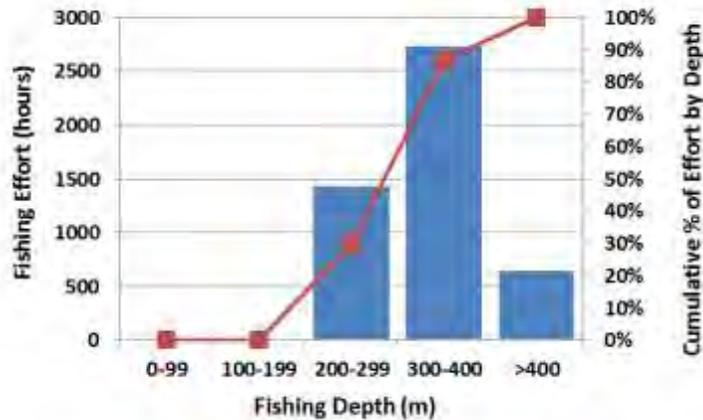


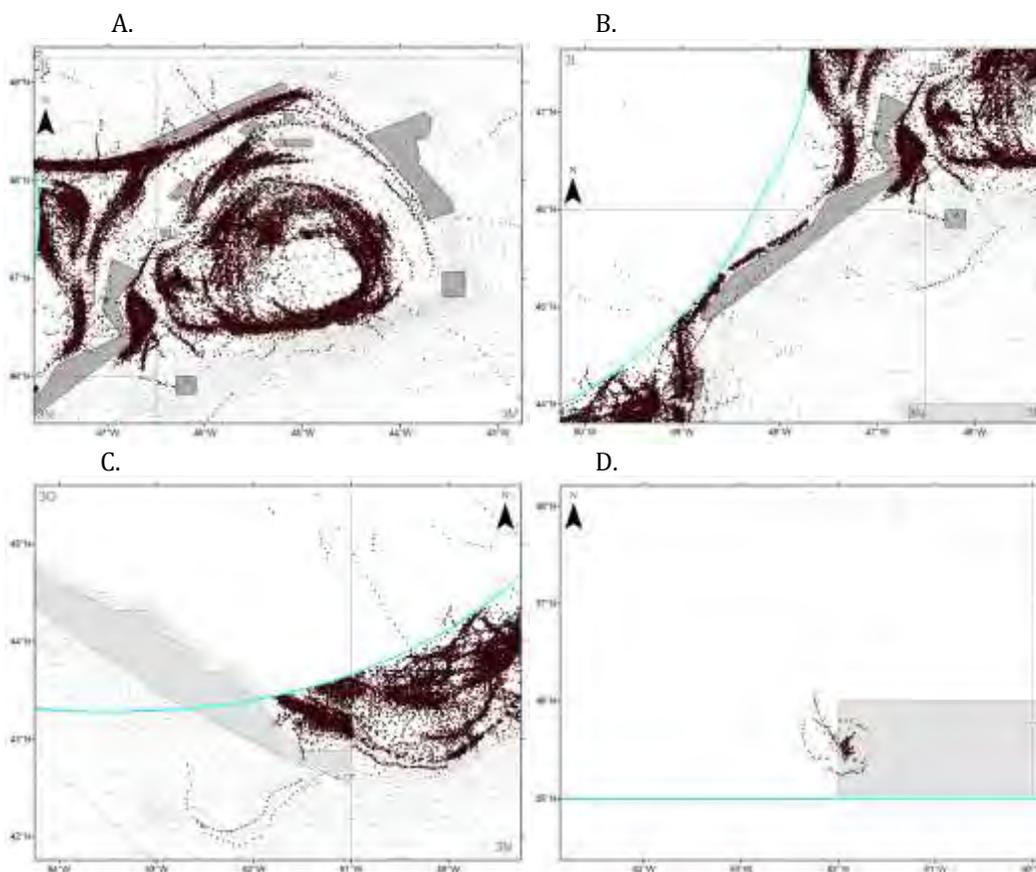
Figure 5. Distribution of shrimp fishing effort by depth in the NRA in 2013.

**Closed areas and Exploratory Fisheries**

Since 2007, in total 19 areas in NAFO have been closed to bottom fishing including 12 significant coral and sponge areas, one coral protection zone and six seamounts. The conservation and enforcement measures concerning the protection of the VMEs are stipulated in Chapter II of the NCEM.



An examination of the VMS position reports revealed that the closed areas were respected (Fig. 6). Fishing activities were confined within the footprint, except for one vessel which fished in Division 6G (in the environs of the closed Corner Seamounts) for a total of 17 days in February and March 2013 (Fig. 6.D). According to the observer report of this fishing trip in Division 6G, the fishing gear that was used was a mid-water trawl. The main species caught was the unregulated splendid alfonsinos. With the use of non-bottom fishing gear, NCEM Chapter II provisions (more specifically relating to Exploratory Fisheries) would not apply. Possible management measures concerning fishing stocks associated with seamounts are currently under discussions at the Joint FC-SC Working Group on Ecosystem Approach Framework to Fisheries Management.



**Figure 6.** VMS position plots of all vessels in the NAFO Regulatory Area in 2013 in relation to the VME closed areas and Corner Seamount. A: Flemish Cap, B: Flemish Pass, C: Division 30 Coral Zone, D: Corner Seamount

### **Catch reporting on sharks**

Fishing for the purpose of collecting shark fins is prohibited under NCEM Art. 12. Sharks species taken in NAFO fisheries are not associated with shark finning practices, and there has never been an incident of shark finning observed in the NRA.

It has been noted that there has been a lack of species-specific reporting of shark catches in the NRA. In this regard, it became a requirement in 2012 to report, the extent possible, all shark catches at the species level (NCEM Art. 28.2.g).

All 2013 CAT reports were examined. Not all sharks catches were reported to the species levels. 70% of all shark catches were reported as dogfishes (Table 4). It is not known how many species of shark were lumped into DGX.

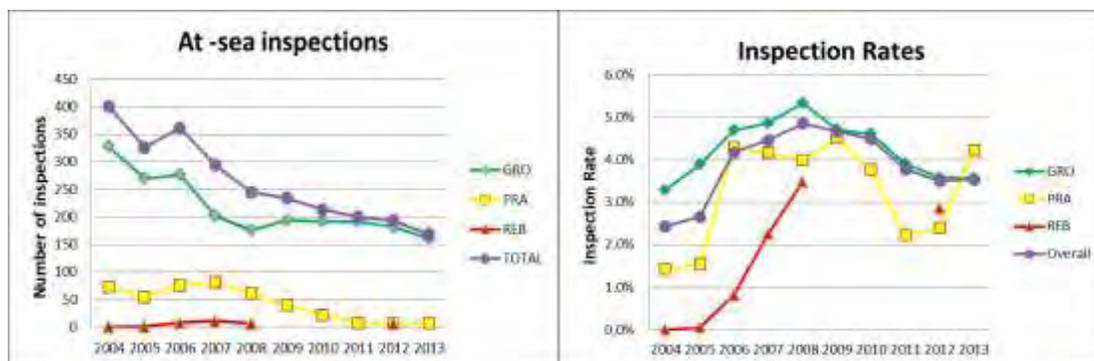
**Table 4.** Amount of shark catches (in tons) as reported in CATs.

FAO 3-Alpha Code	English name	Reported catches in 2013 (from CATs)	Percentage
DGX	DOGFISHES (NS)	63.5	69.97%
GSK	GREENLAND SHARKS	22.2	24.48%
POR	PORBEAGLE	3.6	4.00%
SMA	SHORTFIN MAKO	1.4	1.54%

### At-sea inspections

The NAFO Joint Inspection and Surveillance Scheme is implemented to ensure management and enforcement measures are complied with by fishing vessels fishing in the NRA. Inspectors are appointed by Contracting Parties and assigned to fishery patrol vessels tasked to carry out NAFO inspection duties at sea (Chapter VI of NCEM).

The total number of at-sea inspections dropped from 193 in 2012 to 169 in 2013. With the decrease of total fishing effort (from 5510 days in 2012 to 4779 days in 2013), inspection rate (number of inspections/fishing effort) remained steady at 3.5% (Fig.7).



**Figure 7.** Number of At-Sea Inspections and Inspection rates (number of at-sea inspection/vessel-days) in the NAFO Regulatory Area by fishery type.

### Port inspections

Prior to 2009, port State Contracting Parties were required to conduct port inspections on *all* vessels landing or transshipping fish species from the NRA, i.e. 100% coverage. Since the adoption of the Port State Control measures in 2009, the 100% coverage has been maintained for vessels landing NAFO species under recovery plans, in particular Greenland halibut. When landing catch species not under recovery plans, port inspections are not required if the vessel flag State Contracting Party and the port State Contracting Party are the same; if the flag State and the port State are different, the latter is required to conduct port inspections only 15 % of the total fish landing port of call in a year.

Traditionally, port inspections also serve to confirm AIs that were detected by at-sea inspections. In some occasions port inspectors issue citations of AIs to vessels, which were not detected by the at-sea inspectors. In 2013, 98 port inspection reports were received by the Secretariat, 89 of which were associated with groundfish (e.g. Greenland halibut and Atlantic cod) landings.

***Apparent infringements***

Each citation issued by at-sea or port inspectors can list one or more apparent infringements (AI). NCEM Art. 38 lists fifteen kinds AI's considered serious. In 2013, sixteen vessels were issued with apparent infringement/s either at sea or at port. There were twenty nine AIs issued, The nature of the AIs ranges from expired capacity plans (considered non-serious) to evidence tampering (considered serious). Inspectors determine during the time of inspection whether the AI is considered non-serious or serious.

In cases of at-sea inspections, there were only two types of AI issued, concerning: move-away requirements when bycatch thresholds are reached, and retaining 3M redfish after 100%-TAC-uptake notification. The year 2013 saw the least number of distinct AIs detected at sea (two). In cases of port inspections, there were seven different types of AIs ranging from the non-serious AI involving expired capacity plans to a serious AI of breaking or tampering of seals. Table 5 give details of the AIs issued at-sea and at ports in 2013 (See Section 5 for follow-up actions and disposition of the AI cases).

**Table 5. Details of Apparent Infringements (AI) detected in 2013 by at-sea inspectors and port authorities.***AIs detected at sea*

Vessel Code	CP	FS	Inspecting CP	Inspection Date	Division in NRA or Port Location	Directed Fish. (according to COE)	Apparent Infringement	Serious AI? As considered by inspectors	Article (2013 NCEM)	Disposition/Followup/update as of May2014, as reported by flag State Contracting Party
10	EU	ESP	CAN	04-Mar-13	3N	GHL	Failure to maintain 10 nmiles from previous tow after exceeding allowable bycatch in previous tow	No	Art. 6.2.a	Case pending
7	EU	ESP	CAN	30-Jul-13	3M	SKA	3M Redfish retained after 100%-uptake notification	No	Art. 5.2.b	Case pending
4	EU	PRT	CAN	31-Jul-13	3M	COD, GHL	3M Redfish retained after 100%-uptake notification	No	Art. 5.2.b	No prosecution. Vessels were not notified in due time of area closure
13	EU	EST	CAN	01-Aug-13	3M	RED, COD	3M Redfish retained after 100%-uptake notification	No	Art. 5.2.b	National proceedings initiated and case pending.
14	RUS	RUS	CAN	01-Aug-13	3L	RED	3M Redfish retained after 100%-uptake notification	No	Art. 5.2.b	Decided not to prosecute the master due to timeliness of the closure notification.
15	RUS	RUS	CAN	02-Aug-13	3M	RED, SKA	3M Redfish retained after 100%-uptake notification	No	Art. 5.2.b	Decided not to prosecute the master due to timeliness of the closure notification.
5	EU	PRT	CAN	02-Aug-13	3L	COD, RED	3M Redfish retained after 100%-uptake notification	No	Art. 5.2.b	No prosecution. Vessels were not notified in due time of area closure
1	EU	PRT	CAN	04-Aug-13	3L	RED	3M Redfish retained after 100%-uptake notification	No	Art. 5.2.b	No prosecution. Vessels were not notified in due time of area closure.
11	EU	ESP	CAN	04-Aug-13	3M	COD	3M Redfish retained after 100%-uptake notification	No	Art. 5.2.b	Case pending
9	EU	ESP	CAN	07-Aug-13	3L	GHL, SKA	3M Redfish retained after 100%-uptake notification	No	Art. 5.2.b	Case pending
3	EU	PRT	CAN	10-Aug-13	3L	RED, GHL	3M Redfish retained after 100%-uptake notification	No	Art. 5.2.b	No prosecution. Vessels were not notified in due time of area closure
2	EU	PRT	CAN	19-Aug-13	3O	RED, COD	3M Redfish retained after 100%-uptake notification	No	Art. 5.2.b	No prosecution. Vessels were not notified in due time of area closure.
12	EU	EST	CAN	21-Aug-13	3N	GHL, RED	3M Redfish retained after 100%-uptake notification	No	Art. 5.2.b	No prosecution. Vessels were not notified in due time of area closure.

*AIs detected at ports*

CallSign	CP	FS	Inspecting CP	Inspection Date	Division in NRA or Port Location	Directed Fish. (according to COE)	Apparent Infringement	Serious AI? As considered by inspectors	Article (2013 NCEM)	Disposition/Followup/update as of May2014, as reported by flag State Contracting Party
13	EU	EST	EU	14-Nov-13	Cangas do Morrazo	COD	Incomplete labelling of PLA and YEL	No	Art. 27	to be clarified
8	EU	ESP	EU	12-Feb-13	Vigo	SKA	Product labelling	No	Art. 27	to be clarified
8	EU	ESP	EU	12-Feb-13	Vigo	SKA	Capacity Plans	No	Art. 25.9	to be clarified
8	EU	ESP	EU	12-Feb-13	Vigo	SKA	Bycatch	No	Art. 6.2.a	to be clarified
16	DFG	FRO	EU	19-Mar-13	Vigo	GHL, RED	Product labelling	No	Art. 27	to be clarified
16	DFG	FRO	EU	19-Mar-13	Vigo	GHL, RED	Catch recording	No	Art. 28	to be clarified
13	EU	EST	EU	15-Apr-13	Cangas-Galicia	COD, RED	Capacity Plans	No	Art. 25.11	to be clarified
8	EU	ESP	EU	02-Jul-13	Vigo	GHL	Capacity Plans	No	Art. 25.10.b	to be clarified
1	EU	PRT	EU	12-Apr-13	Cangas do Morrazo	RED	Mis-recording	?	Art. 28.1, 38.1	to be clarified
1	EU	PRT	EU	12-Apr-13	Cangas do Morrazo	RED	Product labelling	No	Art. 27.1	to be clarified
1	EU	PRT	EU	12-Apr-13	Cangas do Morrazo	RED	Tampering of seals	?	Art. 38.1.n	to be clarified
6	EU	ESP	EU	16-Jul-13	Rande-Galicia	GHL	Misrecording of catches	?	Art. 38.1.i	to be clarified
6	EU	ESP	EU	16-Jul-13	Rande-Galicia	GHL	Obstructing inspectors	?	Art. 38.1.l	to be clarified
6	EU	ESP	EU	16-Jul-13	Rande-Galicia	GHL	Falsified documents	?	Art. 38.1.o	to be clarified
6	EU	ESP	EU	16-Jul-13	Rande-Galicia	GHL	Product labelling	No	Art. 27.1.b	to be clarified
6	EU	ESP	EU	16-Jul-13	Rande-Galicia	GHL	Capacity Plans	No	Art. 25.10.b	to be clarified

In Fig. 8, the composite list of AIs and the frequency of the cases since 2004 are shown. The black and the blue dots represent AIs issued by at-sea inspectors and port authorities, respectively. Product mis-labelling, expired vessel capacity plans, and mis-recording of catches are the most frequent AI. Three kinds of AI were issued for the first time in 2013: Bycatch: move-away requirement (NCEM Art. 6.2.a); bycatch: retention of 3M redfish after 100%-TAC-uptake notification (NCEM Art. 5.2.b), and falsification of documents (NCEM Art. 38.1.o). Regarding the retention of 3M Redfish after 100 % notification, causes were identified and actions were initiated to avoid repetition of this type of infringement.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Greenland halibut measures				•					•	
Mis-recording of catches -stowage		•••••	••••••	•••••	••	•••••	•	•••••	•	
Product labelling	•	•••	••••••••	•••••	••	••		•	•••••	••••••
Vessel requirements - capacity plans	•••	••	•	••••••	•••	•••••	••	•	•••	•••••
Bycatch - move-away										•
Bycatch - retaining 3m Redfish										••••••• ••••••
By-catch requirements	••••	•••••	•••••	••••	•	•		•		•
Catch communication violations			•	••••						
Fishing without authorization	••	•								
Gear requirements - illegal attachments	•	•••	•••••	••			•			
Gear requirements - mesh size	••••••	•••••	•			•	•	•		
Inspection protocol	••	•••••	•			•••			•	•
Mis-recording of catches - inaccurate recording	•••••••	•••••••	••••••• ••••	••••••• ••••••• •••••	••	•••	••		••	•••
Observer requirements	•	•								
Quota requirements	•		•						••	
VMS requirements	••	•							•	
Falsification of documents										•
Evidence tampering									•	•

**Figure 8.** Frequency of AI cases detected by NAFO at-sea and port inspectors in 2004 -2013(black and blue dots represent AIs issued at sea and at port, respectively).

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

The NCEM obliges vessels and Contracting Parties to provide reports on their activity within a determined time frame. The completeness and regular delivery of those reports in time are of key importance to evaluating overall compliance. In evaluating the completeness, reports were examined to determine which fishing trips were covered by the reports. Each fishing trip must have VTI and Observers reports; vessels landing Greenland halibut must have port inspection reports. The percentage coverage is computed as a ratio of fishing days accounted for by the reports and total fishing days effort in the NRA. Less than 100% coverage suggests that there were missing reports that should have been received by the Secretariat.

##### ***Vessel Transmitted Information (VTI) – Catch-on-Entry (COE), Catch-on Exit (COX), Daily catch reports (CAT)***

The FMCs of flag States are responsible in transmitting the VTI reports to the Secretariat (see also section *Activity and catch reporting* above). The COE and COX are transmitted signifying the start and end of a fishing trip. A 100% coverage would mean that all expected COEs are paired up with all expected COXs. A trip with a missing COE or COX would not account for the number of days of a fishing trip in the NRA.

In Table 6, the number of COE, COX, and CAT, as well as of the fishing trips and fishing effort-day in the NRA, is presented. Ideally, the number of COE and COX should correspond to the number of fishing trips. The higher-than-expected numbers suggest that duplicates and erroneous reports are occasionally sent. The VMS-VTI system features a cancel report (CAN) which allow vessels and FMCs to withdraw or correct previously sent VTI report but this feature is not widely used. Nonetheless, all identified fishing trips had the corresponding COE and COX report, representing a 100% coverage (see also Fig. 9).

**Table 6.** *Fishing effort and VTI statistics in the NRA, 2013.*

Number of fishing trips identified	160
Days Present in the Regulatory Area	4779
Number of Daily Catch Reports (CATs)	5248
Number of Catch on Entry Reports (COEs)	205
Number of Catch on Exit Reports (COXs)	196

5248 CATs were received, more than the total effort of 4779 vessel days. This indicates that vessels which fished in two or more Divisions in a day transmitted multiple reports, consistent with the requirement that fishing vessels shall report daily their catches by species and by Divisions. The CAT reports have proven to be useful in monitoring quota uptakes of the Contracting Parties.

#### **Port inspection reports**

When vessels land their catches, the port inspectors report on the quantity of catches as well as the fishing trip details. However, the port inspection is not mandatory for all landings from NAFO fisheries (see *Port Inspections*).

In evaluating the compliance of port State authorities in conducting inspections, only trips with Greenland halibut onboard were considered. The identification of these trips was done by examining COX reports. Of the 160 fishing trips identified, COXs of 71 fishing trips indicated Greenland halibut on board. Of the 71 fishing trips (3465 days effort), 57 (2855 days effort) have corresponding port inspection reports --- an 82% coverage (see Fig. 9).

#### **Observer reports**

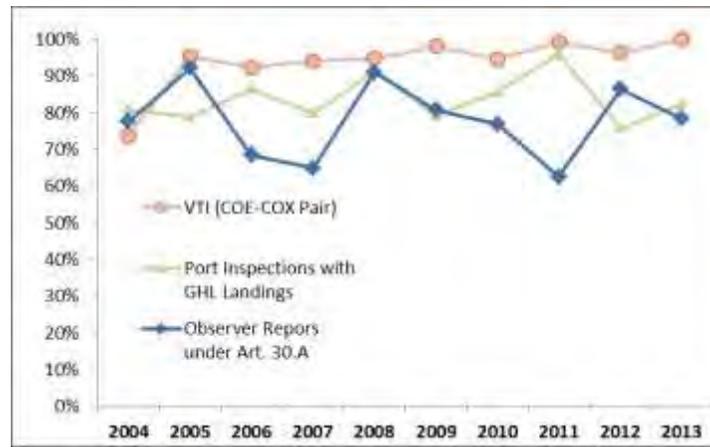
Under the "traditional" scheme, vessels are required to have an independent observer on board at all times (i.e. 100% coverage) in every fishing trip (NCEM Art. 30.A). Observers in this scheme" are committed to deliver within 30 days after their assignment period their observer report, which contains information on date of fishing trip as well as catch and effort.

Since 2007, Contracting Parties have the option of the electronic reporting scheme. Under this "electronic" scheme, CPs may allow their vessels in a single year to have observers onboard at least 25% of the time the vessels are on a fishing trip (NCEM Art. 30.B). CPs must give prior notification to the Secretariat which vessels participate in the electronic scheme. Observers under this scheme are required to report daily the catches and discards (OBR) while the fishing master transmits the daily catch reports (CAT) every trip. The CAT and OBR reports are transmitted through the same technology and communication channels as the VMS. In 2013, sixteen vessels participated under this scheme.

In evaluating compliance of observer reports submission, only reports from vessels under the "traditional" scheme were considered. As in the port inspection reports, percentage coverage was computed as the ratio of the fishing days accounted for by the observers and the total fishing days (of the trips under this scheme) in the NRA. In 2013, the percentage was 78%, i.e. only 3 489 out of 4 456 days were covered by observer reports (Fig. 9).

Catch information in observer reports may be crosschecked with other data sources (e.g. port inspection reports and CATs). According to NCEM Art. 30.A.2.c, the observers shall record, among others, the catch,

effort, and discard information *for each haul*. The Secretariat has noted that not all observers' reports contain the required information on catch and effort on a haul by haul basis. Out of 94 observer reports received, only 12 coming from three flag States contained detailed haul-by-haul catch information. The rest provided only trip summaries of the catch.



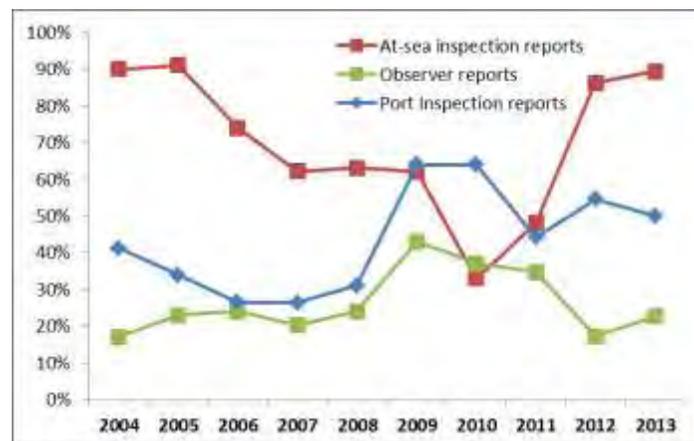
**Figure 9.** Percentage coverage of fishing effort by VTI (COE-COX Pairs), Port Inspection and Observer Reports as a measure of compliance to report submission requirements.

#### **Timeliness of submission of reports**

The timeliness of reports submitted to the NAFO Secretariat is an important issue. VMS messages are required to be provided every hour; haul messages at each entry and exit from the NRA as well catch reports on a daily basis (VTI); observers and at-sea inspection reports are expected to be submitted within 30 days and port inspection reports (PSC3 forms) should be sent to the Executive Secretary “without delay.” For the purpose of timeliness analysis, PSC 3 forms, as well as at-sea inspection reports received more than 30 days after the date of inspection were considered late. VMS and VTI messages were not included in the timeliness analysis as they are received practically in real time through satellite technology.

Figure 10 shows the timeliness of submission of at sea inspection, observer and port inspection reports. Less than half of the number of observer reports was received on time (23%). Timeliness in the submission of at-sea and port inspection reports was 89% and 50%, respectively.

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



**Figure 10.** Timeliness of submission of reports.

## 5. Follow-up to infringements

NCEM Art. 39 spells out obligations of a flag State Contracting Party that has been notified of an infringement. It includes taking immediate judicial or administrative action in conformity with its national legislation and ensuring that sanctions applicable in respect of infringements are adequate in severity. In 2013, thirteen (13) individual citations with a single AI each were issued by at-sea inspectors – twelve of each concerning retaining of 3M redfish after the 100% TAC uptake notification, and another one concerning move-away provision when bycatch thresholds are reached in a tow. At port, sixteen AIs were detected involving eight vessels. The nature of the AI range from a non-serious case of expired capacity plans to a serious AI of obstructing inspectors (See Table 5 for details).

In compliance with NCEM Art. 40, 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. During the review of the follow-up actions by CPs at the STACTIC Intersessional Meeting in May 2014, procedural questions arose with regards to dealing with AIs issued at ports. For example, some port AI citations might have been a violation of domestic port measures rather than an infringement of the NAFO regulations. It was agreed that this will be clarified on a later date by the CP concerned. In Table 7, a summary of the status of AI cases in the last five years and their resolution. Pending clarification on follow-up of AIs detected at ports, the statistics for the year 2013 includes only AIs detected at sea. With regards to the resolved cases in 2013 (which all involved 3M Redfish retention after the closure of the fisheries notified by the Secretariat), the CPs concerned determined that no prosecution would proceed as it was determined that the vessels did not received the closure notification in due time.

**Table 7.** *Legal resolution of citations against vessels fishing in the NAFO Regulatory Area by year in which the citations were issued (as of August 2013). A citation is an inspection report (from at-sea or port inspectors) that lists one or more infringements. Inspections carried out for confirming a previous citation are not included. For year 2013, only citations at sea are included pending procedural clarifications regarding citations issued by port authorities.*

Year	Number of Reports with AI Citation/s	Resolved cases		Pending cases
		Number	%	
2009	13	10	77%	3
2010	7	7	100%	0
2011	8	8	100%	0
2012	11	9	82%	2
2013	13	8	62%	5
<b>Total</b>	<b>52</b>	<b>42</b>	<b>81%</b>	

## 6. Trends, Conclusions and Recommendations

### General Trends

- Although fishing effort has steadily declined since 2004 it has stabilized at 5000 days in the NRA. Overall fishing effort declined by 13.3% in 2013 compared to the previous year. Fishing days in the NRA fell from 5510 days in 2012 to 4779 days in 2013. In contrast the number of vessels has increased by 12.3% from 57 vessels in vessel in 2012 to 64 vessels in 2013. Longline vessels fishing in the NRA have increased and have accounted for 5.2% of Groundfish operations in 2013. It can be concluded that changes in fishing activity has reduced average duration of fishing trips to the NRA
- In the 3L shrimp fishery, although 2013 saw 7 vessels operating in the fishery in 2013, an increase from 5 vessels in 2012, the overall fishing effort has reduced a further 24% from 250 days in 2012 to 190 days in 2013.
- The re-emergence of fishing effort for the Pelagic Redfish Fishery (REB) observed in 2012 has continued but on a reduced scale. Vessel numbers operating in this fishery declined by 50%, with t 4 vessels

fishing in 2013 compared to 8 in 2012, and furthermore effort has been reduced by 62%, down from 210 days in 2012 to 79 days in 2013

- Observer Reports are consistently untimely and missing critical information. In 2013, only 23% of observer reports were submitted on time, a rate that has been fairly consistent for a decade. Additionally, out of 94 observer reports received, only 12 contained detailed haul-by-haul catch information. The remainder provided only trip summaries of the catch. Catch and effort on a haul by haul basis is required. Since flag State Contracting Parties are responsible for forwarding observer reports to the Secretariat, they should ensure that they are complete, consistent with Article 30, and submitted in a timely manner. The improvements made in 2014 to the observer reporting requirements should increase compliance.
- No analysis is available to determine the observer coverage rate or compliance with the OBR reporting requirements for Contracting Parties employing the electronic reporting protocol under Article 30.B. Additional analysis is necessary to ensure that Contracting Parties are complying with minimum observer coverage levels and submitting the required reports.

***Additional data elements compiled provided the following information and recommendations for compliance review:***

- Based on VMS reports for 2013, closed areas are being respected.
- Based on VTI reports for 2013, 3M redfish exceeded the TAC of 6500t by 16%. Notifications were circulated to CPs when total accumulated catch reached 95% and again at 103%. Directed fishing continued for a few days following notification at 103%. The overage was directly related to a delay in notifications to vessels. Contracting Parties should inform the Secretariat if 5 days is insufficient to inform its vessels of a closure.
- Based on VMS and VTI, the 3M shrimp fishery moratorium is being respected
- Based on water depth, 3L shrimp fishing effort continues to comply with a ban of fishing in depths less than 200m.
- Based on CAT reports the total catches reported by regulated and non regulated species can be used to identify fishing trends.
- Analysis of groundfish activity by water depth has indicated a significant increase of fishing activity in depths < 200metres and a decrease in depths > 700 metres as compared with 2012 figures. This is consistent with increased effort in 3M Cod, 3M redfish, and a reduced effort for deep water species such as Greenland halibut.
- There has been a slight increase in effort distribution in the shallower depths. In 2012 50% of fishing effort was conducted in depths below 700 metres and in 2013 50% of fishing effort was conducted in depths below 400 metres. This suggests an increase in the targeting of species found in shallower waters such as skates, cod and redfish despite there being no increase in quota for these species. ( 3M cod increased TAC)
- Reporting of shark captures by species has been achieved since it became a requirement in 2012 and the quantities of shark captures remain insignificant. However 70% of all shark catches were reported as dogfishes, a general description that should be more specific. Contracting Parties should explore ways to improve species identification of shark species, as required in the CEM.
- Table 2 of the Compliance Review indicates that catch for both regulated and unregulated species were reported without an associated NAFO division in daily catch (CAT) reports submitted by vessel masters. Contracting Parties should ensure that vessel masters are accurately reporting catch of each species by NAFO division in their daily CAT reports.

***Inspections and Apparent Infringements***

- The number of sea inspections has declined from 193 in 2012 to 169 in 2013. This decline was related to factors such as decreased fishing effort in the NRA. The inspection rate has remained steady at 3.5% compared with 3.3% in 2012.
- In 2013, 98 port inspection reports were received by the secretariat, 89 of which were associated with landings of groundfish species. Port inspections remain high due to the species subject to 100 percent inspection coverage such as the Greenland halibut rebuilding plan. However, based on available data it

appears that 100 percent requirement is not being met. This will require additional investigation. CPs should strive to increase inspections for vessels landing Greenland halibut from the current rate of 82% (57 of 71 trips).

- No analysis is available regarding the landings referred in Article 43.10. Additional analysis is needed to determine if the minimum 15% port inspections on such trips is being achieved.
- Only two types of AI were detected at sea in 2013, and out of a total of 13 AI's 12 were associated with retaining 3M redfish after closure and 1 with the bycatch move away rule.
- Detection rate of AI's in port has increased markedly. Seven types of AI were detected in port in 2013 with a total of 16 and more than 50% of these AI's were associated with product labelling and capacity plans. This is large increase compared with 2012 which saw six types of AI's with a total of 6 cases. Prior to 2012 the last AI detected in port was in 2009.
- Contracting Parties have an obligation to resolve reported AIs. Recent resolution has been satisfactory, but there are still pending cases with no additional detail provided on their status.

**Annex 35. To Establish a Working Group of Interested Contracting Parties  
to Review the NAFO Observer Scheme and make recommendations to STACTIC  
for Improvements**

(STACTIC Working Paper 14/33 **now** FC Doc. 14/23)

**Preamble**

This proposal calls for the establishment of a Working Group of STACTIC members to undertake a review of the Observer Scheme in the NAFO Regulatory Area and make recommendations to STACTIC for improvements to the program.

**Background**

The NAFO observer program was originally part of the program for Observers and Satellite Tracking which was launched in 1996 and has subsequently been modified to occupy a distinct chapter in the NAFO measures that describes the program and incorporate some harmonized reporting templates to seek some consistency in its application.

Proposals for modifications to the program are frequently tabled at STACTIC to help to standardize data collection and provide clarity on the role of observers. However, after almost 20 years of operation, the program is still unable to produce credible data for use by NAFO scientists and managers to make decisions on stock status, conservation measures and harvest levels. Notwithstanding this, the program still represents the best opportunity to acquire independent data on fishing activities in the Regulatory Area.

**Proposal**

It is therefore proposed that a Working Group of interested Contracting Parties be established to review the Observer Scheme and report to STACTIC on its findings, providing recommendations for potential improvements to the program.

Terms of reference for the review should include all aspects of the scheme as described in Chapter V of the NCEMs, propose language to clarify the objectives of the program, identify the strengths and weaknesses of the existing program, and propose suggestions /options to enhance the observer scheme to maximize the benefit it provides to NAFO.

**Annex 36. Terms of Reference Ad Hoc Working Group on  
Port State Control Alignment (AHWGPsCA)**  
(STACTIC Working Paper 14/35 now FC Doc. 14/24)

Structure:

The Ad Hoc Working Group on Port State Control Alignment (AHWGPsCA) is understood to report directly to STACTIC, and its Chair. The group will take its direction from, report and make recommendations to, STACTIC

The Working Group shall be comprised of a core of Editorial Drafting Group (EDG) members, augmented by interested Contracting Party representatives, in sufficient number to be effective, and capable of contemplating the broad interests of NAFO, while remaining small enough to remain efficient.

The AHWGPsCA will appoint a Chair from its membership, who will act as the group's representative and be responsible to preside over meetings/activities and provide updates to STACTIC.

Objective:

Compare the provisions and spirit of the *FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing – 2012* with the current NAFO Port State Control Measures (Chapter VII) and propose recommendations to STACTIC as necessary to align the NAFO Conservation and Enforcement Measures (CEM's) with the FAO Agreement.

Duties

The AHWGPsCA's will:

- Compare the NAFO Port State Control provisions against those of the FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing – 2012;
- Review the amendments made to the NEAFC Scheme of Control and Enforcement (Rec 09 2014: Alignment of NEAFC Scheme with FAO Port State Measures Agreement);
- Identify amendments to the existing NAFO Port State Control scheme necessary to align with the FAO Agreement on Port State Agreement and ensure continued consistency with the NEAFC Port Control Scheme; and
- Make recommendations to STACTIC as appropriate.

Meetings:

Meetings may be held at the discretion of the group, Chair or at the request of STACTIC, in consultation with Contracting Parties and the NAFO Secretariat.

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

Reporting

The AHWGPsCA will issue a written report of its deliberations, and any accompanying recommendations, to STACTIC for consideration.

An oral update will also be provided during the intervening STACTIC intercessional and annual meetings.

### **Annex 37. Information Security and Management System (ISMS)**

(STACTIC Working Paper 14/22 now FC Doc. 14/34)

At the STACTIC Intersessional meeting in May 2014 the Secretariat was requested to look into the NEAFC application of an Information Security and Management System (ISMS) as it was technically evaluated by the Joint Advisory Committee on Data Management (JAGDM) and report back to STACTIC on its potential application to NAFO.

At the JAGDM meeting in June 2014 the Secretariat took this up with the participants under agenda item 6.a and it was agreed that the Interim Chair would write a letter, with input from the participants, for the NAFO Secretariat to present to STACTIC in September on why NAFO may need an ISMS. This letter is attached. In her letter, the Interim Chair advises that NAFO proceed with developing an ISMS.

If STACTIC decides that NAFO should follow this advice, it is important to determine guidelines for the work. The ISMS of NEAFC is in line with the ISO 27001:2005, the current version of this standard is ISO 27001:2013. It is important to know if NAFO will start the work in line with the ISO 27001:2013, follow another standard or not follow any standard. The Interim Chair conveyed to the Secretariat the availability of JAGDM to assist in this preliminary determination. If needed a specialised meeting within JAGDM could take place in 2015 to exclusively address developing a possible NAFO ISMS.

If STACTIC decides that NAFO should consider an ISMS, it would also be useful to get a picture of how NAFO's current information technology (IT) system compares with best practices. The Secretariat suggests that this could be addressed by an external audit of NAFO's current IT-system.

The Secretariat thereby suggests that:

1. STACTIC approve in principle that NAFO consider the implementation of an ISMS.
2. STACTIC request the assistance of JAGDM to determine guidelines for any ISMS;
3. The Secretariat consider an external audit of NAFO's current IT-system; and
4. The issue of a NAFO ISMS be an item on the next STACTIC agenda.

To the NAFO Secretariat

Bergen 22 August 2014

From JAGDM

At its June 2014 meeting, JAGDM was asked to give advice to the NAFO Secretariat concerning why NAFO needs an Information Security Management System (ISMS).

When the IT-system of NAFO first was developed many years ago, security and confidentiality aspects were addressed by an annex in the CEM. This covered the needs at that time. However, the handling of IT-information in NAFO is no longer limited to sending data between Contracting Parties and the NAFO Secretariat using secure lines and storing data in the computer at the office of the Secretariat.

Moreover, the NAFO website raises further concerns. People with several needs and wishes may want to access and have information presented on the website, and in some cases may also want to input data into the system.

Without an overview and some formalization of the total information handling within NAFO, it is not possible for the Contracting Parties to know what the security and confidentiality policy of the organization is. Currently the NAFO Secretariat has followed its own policies without any guidelines, other than the Annex II.B of the CEM. Although the NAFO Secretariat tries to follow industry standards, it is not clear whether these standards would be acceptable to all Contracting Parties, particularly those that might have different standards in their own countries. This raises risks that certain confidential data may be accessed incorrectly and the organization get negative reactions.

NAFO does not need to have an ISMS in line with a standard such as NEAFC has done. However if NAFO is going to have an overview and formalize its information security it is beneficial if it is done in line with a standard, specially taking into consideration that NAFO has many Contracting parties that might have very different systems in their own countries.

Data stored on the NAFO IT-system largely contains copies of data also stored by the Contracting Parties so new copies of data could be submitted if ever needed. However the Port State data is different. The only copy of this data is only stored on the Secretariat's servers.

In a modern IT-world it is very important to be sure that one has a system that is secure enough to give the organization the decided level of business continuity.

Data has to be classified correctly and from that handled according to the risks identified.

Having an ISMS will not necessarily give the organization a higher or lower level of security, but it makes it possible for the Contracting Parties to know what the status is and from that decide if changes are needed. There will be guidelines for many situations that are meant to help the employees to take the correct decisions.

Preparing the ISMS for NEAFC has been a lot of work and if NAFO is planning an ISMS there has to be people in the Secretariat doing the information-finding job. It is important that one starts with an assessment of the current situation.

If NAFO wishes to use an international standard we recommend that NAFO follow the same ISO standard as NEAFC uses. This will help harmonization between the two organizations. If so NAFO should most likely use the latest ISO 27001:2013 standard that NEAFC will be updating their ISMS to presently.

Best regards

For JAGDM

Ellen E. Fasmer

Interim chair

## **Annex 38. Proposal to require the use of the IMO numbering scheme for NAFO vessels**

(FC WP 14/13 Revised **now** FC Doc. 14/09)

### **Explanatory Memorandum:**

Unique vessel identifiers (UVIs) are useful to quickly and accurately identify vessels and trace and verify their activity over time, irrespective of change of name, ownership, or flag. For that reason, there is a wide recognition that UVIs can be useful in helping combat illegal, unreported, and unregulated (IUU) fishing (e.g., see <http://www.fao.org/fishery/topic/166301/en>).

There is broad recognition that perhaps the most effective approach to expanding the use of UVIs into the fishery sector is to build on the well-established IMO Ship Identification Number Scheme (<http://www.imo.org/ourwork/safety/implementation/pages/imo-identification-number-scheme.aspx>), operated by IHS-Maritime (IHS-M). Under the International Convention for the Safety of Life at Sea (SOLAS), UVIs, in the form of IMO numbers, are required for all merchant vessels 300 gross tons (GT) or above and all passenger vessels 100 GT and larger, but vessels solely engaged in fishing are exempt from the requirement, and until recently such vessels were excluded from the IMO numbering scheme altogether. However, in an effort to enable and encourage the use of IMO numbers as UVIs on fishing vessels, in December 2013 the IMO adopted Resolution A.1078(28) specifically to amend the IMO Ship Identification Number Scheme to remove its exclusion of fishing vessels, making it available to fishing vessels at least 100 GT/GRT in size. IHS-M estimates they have issued numbers to more than 23,000 fishing and related vessels globally. Of the 195 NAFO authorized vessels for 2014, only 4 vessels were under 100GT/GRT.

Currently, NAFO does not require vessels to obtain IMO numbers, although the CEM mandates reporting vessels' IMO numbers, if available, under several vessel register forms. Requiring NAFO vessels to obtain an IMO number would enhance NAFO's strong counter-IUU management regime and support effective fisheries management.

Various other RFMOs, including CCAMLR, ICCAT, IATTC, SPRFMO and WCPFC, have recently adopted new or strengthened existing regulations to require that eligible vessels obtain an IMO number or a number in the seven-digit numbering sequence allocated by IHS (which have been referred to as Lloyds Register or LR numbers). Furthermore, IMO numbers for fishing vessels has been identified as essential element to the success of the Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Global Record), an FAO initiative to improve transparency in the fisheries sector. While participation in the FAO Global Record is voluntary, many NAFO members have noted the importance of such a tool in improving fisheries management globally. Requiring that all NAFO eligible fishing vessels obtain IMO numbers will assist in the effective implementation of the Global Record.

*To that end, the United States and the European Union proposes the following, from January 1, 2016:*

Amend Chapter II, Article 25.2 "Notification of Fishing Vessels" to read:

No fishing vessel shall conduct fishing activities in the Regulatory Area unless:

- a. It is listed as a notified vessel; and
- b. Eligible vessels have been issued an IMO number.

*This would have consequential changes as follows:*

- In Article 1 "Definitions", add the following:

17. "IMO Number" means a 7-digit number, which is assigned by IHS-Maritime;

- In Chapter II, Article 25, paragraph 8, “Vessel Documents to be Carried on Board”, add a new sub-paragraph:

“c.bis. the IMO number”

- In Chapter II, Article 26, paragraph 7 amend sub-paragraph (a) to read:

“(a) the name, flag State registration, IMO number, and flag State of the vessel”

- In Annex I.E, amend chapter II to include a bullet point requiring reporting of the IMO number of the vessel
- In Annex II A, “Recording of Catch (Logbook Entries)”, under “Item of Information”, add a new sub-item:

“3.bis. IMO number”

- In Annex II.C “Vessel Notification and Authorization”, paragraph 1. “Format for register of vessels”, delete footnote 3 and under the section entitled “Vessel IMO Number”, amend the remarks to read “IMO number”, thereby deleting the phrase “in the absence of a side number”.
- Also in Annex II.C, paragraph 2 “Format for withdrawal of vessels from the register”, delete footnote 4 and under the section entitled “Vessel IMO Number”, amend the remarks to read “IMO number”, thereby deleting the phrase “in the absence of a side number”.
- Also in Annex II.C, paragraph 3 “Format for authorization to conduct fishing activities”, delete footnote 5 and under the section entitled “Vessel IMO Number”, amend the remarks to read “IMO number”, thereby deleting the phrase “in the absence of a side number”.
- Also in Annex II.C, paragraph 4 “Format to suspend the authorization to conduct fishing activities”, delete footnote 7 and under the section entitled “Vessel IMO Number”, amend the remarks to read “IMO number”, thereby deleting the phrase “in the absence of a side number”.

## PART II

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

#### 36th Annual Meeting of NAFO, 22-26 September 2014 Vigo, Spain

#### 1. Opening by the Chair, Gene Martin (USA)

The Chair opened the meeting at 14:30h on Monday, September 22, 2014 at Palacio de Congresos Mar de Vigo, Vigo, Spain. The Chair thanked the European Union for hosting the meeting and welcomed the representatives of the following Contracting Parties (CPs): Canada, Denmark (in respect of the Faroe Islands and Greenland), the European Union, France (in respect of Saint Pierre et Miquelon), Iceland, Japan, Norway, the Russian Federation and the United States (Annex 1).

#### 2. Appointment of Rapporteur

Brent Napier (Canada) was appointed Rapporteur.

#### 3. Adoption of Agenda

The following amendments were made to the agenda:

- The Chair added a presentation by International Monitoring, Control and Surveillance (IMCS) Network Executive Director (Harry Koster) as agenda item 12 a);
- The working paper “Terms of Reference Ad Hoc Working Group on Port State Control Alignment” (STACTIC WP 14/35) was included under agenda item 4;
- European Union working papers were included as follows:
  - Discussion paper regarding “Development of the NAFO MCS Website and Risk Based Analysis of Inspection Reports” (STACTIC WP 14/27) under agenda item 8;
  - “Observer Report – New Template for Annex II.M” (STACTIC WP 14/10 revised) as agenda item 10 b) (ii);
  - “Closure of the RED 3M “directed fishery” (STACTIC WP 14/26) as agenda item 10 j);
  - “Deletion of the by-catch limit liaised to quotas “others” (Article 6.2(c) and 6.3(d)) (STACTIC WP 14/24) under agenda item 10 h); and
  - “Clarity on calculation method to evaluate the by-catch limits in any one haul” (Article 6.6 of the NAFO CEM) (STACTIC WP 14/25) as agenda item 10 i).
- The United States working paper “Consistent Approach to Address Serious Infringements Detected At-Sea and In Port” (STACTIC WP 14/28) was added as agenda item 5 b);
- Norway’s working paper “The use of the two-letter code “DS” (Directed Species) in the NAFO Conservation and Enforcement Measures” (STACTIC WP 14/23), was included as agenda item 10 g);
- Canada’s working papers/items were added under the following agenda items:
  - “Provision of Haul by Haul Logbook Data to the Secretariat” (STACTIC WP 14/13 Rev) under agenda item 10 (d);
  - “Amendment to Article 14 of the NCEM” (STACTIC WP 14/29) for inclusion as agenda item 10 k);
  - “Shrimp in Division 3L (Article 9)” (STACTIC WP 14/30) for inclusion as agenda item 10 l);
  - To Establish a Working Group of Interested Contracting Parties to Review the NAFO Observer Scheme and make recommendations to STACTIC for Improvements” (STACTIC WP 14/33) for inclusion as agenda item 10 b) i);
  - “Notification to Inspecting Contracting Party Regarding Additional Procedures for Serious Infringements” (STACTIC WP 14/34) for inclusion as agenda item 10 m);
  - “Definitions and Clarifications of Data Elements” (STACTIC WP 14/31) for inclusion as agenda item 11 c);

- “Data Sharing Between NAFO and NEAFC” (STACTIC WP 14/32) for inclusion as agenda item 11 d); and
- Timing of JAGDM meetings for inclusion as agenda item 11 e).

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

#### **4. Port State Measures Review**

The Chair opened the agenda item and reminded representatives of the agreement, reached during the STACTIC Intersessional, to create a working group to align the NAFO Conservation and Enforcement Measures (NCEM) Port State Control Scheme (Chapter VII) with the FAO Port State Measures Agreement. To this end, a draft Terms of Reference (STACTIC WP 14/35) was presented. The Chair noted the importance of completing this task identified by the Performance Review Panel and opened the discussion. The elements contained within the paper, in particular working group membership, selection of a Chair and objectives were discussed.

DFG commented on the magnitude of the alignment exercise undertaken in NEAFC to address the issue and noted the need to allocate the necessary effort to complete the task in a timely fashion. The EU suggested that the work done in NEAFC could be used to expedite the process and suggested that a NEAFC member involved in this process draft a working paper on the revision of NCEM’s Chapter VII to facilitate the initial work of this group. DFG supported using the work for inspiration, however noted significant differences between the two schemes that would prevent a wholesale copy and paste from the NEAFC process.

**It was agreed:**

**to recommend for adoption STACTIC WP 14/35 to Fisheries Commission (FC) to create a working group with the view to facilitating the completion of the Port State Control alignment exercise in advance of the 2015 NAFO annual meeting**

**with the intent that a NEAFC member involved in this process would draft a working paper on the revision NCEM Chapter VII.**

#### **5. Compliance Review 2014 including review of reports of Apparent Infringements**

##### **a) Compliance Review 2014**

The Chair introduced STACTIC WP 14/17 drafted by the NAFO Secretariat (NS), and associated STACTIC WP 14/17addendum, drafted by the editorial drafting/compliance Working Group. The Addendum was drafted to set forth 2013 trends, conclusions and recommendations based on the Compliance Review.

CPs reviewed the draft compliance review (STACTIC WP 14/17) and the associated trends, conclusions and recommendations found in STACTIC WP 14/17addendum. Both documents were modified to reflect the discussion. As a result of the review, STACTIC requested that the NS assess the feasibility of conducting analysis to determine compliance with a number of elements of interest identified during discussions.

The NS presented STACTIC WP 14/16 REV, containing an updated compilation of 2013 fisheries reports, and STACTIC WP 14/21, a summary of at-sea inspection information. Both documents were reviewed as part of the compliance review process. Some minor edits were identified in STACTIC WP 14/21, which was revised accordingly.

Canada reiterated the importance of following-up on reported infringements to the integrity of the compliance scheme and urged CPs to continue to provide updates on outstanding Apparent Infringements, regardless of the elapsed time, until a final disposition is confirmed.

**It was agreed:**

**To recommend the Compliance Review (STACTIC WP 14/17 Rev) to FC for adoption; and**

**The NS would assess the feasibility of conducting analysis to determine compliance with the following, and report back at the 2015 STACTIC Intersessional:**

- **Observer coverage rates for CPs with vessels operating under Article 30B; and**
- **Inspection rates required pursuant to Article 43.10**

**b) Consistent Approach to Address Serious Infringements Detected At-Sea and In Port**

The Chair asked the US to present its proposal STACTIC WP 14/28 concerning Serious Infringements detected at-sea and in port. The US explained the working paper was developed to address editorial and procedural inconsistencies identified by the NAFO Secretariat (NS) during the 2013 compliance review discussions held at the 2014 NAFO Intersessional. The CPs discussed the elements of the paper and agreed to the merit of the proposal. The EU suggested that the Port State working group should reflect further on the structure, but supported the adoption of the paper in the interim.

**It was agreed to recommend STACTIC WP 14/28 to FC for adoption.**

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

The Chair observed that this was a standing item intended to provide Contracting Parties with the opportunity to share domestic practices and procedures. The Chair noted the NS had catalogued in paper form the current submissions which were summarized in STACTIC WP 14/18. Canada supported the concept and noted it will provide the NS with a copy of the Canadian Observer Training Manual and material related to Canadian Fishery Officer training program.

**The recent submissions, and existing inventory, were noted.**

**7. Review of current IUU list pursuant to NAFO CEM Article 54.3**

The Chair reminded CPs of their responsibility, in accordance with Article 54.3, to review the IUU list and provide evidence related to any vessels that may meet the listing/de-listing criteria in order to facilitate the upkeep of the NAFO IUU list. The NS reported that there were no vessel additions, modifications or removals since the list was last reviewed at the 2014 STACTIC Intersessional, as summarized in STACTIC WP 14/19.

Iceland remarked that NEAFC (PECCOE) would be formally recommending the de-listing of the DOLPHIN, as it had received satisfactory information to establish that the vessel had been scrapped. The Chair noted that, subject to the formal receipt of notification from NEAFC, the issue would be considered at the 2015 STACTIC Intersessional.

**8. Inspector's Website**

The Chair asked the NS to present STACTIC WP 14/20 summarizing the testing of phase III that had occurred over the summer. The NS noted that only a small number of CP's had participated in the testing, but it had gone well and valuable input had been received.

Participating CPs noted some minor technical issues encountered during the testing process, such as missing fields, but were generally pleased with the system and encouraged greater participation from other CP's.

The EU introduced STACTIC WP 14/27 and explained the proposal was intended to formalize elements discussed at the 2014 STACTIC Intersessional by promoting timely risk assessments, expediting the exchange of control information and reducing administrative burden.

The NS noted the website was currently capable of accepting PSC 1,2 and 3 forms. Canada suggested that CPs should upload more content to the website to facilitate testing and further discussion on enhancements could be pursued once technical issues were resolved in the current phases. The US noted some potential limitations about requiring vessels to submit information via a website while at sea due to vessel capacity issues that would need to be considered. The US requested consideration of alternative submission procedures in the future.

The EU circulated a copy of the comments and suggested improvement to the current format of the website that it had provided to the NS and inquired how the NS was processing the technical input it had received, and whether the suggestions it had provided were technically feasible.

The NS expressed its appreciation to all CPs who had provided comments/feedback and noted it was still evaluating the comments, but would report back on its progress at the 2015 STACTIC Intersessional. The NS further noted that, although it was still conducting preliminary feasibility assessments, early indications were that most of the suggestions were feasible. The Chair noted that he was encouraged by the progress but urged CPs to participate more actively in the development of this useful tool. The Chair reiterated STACTIC's understanding that Phase IV of the Inspectors' website would not be initiated until the first 3 phases were up and running well.

**It was agreed that:**

**The NS would continue the work to develop Phase III elements and integrate, where feasible, the comments provided by CPs;**

**That Phase IV would not be initiated until the first 3 phases were operational;**

**CPs would engage more actively in the use and testing of this tool with the view to advancing the concepts described in STACTIC WP 14/27.**

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

The Chair introduced the agenda item and asked the EDG to present STACTIC WP 14/6 REV and 14/7 REV. The EDG outlined the work undertaken to evaluate and reflect CP comments received prior to the 2014 NAFO Annual Meeting, and briefly described the changes made to the working papers. The EDG noted its intention to incorporate concerns expressed to the extent possible and the feedback received from CP's since the Intersessional and at this meeting.

STACTIC reviewed the editorial changes and discussed the merits of more substantive changes recommended by the EDG. Representatives discussed the various elements proposed by the EDG and modified the working paper based on discussions.

The Chair agreed to highlight substantive changes identified by the EDG that may require future redress, in presenting the editorial changes to the FC.

The EDG sought clarification regarding its continuing mandate to review newly adopted amendments to the NCEM, and to conclude activities identified at the 2014 STACTIC Intersessional (e.g. annex I.A footnote review). Representatives agreed that the EDG should conclude its remaining work and continue to review NCEM amendments to ensure they are consistent with the agreed formats.

**It was agreed:**

**To recommend the EDG revisions to the NCEM as contained in STACTIC WP 14/6 Rev 2 and STACTIC WP 14/7 Rev 2 to FC for adoption; and**

**That the EDG would conclude its original mandate by revising footnotes to the NCEM and then continue to meet to review and implement new NAFO measures so that they conform with the format adopted by Fisheries Commission.**

## **10. Possible revisions of the NAFO CEM**

### **a) Directed fishery and by-catch rules in case of creation of a quota by transfer**

EU summarized STACTIC WP 14/8 Rev, Quota obtained through transfer Article 5.9 (b) of the NCEM, indicating it had taken into account comments voiced during the 2014 STACTIC Intersessional, particularly in relation to control issues. A number of CPs identified significant concerns related to process, administration and terminology. As there was no consensus on the issue the EU withdrew the paper.

**The working paper was withdrawn.**

### **b) Observer Program - Article 30**

#### **i. Observer Program Review**

Canada introduced STACTIC WP 14/33 with the view to addressing the numerous concerns that have been raised at STACTIC in recent years related to the observer scheme. The proposal suggested the establishment of a working group that would comprehensively review the various elements of the scheme and provide a broad range of recommendations on improvements to augment the program's overall effectiveness.

Representatives supported the proposal, noting the importance of the observer program to stock assessments, quota monitoring and vessel compliance.

**It was agreed to recommend STACTIC WP 14/33 to FC to establish a Working Group on Observer Program Review.**

#### **ii. Observer Report-New Template for Annex II.M**

The EU presented STACTIC WP 14/10 Rev concerning revising the standardized observer report template to bring it in line with more recent provisions of the NAFO CEM, noting the original proposal was revised to address comments received at the 2014 STACTIC Intersessional. Some CPs appreciated the effort, but voiced desire to await conclusion of 2014 fishing season to allow further time to assess the efficacy of the standardized template with the benefit of the experience garnered from a full season of practical implementation. It was further suggested that this assessment would be better done as part of the WG on observer program review proposed under agenda item 10 b) i).

**STACTIC agreed not to address the standardized observer report template until after a full year worth of experience with the template and then to assess the template as part of the Observer Program Review Working Group. If established, the template would be submitted to the Working Group on Catch Reporting for consideration.**

### **c) Length of a trial tow in accordance with by-catch provisions under Article 6.6 (b)(iii)**

Canada summarized STACTIC WP 14/12 proposing shortening maximum length of trial tows from 3 hours to 1 hour and noted there had been no changes to the paper since the intersessional. Canada reiterated that a reduction in trial tow length would minimize the conservation impact while still allowing for an assessment of catch composition. The EU was not in favour, noting the catch composition results of a shorter trial tow were less conclusive and it could result in a greater degree of manipulation of catch of the tow. Russia alluded to the possibility of manipulation at any trial tow length, with variables such as speed and depth being undefined.

The Chair observed it may be prudent to revisit the trial tow provisions, given the potential for manipulation at any trial tow length. Canada withdrew the paper and noted it would reflect on how to address the concerns raised during the discussion.

**Canada withdrew the working paper and agreed to reflect on comments with the view to developing a new proposal to address the concerns raised.**

**d) Provision of haul by haul logbook data to the Secretariat**

Canada summarized the revisions contained in 14/13 Rev to the original document concerning reporting on a haul by haul basis which was introduced at the Intersessional, noting the incorporation of language intended to address comments made during the 2014 STACTIC Intersessional. Although there were some initial concerns voiced regarding standardization, process, utility of resulting data, logistics and security CPs agreed it was an important step given the value of the information to the stock assessment and catch monitoring processes and recommendations of the FC/SC Ad hoc Working Group on Catch Reporting. CPs further agreed that improvements would be required over time to address compatibility and other technical issues. DFG noted some concerns with its capacity to meet the deadlines defined in the proposal.

The EU made it clear they were ready and willing to transmit haul by haul data in electronic format, but advised the data transmission would have to be done by the flag state FMC in the format in use by the CP.

While Canada noted that formatting would likely pose some challenges at first, the proposal is flexible to all noted formats at this time.

The Chair noted that this proposal directly responded to the Working Group on Catch Reporting recommendations and that there was sufficient flexibility with the proposal to address some of the logistical concerns.

**It was agreed to recommend STACTIC WP 14/13 rev 2 to FC for adoption.**

**e) Return error numbers (Annex II.D.D.2.B)**

Russia presented STACTIC WP 14/5 concerning revisions to return error numbers which had been deferred from the intersessional meeting. Norway voiced support of the proposal, but noted that this change would impact CP systems and was not simply a change in the NCEM. Norway elaborated that a similar re-structure had already occurred in NEAFC, and systemic changes were required to accommodate the changes. CPs agreed that the outstanding technical issues (e.g. definition/duplicate issue) associated with this proposal should be referred to JAGDM for review, and the list of field codes clarified.

While some CPs expressed concern over the possible systemic implications, the Chair noted that the measure would not be in place until 2015, providing time for CPs to make the necessary systemic adjustments.

**It was agreed:**

**To recommend STACTIC WP 14/5 to FC for adoption;**

**That the NS would conduct the necessary systemic assessments and liaise with the system service provider to facilitate implementation; and**

**The outstanding technical issues would be referred to JAGDM for consideration.**

**f) Use of "Others" quota under chartering arrangement**

France-SPM elaborated on STACTIC WP 14/15 seeking clarification as to whether a vessel under a charter arrangement would be eligible to fish the "others" quota. France (in respect of SPM) then prepared a written proposal (STACTIC WP 14/36) that would add a provision to Article 26 that would allow a vessel of a flag

state CP to have access to and fish the “others” quota of the chartering CP. Several CPs stated that the intent of the measures in Article 26 was not to allow for a flag state CP to fish for the “others” quota of a chartering CP, and, that should France-SPM wish to pursue this matter, it must be addressed in Fisheries Commission.

**There was no consensus on the working paper and the paper was not adopted.**

**g) The use of the two-letter code “DS” (Directed Species) in the NAFO CEM**

Norway presented STACTIC WP 14/23 concerning the need for a new code for authorized directed species. Norway explained that this change was necessary for compatibility with IT requirements and noting that it had been presented at JAGDM. Norway reviewed the recommendations made by JAGDM and synthesized the advice with the view to minimizing the systemic impact on the NS and CPs, while still addressing the primary coding concerns.

Representatives were generally supportive of the proposal, but some questions were raised. The EU collaborated with Norway to revise the proposal to address concerns and re-presented the proposal as STACTIC WP 14/23 Rev and STACTIC WP 14/23 Rev 2.

During the deliberations, it was agreed that area associated with the regulated stocks should be as described in the heading of the annual quota table (NCEM Annex I.A and I.B). The unregulated species must be associated to an area using a code based on the existing sub-areas/divisions or use the word “ANY” as an area code.

**It was agreed to recommend STACTIC WP 14/23 Rev 2 to FC for adoption.**

**h) Deletion of the by-catch limit liaised to quotas “others” (Article 6.2(c) and 6.3(d))**

EU presented STACTIC WP 14/24 concerning the deletion of the by-catch limit liaised to “others” quotas. CPs expressed concern over the possibility that the measure may unintentionally increase actual by-catch levels and suggested that this proposal could be referred to the Working Group on by-catch for further consideration. As there was no consensus on the issue the EU withdrew the paper.

**The working paper was withdrawn.**

**i) Clarity on calculation method to evaluate the by-catch limits in any one haul (Article 6.6)**

EU presented STACTIC WP 14/25 to clarify calculation to evaluate by-catch in any one haul, explaining the proposal intended to adapt the NCEM’s provision to the current practice. Some CPs expressed reservations, particularly in relation to the different applicability to vessels of varying capacity. It was agreed that this proposal could be addressed under the working group on by-catch, discards and selectivity. As there was no consensus on the issue the EU withdrew the paper.

**The working paper was withdrawn, with the understanding that this issue could be addressed by the WG on By-catch, Discards and Selectivity.**

**j) Amendment to Closure of RED 3M “directed fishery”**

EU presented STACTIC WP 14/26 concerning the closure of RED 3M directed fishery and explained the objective was administrative in nature and intended to avoid delays in the notification process. CPs all supported the proposal.

**It was agreed to recommend STACTIC WP 14/26 to FC for adoption**

**k) Article 14 of the NCEM's**

Canada introduced STACTIC WP 14/29 to delete NCEM Article 14.3, noting it is a provision that applies only to Canada, and that the provision was no longer necessary based on amendments to its domestic regulations. This proposal now would align Canadian regulations with the minimum fish size provisions within the NCEM.

**It was agreed to recommend STACTIC WP 14/29 to FC for adoption.**

**l) Shrimp in Division 3L (Article 9)**

Canada presented STACTIC WP 14/30 to correct an editorial correction to reflect the language contained within FC Doc. 11/23 concerning the 3L shrimp 200 meter depth restriction line. The proposal is intended to align Article 9 with the originally adopted text of FC Doc. 11/23. Representatives voiced concerns over the appropriateness of the change in the current context, noting the FC had adopted the existing text. Canada agreed to withdraw the proposal with the view to possibly resubmit the proposal at the 2015 STACTIC Intersessional.

**The working paper was withdrawn with Canada noting that it may revisit this issue at the 2015 STACTIC Intersessional in a separate proposal.**

**m) Notification to Inspecting Contracting Party Regarding Additional Procedures for Serious Infringements**

Canada presented STACTIC WP 14/34 which was then revised as STACTIC WP 14/34 Rev 2 to require the NS to provide an inspecting Contracting Party with notification without delay as to the justification given by the flag state of a vessel cited for a serious infringement for not requiring such vessel to return to port.

**It was agreed to recommend STACTIC WP 14/34 Rev 2 to FC for adoption.**

**11. Joint Advisory Group on Data Management (JAGDM)****a) Presentation of Meeting Reports of the JAGDM (March and June 2014)**

The Chair invited the Interim Chair of JAGDM (Ellen Fasmer - Norway) to present the reports of the two 2014 meetings (FC Doc. 14/02 and FC Doc. 14/04). The Interim Chair highlighted key elements, provided a summary of the groups Terms of Reference and informed representatives of JAGDM's role.

Representatives acknowledged the benefits of the technical advisory group, particularly in terms of promoting regional/global standardization within fisheries management systems.

Canada sought clarification on how technical issues would be referred to JAGDM, whether through STACTIC or by directed participation in JAGDM. The Interim Chair advised that it would depend on the issue, but noted that all issues addressed at JAGDM would be reflected in its report to NAFO/NEAFC at their annual meetings and that the submission process was likely to be iterative.

**The Chair thanked the Interim Chair of the JAGDM for the report.**

**b) Information Security Management System (ISMS)**

After the Chair noted that the JAGDM sent a letter to NAFO recommending that NAFO adopt an ISMS, the NS presented STACTIC WP 14/22 recommending the first steps for implementing an ISMS. The NS noted that the JAGDM was available to assist in determining guidelines for any NAFO ISMS. The Chair noted the cost implications of this proposal and the requirement to refer this issue to STACFAD, should STACTIC support the recommendation.

CPs supported the initiative and endorsed the (4) recommendations found in STACTIC WP 14/22.

**It was agreed:**

**to support the (4) recommendations contained within STACTIC WP 14/22 and refer the issue to FC for adoption, noting that there may be budget considerations for following all of the recommendations; and**

**Include the NAFO ISMS as an agenda item for the 2015 STACTIC Intersessional.**

**c) Definitions and Clarification of Data Elements**

Canada introduce STACTIC WP 14/31 which outlined some identified technical ambiguities in the measures and sought JAGDM guidance on interpretation and process.

The Interim Chair of JAGDM noted that, given the apparent confusion, JAGDM could reflect on the issue with the view to clarifying the definitions/process.

**It was agreed to refer STACTIC WP 14/31 Rev to JAGDM to request guidance and clarity on the relevant data definitions and related technical concerns.**

**d) Data sharing between NAFO and NEAFC**

Canada presented STACTIC WP 14/32 to request that data be shared between NAFO and NEAFC, noting that there is lack of information exchanged between the two organizations related to vessels fishing in both jurisdictions. CPs agreed with the need to enhance data sharing between both organizations, but noted some technical issues that would need to be addressed prior to implementation. It was agreed that JAGDM could provide STACTIC with recommendations on how best to implement this initiative. The NS agreed to provide JAGDM with relevant STACTIC WPs and other reference materials, related to this issue to help it address this issue.

**It was agreed that:**

**STACTIC WP 14/32 revised would be submitted to JAGDM to request advice and recommendations to enhance data sharing between NAFO and NEAFC;**

**The NS would provide JAGDM with relevant NAFO reference material; and**

**JAGDM would be requested to provide STACTIC with an update on its deliberations in advance of the 2015 NAFO annual meeting.**

**e) JAGDM meeting schedule**

The Interim Chair of JAGDM advised that JAGDM had planned to meet in June of 2015, although the group was open to different scheduling options should urgencies arise. Canada noted the numerous working groups going to be scheduled and suggested holding JAGDM meetings in conjunction with other NAFO meetings, such as the STACTIC Intersessional. CPs noted that a calendar exercise, similar to one undertaken in NEAFC should be conducted to determine the most appropriate timing.

The Chair recognized the growing commitment required to participate in the numerous NAFO working groups and suggested CPs reflect on other options to address the need to consolidate meetings and to consider such options at the 2015 STACTIC Intersessional.

**It was agreed that Representatives would reflect on the possibility of consolidating working group meetings with the view to reducing the growing financial/resource impacts and discuss options at the next STACTIC Intersessional.**

**12. Other Matters**

### **a) International Monitoring, Control and Surveillance (IMCS) Network presentation**

In response to a request of the Executive Director of the IMCS Network (Harry Koster), the Chair invited Mr. Koster to provide an overview of the IMCS Network. The Executive Director provided a synopsis of the purpose and functions of the IMCS as outlined in the MS PowerPoint presentation attached hereto as Annex 3.

The CPs expressed their appreciation for the presentation and noted the importance of the work being done by the organization and the value of such a forum for the exchange of fisheries control information.

### **13. Election of Chair and Vice-Chair**

The Chair noted the end of his term and opened the floor to nominations. Canada inquired as to whether the Chair would be available to Chair for an additional year. The Chair confirmed that he was available to afford sufficient transition time for CPs to find an adequate replacement. CPs fully supported retaining the services of the Chair for an additional year to more smoothly transition to a new Chair.

Aronne Spezzani was nominated by the CPs and agreed to stay on for another term as Vice Chair.

**It was agreed that:**

**Gene Martin (US) would extend his term as Chair for one additional year; and**

**Aronne Spezzani (EU) would start a new term as Vice Chair.**

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

The next STACTIC meeting will be held in Tallinn, Estonia, tentatively the week of May 4<sup>th</sup>, 2015.

STACTIC also considered the tentative time and place for the following working groups, if agreed to be established by the Fisheries Commission:

The ad hoc Working Group on Port State Control Alignment: prior to the STACTIC Intersessional meeting, May 2015.

EDG / Observer Program Review WG: In St. John's, Canada in June 2015.

### **15. Adoption of Report**

The report was adopted by Contracting Parties on Thursday, September 25, 2014.

### **16. Adjournment**

The Chair adjourned the meeting at 11:25 a.m. on Thursday, September 25, 2014.

**Annex 1. List of Participants**

<b>Name</b>	<b>Contracting Party</b>
Judy Dwyer Robert Lambert Brent Napier Chad Ward	Canada
Meinhard Gaardlykke Petur Meinhard Jacobsen Martin Kruse Mads T. Nedergaard	Denmark (in respect of the Faroe Islands and Greenland)
Genadijus Babcionis Carlos Chamizo Meit Grossmann Arunas Jonaitis Jon Lansley Epp Meremaa Giuliano Pagliarani Aronne Spezzani	European Union
Bruno Detcheverry Jean-Marc Philippeau	France (in respect of Saint-Pierre et Miquelon)
Bjorgolfur H. Ingason Anna Thormar	Iceland
Junichiro Okamoto Hyo Suzuki	Japan
Ellen E Fasmer Hanne Ostgard	Norway
Vadim Agalakov	Russian Federation
Scott Bode Doug Christel Gene Martin Dan Orchard Carlos Rafael	United States of America

Mark Harley  
Cindy Kerr  
Matt Kendall

NAFO Secretariat

Koster, Harry

International Monitoring, Control and Surveillance  
(IMCS) Network



## Annex 2. Agenda

1. Opening by the Chair, Gene Martin (USA)
2. Appointment of Rapporteur
3. Adoption of Agenda
4. Port State Measures Review
5. Compliance review 2014 including review of reports of Apparent Infringements
  - a. Compliance Review 2014
  - b. Consistent Approach to Address Serious Infringements Detected At-Sea and In Port
6. Review and evaluation of Practices and Procedures
7. Review of current IUU list pursuant to NAFO CEM Article 54.3
8. Inspectors Website
9. Editorial Drafting Group (EDG) of the NAFO CEM
10. Possible revisions of the NAFO CEM
  - a. Directed fishery and by-catch rules in case of creation of a Quota by transfer
  - b. Observer Program – Article 30
    - i. Observer Program Review
    - ii. Observer Report New Template for Annex II.M
  - c. Length of a trial tow in accordance with by-catch provisions under Article 6.6 (b) (iii)
  - d. Provision of haul by haul logbook data to the Secretariat
  - e. Return error numbers (Annex II.D.D.2.B)
  - f. Use of “Others” quota under chartering arrangement
  - g. The use of the two-letter code “DS” (Directed Species) in the NAFO CEM
  - h. Deletion of the by-catch limit liaised to quotas “others” (Article 6.2 (c) and 6.3(d))
  - i. Clarity on calculation method to evaluate the by-catch limits in any one haul (Article 6.6)
  - j. Amendment to closure of RED 3M “directed fishery”
  - k. Article 14 of the NCEM
  - l. Shrimp in Division 3L (Article 9)
  - m. Notification to inspecting Contracting Party regarding additional procedures for serious infringements
11. Joint Advisory Group on Data Management (JAGDM)
  - a. Presentation of Meeting Reports of the JAGDM (March and June 2014)
  - b. Information Security Management System (ISMS)
  - c. Definitions and Clarification of Data Elements
  - d. Data Sharing between NAFO and NEAFC
  - e. JAGDM meeting schedule
12. Other Matters
  - a. International Monitoring, Control and Surveillance (IMCS) Network presentation
13. Election of Chair and Vice-Chair
14. Time and Place of next meeting
15. Adoption of Report
16. Adjournment

## Annex 3. Purpose and Functions of the IMCS Network



The International Monitoring, Control, and Surveillance (MCS) Network

Harry KOSTER, Executive Director

36<sup>th</sup> Annual Meeting of NAFO  
22-26 September 2014

### History

- 2000 – Responsible Fisheries Declaration
- US, EU, Chile, Peru, Australia, Canada and others
- 2001 – IMCS Network Formed
- Global Reach
- Not Bound by Treaty
- Open Membership – For National Authorities and RFMO's

### Role of the Network

- Exchange Information
- Raise Awareness
- Strengthen Capacity



### Initiatives

- Capacity building
  - Register of Vetted Experts
- Global Fisheries Enforcement Training Workshop
- Working With INTERPOL
- Spreading Membership in Key Areas
- Stop IUU Fishing Award Contest

### Register of Vetted MCS Experts



### Africa Winds



### 4<sup>th</sup> GFETW



Costa Rican President Laura Chinchilla and Minister Abraham signing ban on fish aggregating devices, February 17, 2014

### Exchange of MCS Equipment



4<sup>th</sup> GFETW Session 10: Capacity Building in Practice

### 4<sup>th</sup> GFETW

Protecting Artisanal and Regional Fisheries through the Promotion of Legal, Reported and Regulated Fisheries



February 17-21, 2014  
San Jose, Costa Rica

[gfetw.org](http://gfetw.org)

Report of the

### FOURTH GLOBAL FISHERIES ENFORCEMENT TRAINING WORKSHOP San José, Costa Rica, 17-21 February





## Repurposing the button

