



Northwest Atlantic Fisheries Organization

Conservation and Enforcement Measures

TABLE OF CONTENTS

List of Adopted CEM Amendments	3
Map.....	4
Article 1 – Definitions	5
Article 2 – Scope	5
Article 3 – Duties of the Contracting Parties	5
CHAPTER I – CONSERVATION AND MANAGEMENT MEASURES.....	5
Article 4 – Research Vessels.....	5
Article 5 – Catch Limitation	6
Article 6 – By-Catch Requirements	7
Article 7 – Cod Recovery Plans.....	8
Article 8 – American plaice	9
Article 9 – Shrimp.....	10
Article 10 – Greenland halibut.....	12
Article 11 – Squid.....	13
Article 12 – Conservation and Management of Sharks.....	13
Article 13 – Gear Requirements.....	13
Article 14 – Minimum Fish Size Requirements.....	15
CHAPTER II – BOTTOM FISHERIES IN THE NAFO REGULATORY AREA.....	15
Article 15 – Purpose and definitions	15
Article 16 – Seamount, Coral, and Sponge Protection Zones	15
Article 17 – Map of existing bottom fishing areas.....	19
Article 18 – Exploratory bottom fishing activities.....	20
Article 19 – Assessment of proposed exploratory bottom fishing activities	20
Article 20 – Management measures on exploratory bottom fishing activities and for the protection of Vulnerable Marine Ecosystems.....	21
Article 21 – Evaluation of exploratory bottom fishing activities	21
Article 22 – Interim Encounter Provision	21
Article 23 – Reassessment of bottom fishing activities.....	22
Article 24 – Review	23
CHAPTER III – VESSEL REQUIREMENTS AND CHARTERING.....	23
Article 25 – Vessel Requirements.....	23
Article 26 – Chartering Arrangements.....	24
CHAPTER IV – MONITORING OF FISHERIES.....	26
Article 27 – Product Labelling Requirements.....	26
Article 28 – Monitoring of Catch.....	26
Article 29 – Vessel Monitoring System (VMS).....	28
CHAPTER V – OBSERVER SCHEME.....	29
Article 30 – Observer Program	29
CHAPTER VI – JOINT INSPECTION AND SURVEILLANCE SCHEME.....	31
Article 31 – General Provisions	31
Article 32 – Notification Requirements	32
Article 33 – Surveillance Procedure	32
Article 34 – Boarding and Inspection Procedures.....	33
Article 35 – Obligations of Vessel Master during Inspection	33
Article 36 – Inspection Report and follow-up.....	34
Article 37 – Procedures Relating to Infringements	34

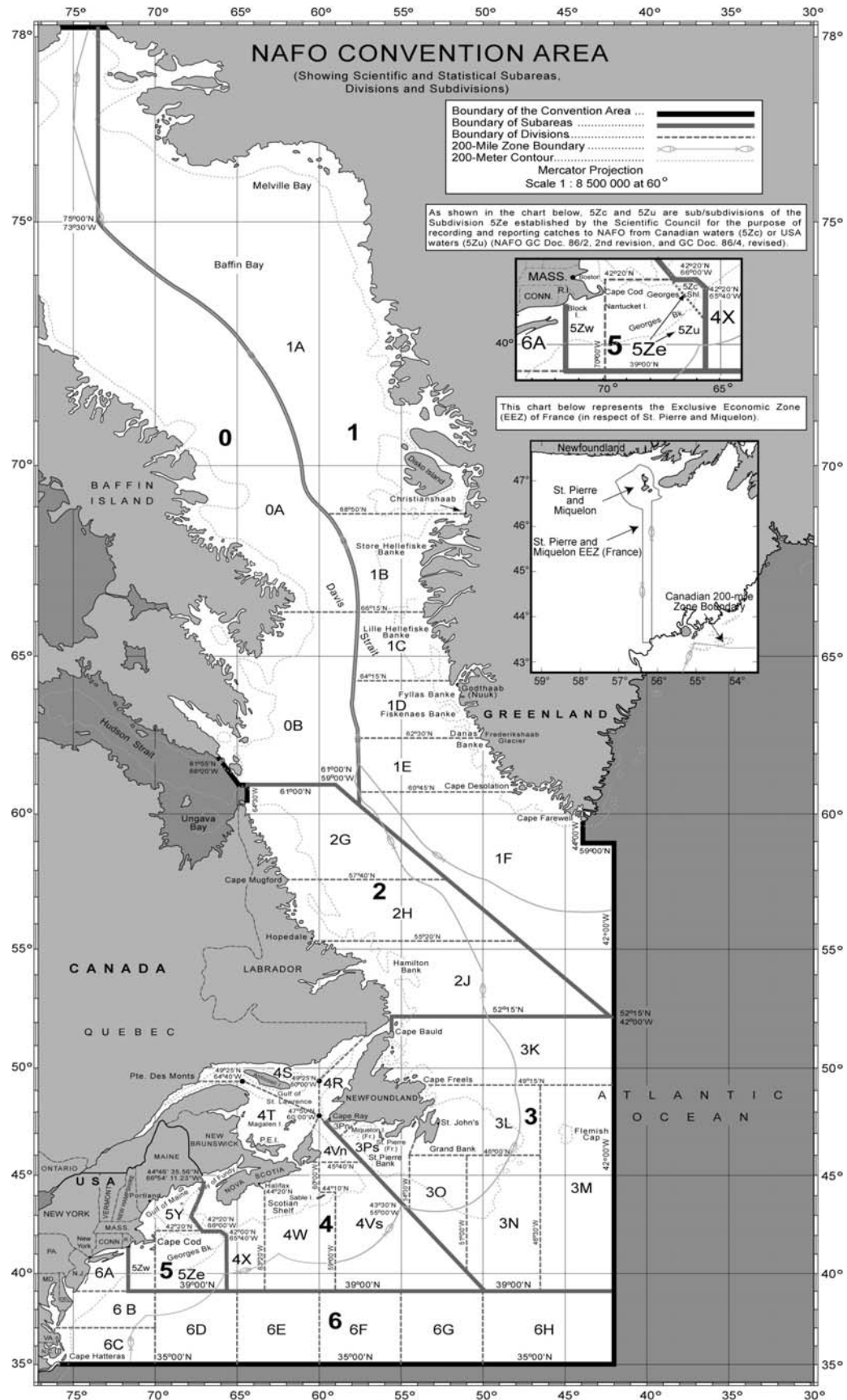
Article 38 – Additional Procedures for Serious Infringements	35
Article 39 – Follow-up to Infringements.....	36
Article 40 – Contracting Party Reports on Inspection, Surveillance and Infringements	37
Article 41 – Dispute Resolution Regarding the Interpretation or Application of this Scheme.....	37
CHAPTER VII – PORT STATE CONTROL	38
Article 42 – Scope	38
Article 43 – Duties of the Port State Contracting Party	38
Article 44 – Duties of the Flag State Contracting Party	39
Article 45 – Obligations of the Master of a Fishing Vessel	39
Article 46 – Duties of the Executive Secretary	40
Article 47 – Serious Infringements	40
CHAPTER VIII – NON-CONTRACTING PARTY SCHEME	40
Article 48 – Scope and Objectives	40
Article 49 – Sightings and Identifications of non-Contracting Party vessels /Presumption of NCP vessels undermining NAFO CEM.....	40
Article 50 – Inspections at Sea.....	41
Article 51 – Entry and Inspection in Port.....	41
Article 52 – Fishing Activities	41
Article 53 – Notification of presumed IUU Activities and Establishment of a Provisional List.....	41
Article 54 – Establishment of the IUU List.....	42
Article 55 – Follow-up Action	43
Article 56 – Actions vis-à-vis Flag States	43
ANNEX I – FISHERIES MANAGEMENT	
Annex I.A Annual Quota Table	44
Annex I.B Effort Allocation Scheme for Shrimp Fishery in the NAFO Regulatory Area Division 3M, 2013	47
Annex I.C List of Species	48
Annex I.D Minimum Fish Size	51
Annex I.E Templates for the conduct of exploratory bottom fishing activities	52
Annex I.F Greenland Halibut Management Strategy	59
Annex I.G Exceptional Circumstances Protocol	60
ANNEX II – REPORTING	
Annex II.A Recording of Catch (Logbook Entries)	61
Annex II.B Rules on Confidentiality.....	62
Annex II.C Vessel Notification and Authorization	64
Annex II.D Data Exchange Format and Protocols	67
Annex II.E VMS Data Format	72
Annex II.F Format for the Communication of Catches and Reports by Fishing Vessels.....	73
Annex II.G Observer Report	78
Annex II.H Weekly Reports.....	79
Annex II.I Fishing Vessel Codes	80
Annex II.J Gear Codes.....	81
Annex II.K Product Form Presentation	82
Annex II.L Port State Control Prior Notification Forms.....	83
ANNEX III - GEAR	
Annex III.A Mesh Measurements and Gauges	85
Annex III.B Authorized Topside Chafers / Shrimp Toggle Chains.....	88
ANNEX IV – INSPECTION	
Annex IV.A Report of Inspection	92
Annex IV.B Surveillance Report Form	96
Annex IV.C Report on Port State Control Inspection (PSC-3).....	97
Annex IV.D Document of Identity	100
Annex IV.E NAFO Inspection Pennants.....	101
Annex IV.F NAFO Inspection Seal	102
Annex IV.G Construction and Use of Boarding Ladders	103

Amendments Adopted at Annual Meeting, September 2012

CEM Article/Annex (new numbers)	Source
Article 5.2	FC Doc. 12/9 (Revised)
Article 9	FC Doc. 12/11
Article 10.5	FC Doc. 12/17
Article 13.2(f)	FC Doc. 12/13
Article 13 (13.9-13.13)	FC Doc. 12/18
Articles 15-24 (Chapter II)	FC Docs. 12/6; 12/12
Article 25	FC Doc. 12/17
Article 27	FC Doc. 12/20
Article 28.1.(b)	FC Doc. 12/14
Article 28.2	FC Doc. 12/15
Article 29.10.(d)	FC Doc. 12/8
Annex I.A	Annual Quota Table (2013); FC Doc. 12/31
Annex I.B	Effort Allocation Scheme for Shrimp Fishery in the NAFO RA Division 3M, 2013
Annex I.E	FC Doc. 12/6
Annex II.A	FC Doc. 12/14
Annex II.C	FC Doc. 12/17
Annex II.D.C- II.D.E	FC Docs. 12/15; 12/16; 12/17
Annex II.F.2; II.F.8	FC Doc. 12/17; 12/15
Annex IV.B	FC Doc. 12/19

Amendments Adopted at Annual Meeting, September 2011

CEM Article/Annex (new numbers)	Source
Article 6.1(b)	FC Doc. 11/17
Article 7.6-7.10	FC Doc. 11/22
Article 7.11	FC Doc. 11/17
Article 8	FC Doc. 11/21
Article 9.7	FC Doc. 11/23
Article 10.1; 10.3 and 10.4	FC Doc. 11/15
Articles 15-21 (Chapter II)	FC Docs. 11/13; 11/16; 11/20; 11/36; 11/38
Article 25.2(g)	FC Doc. 11/24
Article 26.8	FC Doc. 11/30
Article 35.1 (n)-(o)	FC Doc. 11/31
Annex I.A	Annual Quota Table (2012); FC Doc. 11/38
Annex I.B	Effort Allocation Scheme for Shrimp Fishery in the NAFO RA Division 3M, 2012
Annex I.F and Annex I.G	FC Doc. 11/15
Annex II.B	FC Doc. 11/27
Annex II.C	FC Doc. 11/26
Annex II.D.C; II.F; II.G	FC Docs. 11/28; 11/29
Annex II.I	FC Doc. 11/26
Annex II.K	FC Doc. 11/25



Article 1 - Definitions

1. "Bottom fishing activities" means bottom fishing activities where the fishing gear is likely to contact the seafloor during the normal course of fishing operations;
2. "CEM" refers to these Conservation and Enforcement Measures;
3. "Convention" means the 1979 Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries, as amended from time to time;
4. "FMC" means a land-based fisheries monitoring centre of the flag State Contracting Party;
5. "Fishing activities" means fishing, fish processing operations, transshipment of fish or fish products, landings, and any other activity in preparation for or related to fishing in the Regulatory Area;
6. "Fishing day" means any calendar day or any fraction of a calendar day in which a fishing vessel is present in any Division in the Regulatory Area;
7. "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 has been unloaded or transhipped;
8. "Fishing vessel" means any vessel equipped for or engaged in fishing activities, including fish processing, transshipment or any other activity in preparation for or related to fishing, including experimental or exploratory fishing;
9. "Inspector", unless otherwise specified, means an inspector of the fishery control services of a Contracting Party assigned to the Joint Inspection and Surveillance Scheme;
10. "IUU fishing" means activities as defined in paragraph 3 of the FAO *International Plan of Action to prevent, deter and eliminate illegal, unreported and unregulated fishing*;
11. "IUU List" means the list, established pursuant to Articles 53.6 and 54;
12. "Non-Contracting Party vessel" means a vessel entitled to fly the flag of a State that is not a Contracting Party or a vessel suspected to be without nationality;
13. "Processed fish" means any marine organism that has been physically altered since capture, including fish that has been filleted, gutted, packaged, canned, frozen, smoked, salted, cooked, pickled, dried or prepared for market in any other manner;
14. "Research vessel" means a vessel permanently used for research or a vessel normally used for fishing activities or fisheries support activity that is for the time being used for fisheries research;
15. "Transshipment" means transfer, over the side, from one fishing vessel to another, of fisheries resources or products.

Article 2 - Scope

1. The CEM shall, unless otherwise provided, apply to all fishing vessels used or intended for use for the purposes of commercial fishing activities conducted on fisheries resources in the Regulatory Area.
2. Unless otherwise provided, research vessels shall not be restricted by conservation and management measures pertaining to the taking of fish, in particular, concerning mesh size, size limits, closed areas and seasons.

Article 3 – Duties of the Contracting Parties

Every Contracting Party shall ensure that every fishing vessel entitled to fly its flag operating in the Regulatory Area complies with the relevant CEM and that the Master in command of such vessel performs the relevant duties set out in these CEM.

Chapter I

CONSERVATION AND MANAGEMENT MEASURES

Article 4 – Research Vessels

1. Unless otherwise provided, research vessels shall not be restricted by conservation and management measures pertaining to the taking of fish in the Regulatory Area, in particular, mesh size, size limits, closed areas and seasons.
2. A research vessel shall not:
 - (a) conduct fishing activities inconsistent with its research plan; or

- (b) take 3L shrimp in excess of the allocation of the flag State Contracting Party.
- 3. No less than seven days prior to the commencement of a fishery research period, the flag State Contracting Party shall:
 - (a) by electronic transmission in the format prescribed in Annex II.C, notify the Executive Secretary of all research vessels entitled to fly its flag it has authorized to conduct research activities in the Regulatory Area; and
 - (b) provide to the Executive Secretary a Research Plan for all vessels entitled to fly its flag it has authorized to conduct research, including the purpose, location and, for vessels temporarily engaged in research, the dates during which the vessel will be engaged as a research vessel.
- 4. For vessels temporarily employed in research, the flag State Contracting Party shall immediately upon termination of research activities so notify the Executive Secretary.
- 5. The flag State Contracting Party shall notify the Executive Secretary not less than seven days before the effective date of any changes to the research plan. The research vessel shall maintain a record of the changes on board.
- 6. Vessels engaged in research shall at all times keep on board a copy of the Research Plan in the English language.

Duties of the Executive Secretary

- 7. Following notification pursuant to paragraph 3(a), the Executive Secretary without delay posts the names of all research vessels in the vessel registry to the NAFO website and includes in such posting any supporting documents provided by the flag State Contracting Party, including the Research Plan.

Article 5 – Catch Limitation

Quotas

- 1. Each Contracting Party shall limit its catches of the stocks listed in Annex I.A so that neither the quota allocated to a Contracting Party nor the quota allocated to "Others" is exceeded.
- 2. (a) Each Contracting Party to which a quota has been allocated shall close its fishery in the Regulatory Area for the stocks listed in Annex I.A on the date on which the accumulated reported catch, the estimated unreported catch, the estimated quantity to be taken before the closure of the fishery and the likely by-catches during the period to which the quota applies, equal 100 percent of the quota allocated to that Contracting Party. Such Contracting Party shall promptly notify the Executive Secretary of the date on which that Party will close its fishery for the stocks concerned. The Executive Secretary shall promptly inform all other Contracting Parties of such notification. Each Contracting Party shall ensure that, after the closure, no more fish of that species is retained on board its vessels, unless otherwise authorized by the measures.
- (b) The Executive Secretary shall notify without delay all Contracting Parties of the date on which, for 3M Redfish, the accumulated reported catch taken by vessels of the Contracting Parties is estimated to equal 50% and then 100% of the TAC. Each Contracting Party shall ensure that after it has been notified by the Executive Secretary that 100% of the TAC is taken, no more 3M Redfish, caught after that date, is retained onboard its vessels.
- 3. Each Contracting Party which has not been allocated a quota of a particular stock listed in Annex I.A shall be allowed to fish on the quota allocated to "Others". Those Contracting Parties shall notify the Executive Secretary, at least 48 hours in advance of each entry after a minimum of 48 hours of absence from the Regulatory Area, of their vessels intended to fish on such a quota. This notification shall, if possible, be accompanied with an estimate of the projected catch.
- 4. The Executive Secretary shall notify without delay and by the most rapid electronic means available all Contracting Parties of the date on which the accumulated reported catch, the estimated unreported catch, the estimated quantity to be taken before the closure of the fishery and the likely by-catches during the period to which the quota applies, equal 100 percent of the quota allocated to "Others" in Annex I.A for a particular stock. A vessel is not allowed to start a fishery after the date a notification of closure has been issued by the Secretariat.
- 5. Each Contracting Party which has not been allocated a quota for a particular stock shall, within 7 days of the date of issue of such electronic notification by the Executive Secretary, close its fishery in the Regulatory Area for that stock, except for by-catches in directed fisheries for other stocks.
- 6. Where no agreement can be reached by the Fisheries Commission on a NAFO managed stock, through either consensus or vote, the Fisheries Commission shall maintain the existing relative percentage quota shares for that stock, as reflected in Annexes I.A and I.B. This shall be deemed to be a proposal of the Fisheries Commission pursuant to Articles XI and XII of the Convention for the succeeding calendar year.

Quota Adjustments

7. When information satisfactory to the Executive Secretary indicates that there are reasonable grounds for believing that a quota of a Contracting Party has been taken, he shall within one working day inform that Contracting Party. Should that Contracting Party fail within 15 days either to cease fishing or to demonstrate that the quota has not been taken, the Executive Secretary shall so report without delay to the Fisheries Commission.
8. When the Fisheries Commission finds that vessels of a Contracting Party have taken more than the quota allocated to that Contracting Party, the Commission may adjust the corresponding quota for that Contracting Party in a succeeding quota period.
9. When the Fisheries Commission finds that a Contracting Party, contrary to the provisions of Article 5.1-5.6, has fished on a quota allocated to "Others" without reporting its intention to fish on that quota, failed to report its catches taken under such a quota, or continued a directed fishery under such quota after this fishery had been closed, the Commission may propose measures to compensate for damage caused to the stock. Such measures may include adjustments to quotas or the establishment of new quotas for that Contracting Party as appropriate.
10. Quota adjustments shall be made during the determination by the Fisheries Commission of relevant quotas for the following quota period, and shall not result in an increase in any other quota for the Contracting Party to which the quota adjustment applies. Any quota adjustment shall not result in an increase in the relevant quota for any other Contracting Party, unless the Commission determines that the increase will not cause further harm to the stock.

Quota Transfer

11. A Contracting Party may partly or fully transfer fishing possibilities allocated to that Party under Annexes I.A and I.B to another Contracting Party. Such transfers shall be subject to the consent of the receiving Contracting Party.
12. A Contracting Party intending to make a transfer in accordance with paragraph 11 shall make a prior notification of the transfer to the Executive Secretary. The Executive Secretary shall forward this notification to all Contracting Parties, for information.

Article 6 – By-catch Requirements

1. By-catch retained on board

- (a) Vessels of a Contracting Party shall limit their by-catch to a maximum of 2500 kg or 10%, whichever is the greater, for each species listed in Annex I.A for which no quota has been allocated in that Division to that Contracting Party. However, for cod in Division 3M and redfish in Divisions 3LN vessels of a Contracting Party shall limit their by-catch to a maximum of 1250 kg or 5%, whichever is greater.
- (b) In cases where a ban on fishing is in force or an "Others" quota has been fully utilized, the by-catch of the species concerned may not exceed 1250 kg or 5%, whichever is the greater. However, for cod in Division 3NO vessels of a Contracting Party shall limit their by-catch to a maximum of 1000 kg or 4%, whichever is greater.
- (c) The percentages in a) and b) are calculated as the percentage, by weight, for each species of the total catch retained on board. Catches of shrimp shall not be included in the calculation of by-catch levels of ground fish species.

2. By-catch in any one haul

- (a) If the percentages of by-catches in any one haul have exceeded the percentages laid down in paragraph 1 a) and b) the vessel must immediately move a minimum of 10 nautical miles from any position of the previous tow and throughout the next tow keep a minimum distance of 10 nautical miles from any position of the previous tow. If after moving, the next haul exceeds these by-catch limits the vessel must leave the Division and not return for at least 60 hours.
- (b) In the event that total by-catches of all ground fish species subject to quota in any haul in the shrimp fishery exceed 5% by weight in Division 3M or 2.5% by weight in Division 3L, the vessel must move a minimum of 10 nautical miles from any position of the previous tow and throughout the next tow keep a minimum distance of 10 nautical miles from any position of the previous tow. If after moving, the next haul exceeds these by-catch limits the vessel must leave the Division and not return for at least 60 hours.
- (c) The percentage of by-catch authorized in any one haul is calculated as the percentage, by weight, for each species of the total catch in that haul.

3. Directed fishery and by-catch

- (a) Masters shall not conduct directed fisheries for species for which by-catch limits apply. A directed fishery for a species shall be deemed to have been conducted when that species comprises the largest percentage by weight of the total catch in any one haul.

- (b) However, when a vessel is conducting a directed fishery for skate with a legal mesh size appropriate for that fishery, the first time that, in a haul, catches of species for which by-catch limits comprise the largest percentage, by weight of the total catch, they shall be considered as incidental. In this event the vessel shall immediately change position in accordance with the provisions of paragraph 2a) and b).
- (c) Following an absence from a Division of at least 60 hours in accordance with the provisions of paragraphs 2a) and b) masters shall undertake a trial tow the duration of which shall not exceed 3 hours. By way of derogation from paragraph a), if in a haul from such a trial tow catches of species for which by-catch limits comprise the largest percentage, by weight of the total catch, it shall not be considered as a directed fishery. In this event the vessel shall immediately change position in accordance with the provisions of paragraph 2a) and b).

Article 7 – Cod Recovery Plans

Cod in Divisions 2J3KL

1. The Fisheries Commission shall obtain annually the decision of Canada on the limit it has established for catches by Canadian fishers. This limit shall be 95% of the TAC for this stock.
2. The Fisheries Commission shall establish a catch limit in the Regulatory Area that shall apply to the other Contracting Parties. This limit shall be 5% of the TAC for this stock.
3. The total of the catch limits set in accordance with paragraphs 1 and 2 shall constitute the TAC for 2J3KL cod.
4. The distribution key that shall apply for the 5% figure when the fishery in the Regulatory Area is resumed shall be 65.4% for the EU and 34.6% for the other Contracting Parties.
5. The measures in this Article shall apply when a decision is taken to allow the resumption of fishing for cod in the Regulatory Area, and shall not serve as a precedent in future years for establishing catch limits of criteria for quota allocations of other stocks.

Interim 3NO Cod Conservation Plan and Rebuilding Strategy

6. Objective(s):
 - (a) Long-term Objective: The long-term objective of this Conservation Plan and Rebuilding Strategy is to achieve and to maintain the 3NO Cod Spawning Stock Biomass (SSB) in the 'safe zone', as defined by the NAFO Precautionary Approach framework, and at or near Bmsy.
 - (b) Interim Milestone: As an interim milestone, increase the 3NO Cod Spawning Stock Biomass (SSB) to a level above the Limit Reference Point (Blim). It may reasonably be expected that Blim will not be reached until after 2015.
7. Reference Points:
 - (a) Limit reference point for spawning stock biomass (Blim) – 60,000t¹
 - (b) An intermediate stock reference point or security margin Bmsr² – [120,000t]
 - (c) Limit reference point for fishing mortality (Flim = Fmsy) – 0.30
 - (d) Bmsy – [248,000t]
8. 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 low³ probability of actually being below Blim.
 - (b) An annual TAC should be established at a level which is projected to result in:
 - i. continued growth in SSB,
 - ii. low⁴ probability of SSB declining below Blim throughout the subsequent 3-year period, and
 - iii. fishing mortality < F0.1

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

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

³ 'very low' means 10% or less

⁴ 'low' means 20% or less

9. Harvest Control Rules:

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

a) When SSB is below Blim:

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

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

b) When SSB is between Blim and Bmsr:

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

c) When SSB is above Bmsr:

- i. TACs should be set at a level(s) to allow for growth in SSB consistent with the long term objective, and
- ii. Biomass projections should apply a risk neutral approach (i.e. mean probabilities)

d) When SSB is above Bmsy:

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

10. Ecosystem Considerations:

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

11. By-catch Provisions

The by-catch provisions in the CEMs 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.

Article 8 – American plaice

Interim 3LNO American Plaice Conservation Plan and Rebuilding Strategy

1. Objective(s):

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

2. Reference Points:

- (a) Limit reference point for spawning stock biomass (Blim) – 50,000t
- (b) An intermediate stock reference point or security margin Bmsr¹ – [100,000t]
- (c) Limit reference point for fishing mortality (Flim = Fmsy) – 0.31
- (d) Bmsy – [242,000t]

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

3. Re-opening to Directed Fishing:

- (a) A re-opening of a directed fishery should only occur when the estimated SSB, in the year projected for opening the fishery, has a very low² probability of actually being below Blim.
- (b) An annual TAC should be established at a level which is projected to result in:
 - i. continued growth in SSB,
 - ii. low³ probability of SSB declining below Blim throughout the subsequent 3-year period, and
 - iii. fishing mortality < F_{0.1}

4. Harvest Control Rules:

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

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

Article 9 – Shrimp

Shrimp in Division 3M

1. Each Contracting Party shall limit its shrimp fishing activities in Division 3M in accordance with Annex I.B. For the purpose of this measure, Division 3M includes that portion of Division 3L enclosed by lines joining the points described below in Figure 1(1):

Point No.	Latitude	Longitude
1	47°20'0	46°40'0
2	47°20'0	46°30'0
3	46°00'0	46°30'0
4	46°00'0	46°40'0

2. Subject to allocations set out in Annex I.B as amended from time to time, each Contracting Party that conducted a shrimp fishery in Division 3M in the period beginning 1 January 1993 and ending 31 August 1995 is permitted a minimum of 400 fishing days per year. A Contracting Party without such track record may authorize only one vessel to fish shrimp in Division 3M for a maximum of 100 fishing days per year.
3. Each Contracting Party shall closely monitor its vessels fishing shrimp in Division 3M and shall close its fishery when the number of fishing days available to it has been exhausted. The number of fishing days in respect of each vessel shall be determined using the vessel monitoring system (hereinafter "VMS") reports.
4. A vessel fishing for shrimp and other species on the same trip shall transmit a report to the Executive Secretary signalling the change of fishery. The number of fishing days shall be calculated accordingly.

² 'very low' means 10% or less

³ 'low' means 20% or less

5. Fishing days referred to in this Article are not transferable between Contracting Parties. Fishing days of one Contracting Party may be utilized by a vessel flying the flag of another Contracting Party only in accordance with Article 26.
6. No vessel shall fish for shrimp in Division 3M between 00:01 UTC on 1 June and 24:00 UTC on 31 December in the following area as depicted in Figure 1(2):

Point No.	Latitude	Longitude
1 (same as no.7)	47°55'0	45°00'0
2	47°30'0	44°15'0
3	46°55'0	44°15'0
4	46°35'0	44°30'0
5	46°35'0	45°40'0
6	47°30'0	45°40'0
7 (same as no. 1)	47°55'0	45°00'0

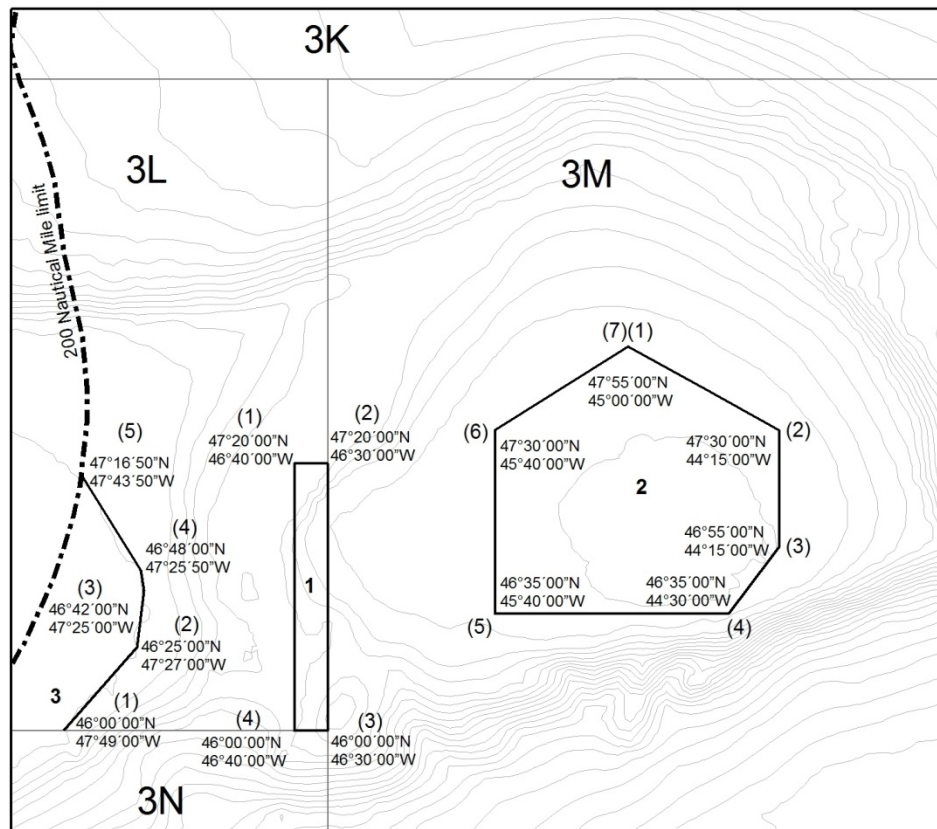


Figure 1. 3L 200 meter depth restriction line, portion of 3L considered 3M, and 3M closed area.

Shrimp in Division 3L

7. No vessel shall fish for shrimp in Division 3L at a depth less than 200 meters in an area east of a line bound by the following coordinates (illustrated in Figure 1(3)):

Point No.	Latitude	Longitude
1	46°00'00"N	47°49'00"W
2	46°25'00"N	47°27'00"W
3	46°42'00"N	47°25'00"W
4	46°48'00"N	47°25'50"W
5	47°16'50"N	47°43'50"W

8. Each vessel that has fished for shrimp in Division 3L, or its representatives on its behalf, shall provide to the competent port authority at least 24 hours prior notice of its estimated time of arrival and the estimated quantities on board of shrimp by Division.

Article 10 – Greenland halibut

Rebuilding program

1. The current Management Strategy (MS) for Greenland halibut stock in Subarea 2 + Divisions 3KLMNO adopted by NAFO in 2010 shall be in force initially until 2014.
2. The objective of this programme is an exploitable biomass of 5+ year classes of 140,000 tonnes on average, allowing a stable yield over the long term in the Greenland halibut fishery.
3. The total allowable catch (TAC) shall be adjusted annually according to the harvest control rule (HCR) specified in Annex I.F.
4. The Exceptional Circumstances Protocol (Annex I.G) shall be invoked in response to an event or observation by Scientific Council which is outside of the range of possibilities considered within the MSE.

Control measures

5. The following measures apply to vessels 24 meters or greater in overall length engaged in the Greenland halibut fishery in Subarea 2 and Divisions 3KLMNO:
 - (a) Each Contracting Party shall allocate its quota for Greenland halibut among its authorized vessels.
 - (b) An authorized vessel shall land its Greenland halibut catch only in a designated port. To this end, each Contracting Party shall designate one or more ports in its territory where authorized vessels may land Greenland halibut.
 - (c) Each Contracting Party shall transmit to the Executive Secretary the name of every port it has so designated and advise the Executive Secretary at least 15 days before any change of designation becomes effective.
 - (d) At least 48 hours before its estimated time of arrival in port, an authorized vessel or its representative on its behalf, shall advise the competent port authority of its estimated time of arrival, the estimated quantity of Greenland halibut retained onboard, and information on the division or divisions where the catches were taken.
 - (e) Each Contracting Party shall inspect each landing of Greenland halibut in its ports and prepare an inspection report in the format prescribed in Annex IV.C, which it shall transmit to the Executive Secretary within 14 working days from the date on which the inspection was completed.
6. The following procedures apply with respect to authorized vessels with more than 50 tonnes live weight total catch on board taken outside the Regulatory Area entering the Regulatory Area to fish for Greenland halibut:
 - (a) the master shall notify the Executive Secretary by e-mail or fax, at the latest 72 hours prior to the vessel's entry into the Regulatory Area, of the amount of catch on board, the position by latitude and longitude where the master intends to commence fishing, the estimated time of arrival at the position, and contact information for the fishing vessel (e.g., radio, satellite phone or email).
 - (b) An inspection vessel that intends to inspect a fishing vessel before it begins fishing for Greenland halibut shall notify that fishing vessel and the Executive Secretary of the coordinates of a designated inspection point that is no more than 60 nautical miles from the position where the master estimates that the vessel will commence fishing and shall inform other inspection vessels that may be operating in the Regulatory Area accordingly.
 - (c) A fishing vessel notified pursuant to paragraph (b) shall proceed to the designated inspection point.
 - (d) Until inspected pursuant to this Article, a fishing vessel may not begin fishing unless
 - (i) it receives no notification within 72 hours of the notification it has transmitted pursuant to subparagraph 6(a), or
 - (ii) within 3 hours of its arrival at the designated inspection point, the inspection vessel has not begun the intended inspection.
7. The Contracting Parties shall prohibit landings of Greenland halibut from non-Contracting Party vessels that have engaged in fishing activities in the Regulatory Area.

Duties of the Executive Secretary

8. The Executive Secretary:
 - (a) places on the agenda of the Fisheries Commission in the context of reviewing the implementation of this rebuilding plan, the issue of deciding on additional measures to ensure the effective attainment of its objective;
 - (b) on the basis of the information provided by the Contracting Parties, establishes and maintains a list of designated ports for the purpose of this Article and transmits it as well as any subsequent changes to all Contracting Parties;

- (c) transmits any port inspection report received pursuant to subparagraph 5(e) to any Contracting Party that requests it; and
 - (d) transmits the information received pursuant to subparagraph 6(b) to all inspection vessels in the Regulatory Area.
9. Where within 24 hours of the notification transmitted pursuant to subparagraph 6(b), the Executive Secretary does not receive a notification from an inspection vessel, the Executive Secretary immediately advises the fishing vessel that it may begin fishing and notifies inspection vessels and the flag-State FMC accordingly.

Article 11- Squid

Squid closure

1. No vessel may fish for squid between 0001 UTC on 1 January to 2400 UTC on 30 June in Sub-areas 3 and 4.

Article 12 – Conservation and Management of Sharks

1. Contracting Parties shall report all catches of sharks, including available historical data, in accordance with the data reporting procedures set out in Article 28.
2. Up to the point of offloading, no fishing vessel shall discard any part of shark retained on board except the head, guts or skin.
3. Contracting Parties shall require their vessels not to have onboard shark fins that total more than 5% of the weight of sharks onboard, up to the first point of landing. Contracting Parties that currently do not require fins and carcasses to be offloaded together at the point of first landing shall take the necessary measures to ensure compliance with the 5% fin-to-body weight ratio through certification, monitoring by an observer, or other appropriate measures.
4. No fishing vessel shall retain on board, tranship or land any fins harvested in contravention of these provisions.
5. In fisheries that are not directed at sharks, each Contracting Party shall encourage every vessel entitled to fly its flag to release live sharks, especially juveniles, that are not intended for use as food or subsistence.
6. Contracting Parties shall, where possible, undertake research to identify ways to make fishing gear more selective for the protection of sharks.
7. Contracting Parties shall when possible conduct research to identify shark nursery areas.

Article 13 - Gear Requirements

Mesh sizes

1. For the purpose of this Article, mesh size is measured in accordance with Annex III.A.
2. No vessel shall fish with a net having a mesh size smaller than prescribed for each of the following species:
 - (a) 40 mm for shrimps and prawns (PRA);
 - (b) 60 mm for short finned squid (SQI);
 - (c) 280 mm in the codend and 220 mm in all other parts of the trawl for skate (SKA);
 - (d) 130 mm for groundfish;
 - (e) 100 mm for pelagic *Sebastes mentella* (REB) in Subarea 2 and Divisions 1F and 3K; and
 - (f) 90 mm for redfish (RED) in the fishery using mid-water trawls in Division 3O and 3M. Within this fishery mid-water trawl means trawl gear that is designed to fish for pelagic species, no portion of which is designed to be or is operated in contact with the bottom at any time. The gear shall not include discs, bobbins or rollers on its footrope or any other attachments designed to make contact with the bottom. The trawl may have chafing gear attached.
3. A vessel conducting a fishery for a species referred to in paragraph 2 that has on board nets having a mesh size smaller than that specified in that paragraph, shall ensure such nets are securely lashed and stowed and are not available for immediate use during that fishery.
4. A vessel conducting a directed fishery for species other than those identified in paragraph 2 is, however, permitted to take regulated species with nets having a mesh size less than specified in paragraph 2, provided that the by-catch requirements in Article 6, paragraph 1(a) are complied with.

Use of Attachments

5. Strengthening ropes, splitting straps and codend floats may be used on trawls, as long as these attachments do not in any way restrict the authorized mesh or obstruct the mesh opening.
6. No vessel shall use any means or device that obstructs or diminishes the size of the meshes. However, vessels may attach devices described in Annex III.B to the upperside of the codend in a manner that does not obstruct the meshes of the codend including any lengthener(s). Canvas, netting or other material may be attached to the underside of the codend of a net only to the extent required to prevent or minimize damage to the codend.
7. Vessels fishing for shrimp in Divisions 3L or 3M shall use sorting grids or grates with a maximum bar spacing of 22 mm. Vessels fishing for shrimp in Division 3L shall also be equipped with toggle chains with a minimum length of 72 cm as measured in accordance with Annex III.B.

Marking of Gear

8. No fishing vessel shall:
 - (a) use gear that is not marked in accordance with generally accepted international standards, in particular, the *Convention on Conduct of Fishing Operations in the North Atlantic*; or
 - (b) deploy any marker buoy or similar object floating on the surface and intended to indicate the location of fixed fishing gear without displaying the vessel's registration number.

Lost or abandoned fishing gears

Retrieval of fishing gears

9. Each Contracting Party shall ensure that:
 - (a) vessels fishing in the NRA flying their flag have equipment on board to retrieve lost gear;
 - (b) the master of a vessel that has lost gear or part of it shall make every reasonable attempt to retrieve it as soon as possible; and
 - (c) no master shall deliberately abandon fishing gear, except for safety reasons.
10. If the lost gear cannot be retrieved, the Master of the vessel shall notify the flag State Contracting Party within 24 hours of the following:
 - (a) the name and call sign of the vessel;
 - (b) the type of lost gear;
 - (c) the quantity of gear lost;
 - (d) the time when the gear was lost;
 - (e) the position where the gear was lost; and
 - (f) the measures taken by the vessel to retrieve the lost gear.
11. Following retrieval of lost gear, the Master of the vessel shall notify the flag State Contracting Party within 24 hours of the following:
 - (a) the name and call sign of the vessel that has retrieved the gear;
 - (b) the name and call sign of the vessel that lost the gear (if known);
 - (c) the type of gear retrieved;
 - (d) the quantity of gear retrieved;
 - (e) the time when the gear was retrieved; and
 - (f) the position where the gear was retrieved.
12. The flag State Contracting Party shall without delay notify the Executive Secretary of the information referred to in paragraph 10 and 11.

Duties of the Executive Secretary

13. The Executive Secretary posts without delay the information provided by Contracting Parties in accordance with paragraph 12 on the secure part of the NAFO website.

Article 14 - Minimum Fish Size Requirements

1. No vessel shall retain on board any fish smaller than the minimum size established pursuant to 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.
4. 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.

Chapter II

BOTTOM FISHERIES IN THE NAFO REGULATORY AREA

Article 15 - Purpose and definitions

1. The purpose of this Article is to ensure the implementation by NAFO of effective measures to prevent significant adverse impacts of bottom fishing activities on vulnerable marine ecosystems known to occur or likely to occur in the Regulatory Area based on the best available scientific information. For the purposes of this Article, NAFO will take into account the guidance provided by the FAO in the framework of the Code of Conduct for Responsible Fisheries and any other internationally agreed standards, as appropriate.
2. The term "bottom fishing activities" means bottom fishing activities where the fishing gear is likely to contact the seafloor during the normal course of fishing operations.
3. The term "existing bottom fishing areas" ("footprint") means that portion of the Regulatory Area where bottom fishing has historically occurred and is defined by the coordinates shown in Table 1 and illustrated in Figure 4.
4. The term "exploratory bottom fishing activities" means bottom fishing activities conducted in unfished bottom areas, or bottom fishing activities with significant changes to the conduct or in the technology used in the existing bottom fishing areas.
5. The term "unfished bottom areas" means other areas within the Regulatory Area which are not defined as existing bottom fishing areas.
6. The term "vulnerable marine ecosystems" has the same meaning and characteristics as those contained in paragraphs 42 and 43 of the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas.
7. The term "VME indicator species" refers to species of coral identified as gorgonians, *Lophelia*, and sea pen fields; crinoids; erect bryozoans; sea squirts; cerianthid anemone fields; and sponges that constitute sponge grounds or aggregations. The current list is attached as Part VI of Annex I.E.
8. The term "VME element" refers to topographical, hydrophysical or geological features which potentially support VMEs including slopes, summits and flanks of seamounts and knolls and canyons as described in the Annex of the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas. The current list is attached as Part VII of Annex I.E.
9. The term "significant adverse impacts" has the same meaning and characteristics as those described in paragraphs 17-20 of the FAO International Guidelines for the Management of Deep Sea Fisheries in the High Seas.
10. The term "encounter" means catch of a VME indicator species above threshold levels as set out in Article 22.3. Any encounter with a VME indicator species or merely detecting its presence is not sufficient to identify a VME. That identification should be made on a case-by-case basis through assessment by relevant bodies.

Article 16 - Seamount, Coral, and Sponge Protection Zones

1. Until December 31, 2014, no vessel shall engage in bottom fishing activities in any of the areas defined by connecting the following coordinates (in numerical order and back to coordinate 1), subject to the exception foreseen in paragraph 2.

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

- A request to conduct exploratory bottom fishing activities, in any of the areas defined by paragraph 1, shall be in accordance with Article 18 and the Exploratory Protocol (Part IV of Annex I.E).
- If a vessel fishing in any of the areas defined in paragraph 1 encounter a VME indicator species, as defined in Article 22.3, interim encounter provisions as set out in Article 22.2 will apply.
- Until December 31, 2014, no vessel shall engage in bottom fishing activities in the following area in Division 30 defined by connecting the following coordinates (as illustrated in Figure 2).

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

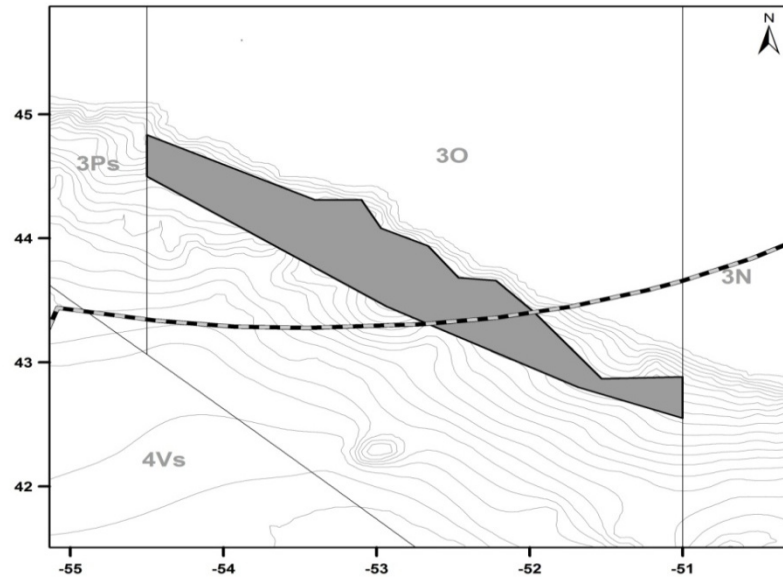


Figure 2. Polygon Delineating Area of 30 Coral Closure referred to in Article 16.4.

5. Until December 31, 2014, no vessel shall engage in bottom fishing activities in the areas defined by connecting the following coordinates (as illustrated in Figure 3).

Area	Description	Point No.	Latitude	Longitude
1	Tail of the Bank	1.1	44° 02' 53.88" N	48° 49' 9.48" W
		1.2	44° 21' 31.32" N	48° 46' 48" W
		1.3	44° 21' 34.56" N	48° 50' 32.64" W
		1.4	44° 11' 48.12" N	48° 50' 32.64" W
		1.5	44° 02' 54.6" N	48° 52' 52.32" W
2	Flemish Pass/ Eastern Canyon	2.1	44° 50' 56.4" N	48° 43' 45.48" W
		2.2	46° 18' 54.72" N	46° 47' 51.72" W
		2.3	46° 25' 28.56" N	46° 47' 51.72" W
		2.4	46° 46' 32.16" N	46° 55' 14.52" W
		2.5	47° 03' 29.16" N	46° 40' 4.44" W
		2.6	47° 11' 47.04" N	46° 57' 38.16" W
		2.7	46° 40' 40.8" N	47° 03' 4.68" W
		2.8	46° 24' 24.12" N	46° 51' 23.04" W
		2.9	46° 07' 1.56" N	47° 30' 36.36" W
		2.10	45° 49' 6.24" N	47° 41' 17.88" W
3	Beothuk Knoll	3.1	45° 49' 10.2" N	46° 06' 2.52" W
		3.2	45° 59' 47.4" N	46° 06' 2.52" W
		3.3	45° 59' 47.4" N	46° 18' 8.28" W
		3.4	45° 49' 10.2" N	46° 18' 8.28" W
4	Eastern Flemish Cap	4.1	46° 48' 35.28" N	43° 20' 51.72" W
		4.2	47° 03' 58.68" N	43° 20' 51.72" W
		4.3	47° 03' 58.68" N	43° 34' 16.32" W
		4.4	46° 48' 35.28" N	43° 34' 16.32" W
5	Northeast Flemish Cap	5.1	47° 47' 46.00" N	43° 29' 07.00" W
		5.2	47° 40' 54.47" N	43° 27' 06.71" W
		5.3	47° 35' 57.48" N	43° 43' 9.12" W
		5.4	47° 51' 14.4" N	43° 48' 35.64" W
		5.5	48° 27' 19.44" N	44° 21' 7.92" W

		5.6	48° 41' 37.32" N	43° 45' 08.08" W
		5.7	48° 37' 13.00" N	43° 41' 24.00" W
		5.8	48° 30' 15.00" N	43° 41' 32.00" W
		5.9	48° 25' 08.00" N	43° 45' 20.00" W
		5.10	48° 24' 29.00" N	43° 50' 50.00" W
		5.11	48° 14' 20.00" N	43° 48' 19.00" W
		5.12	48° 09' 53.00" N	43° 49' 24.00" W
6	Sackville Spur	6.1	48° 18' 51.12" N	46° 37' 13.44" W
		6.2	48° 28' 51.24" N	46° 08' 33.72" W
		6.3	48° 49' 37.2" N	45° 27' 20.52" W
		6.4	48° 56' 30.12" N	45° 08' 59.99" W
		6.5	49° 00' 9.72" N	45° 12' 44.64" W
		6.6	48° 21' 12.24" N	46° 39' 11.16" W
7	Northern Flemish Cap	7.1	48° 20' 29.76" N	44° 54' 38.16" W
		7.2	48° 25' 2.28" N	44° 54' 38.16" W
		7.3	48° 25' 2.28" N	45° 17' 16.44" W
		7.4	48° 20' 29.76" N	45° 17' 16.44" W
8	Northern Flemish Cap	8.1	48° 35' 56.4" N	45° 05' 35.52" W
		8.2	48° 40' 9.84" N	45° 05' 35.52" W
		8.3	48° 40' 9.84" N	45° 11' 44.88" W
		8.4	48° 35' 56.4" N	45° 11' 44.88" W
9	Northern Flemish Cap	9.1	48° 34' 23.52" N	45° 26' 18.96" W
		9.2	48° 36' 55.08" N	45° 31' 15.96" W
		9.3	48° 30' 18.36" N	45° 39' 42.48" W
		9.4	48° 27' 30.6" N	45° 34' 40.44" W
10	Northwest Flemish Cap	10.1	47° 47' 17.16" N	46° 17' 27.96" W
		10.2	47° 58' 42.24" N	46° 06' 43.92" W
		10.3	48° 01' 6.6" N	46° 12' 3.96" W
		10.4	47° 49' 41.52" N	46° 22' 48" W
11	Northwest Flemish Cap	11.1	47° 25' 48" N	46° 21' 23.76" W
		11.2	47° 30' 1.44" N	46° 21' 23.76" W
		11.3	47° 30' 1.44" N	46° 27' 33.12" W
		11.4	47° 25' 48" N	46° 27' 33.12" W

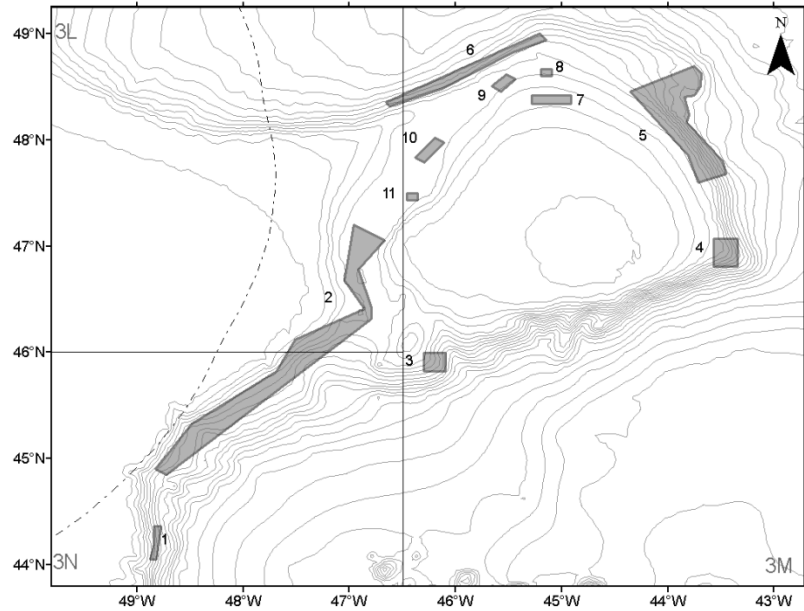


Figure 3. Polygons Delineating Areas of Higher Sponge and Coral Concentrations referred to in Article 16.5.

6. The measures referred to in Article 16.5 shall be reviewed in 2014 by the Fisheries Commission, taking account of the advice from the Scientific Council and the Working Group of Fishery Managers and Scientists on VMEs, and a decision shall be taken on future management measures.
7. Contracting Parties are encouraged to the extent possible to record all coral and sponge catch in their annual government and/or industry research programs and to consider non-destructive means for the long-term monitoring of coral and sponges in the closed areas.

Article 17 - Map of existing bottom fishing areas

The comprehensive map of existing bottom fishing areas (as delineated by the coordinates shown in Table 1 and illustrated in Figure 4) shall be revised regularly to incorporate any new relevant information. Contracting Parties may, in the future, consider the possibility of refining the comprehensive map on the basis of haul by haul information, if available.

Table 1. Boundary points delineating the eastern side of the footprint in the NAFO Regulatory Area. The Canadian EEZ boundary delineates the western side of the footprint map (see Figure 4).

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

¹approximately 47°47'45"W

²approximately 52°09'46"W

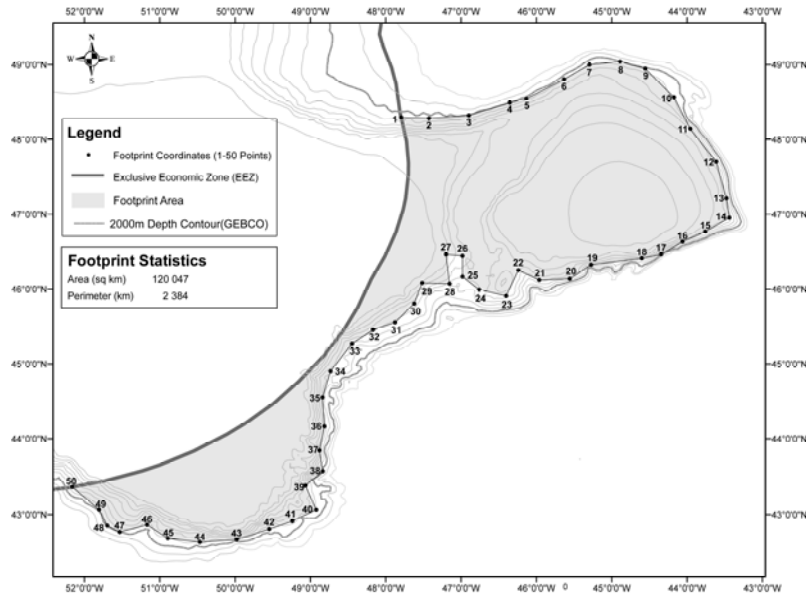


Figure 4. NAFO Regulatory Area footprint map (shaded).

Article 18 – Exploratory bottom fishing activities

1. Exploratory bottom fishing activities shall be conducted in accordance with the exploratory protocol set out in Parts I-IV of Annex I.E.
2. Contracting Parties whose vessels wish to engage in exploratory bottom fishing activities shall communicate a ‘Notice of Intent to Undertake Exploratory Bottom Fishing’ (Annex I.E, Parts I and IV) to the Executive Secretary together with the assessment required under Article 19.i.
3. The exploratory bottom fishing activities may start only after they have been authorized in accordance with Article 20.
4. Contracting Parties shall ensure that vessels flying their flag and conducting exploratory bottom fishing activities have a scientific observer on board.
5. Contracting Parties shall within 3 months of the completion of the fishing trip provide an ‘Exploratory Bottom Fishing Trip Report’ of the results of such activities to the Executive Secretary for circulation to the Scientific Council and all Contracting Parties.

Article 19 - Assessment of proposed exploratory bottom fishing activities

Assessment for proposed exploratory bottom fishing activities in the Regulatory Area shall follow the procedure below:

- i. The Contracting Party proposing to participate in exploratory bottom fishing activities shall submit to the Executive Secretary information and preliminary assessment of the known and anticipated impacts of the bottom fishing activity which will be exercised by the vessels flying its flag on vulnerable marine ecosystems.

That assessment shall be sent no less than two weeks in advance of the opening of the June meeting of the Scientific Council. It shall address the elements as set forth in Part V of Annex I.E.

The Executive Secretary shall promptly forward these submissions to the Scientific Council and the Fisheries Commission.

- ii. The elaboration of that assessment shall be carried out in accordance with guidance developed by the Scientific Council, or, in the absence of such guidance, to the best of the Contracting Party’s ability.

iii. At the meeting of the Scientific Council immediately following the submission of the information and preliminary assessment, the Scientific Council shall undertake an assessment of the submitted documentation, according to procedures and standards it develops and, taking into account the risks of significant adverse impacts on vulnerable marine ecosystems. The Scientific Council may use in its assessment additional information available to it, including information from other fisheries in the region or similar fisheries elsewhere.

The Scientific Council shall in line with the precautionary approach, provide advice to the Fisheries Commission on possible significant adverse impacts on vulnerable marine ecosystems and on the mitigation measures to prevent them.

Article 20 – Management measures on exploratory bottom fishing activities and for the protection of Vulnerable Marine Ecosystems

1. The Working Group of Fishery Managers and Scientists on VMEs shall examine the advice of the Scientific Council delivered in accordance with Article 19(iii) and shall make recommendations to the Fisheries Commission in accordance with its mandate.
2. The Fisheries Commission shall, taking account of advice and recommendations provided by the Scientific Council and the Working Group of Fishery Managers and Scientists on VMEs concerning exploratory bottom fishing activities, including data and information arising from reports pursuant to Article 22, adopt conservation and management measures to prevent significant adverse impacts on vulnerable marine ecosystems. These may include:
 - i. allowing, prohibiting or restricting bottom fishing activities;
 - ii. requiring specific mitigation measures for bottom fishing activities;
 - iii. allowing, prohibiting or restricting bottom fishing with certain gear types, or changes in gear design and/or deployment; and/or
 - iv. any other relevant requirements or restrictions to prevent significant adverse impacts to vulnerable marine ecosystems.

Article 21 – Evaluation of exploratory bottom fishing activities

1. At its meeting immediately following receipt of the ‘Exploratory Bottom Fishing Trip Report’ circulated in accordance with Article 18.5, the Scientific Council shall evaluate the exploratory bottom fishing activities. Taking into account the risks of significant adverse impacts on vulnerable marine ecosystems, the Scientific Council shall, in line with the precautionary approach, provide advice to the Fisheries Commission on the decision to be taken in accordance with Article 21.3.
2. The Working Group of Fishery Managers and Scientists on VMEs 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.
3. The Fisheries Commission shall, taking account of advice and recommendations provided by the Scientific Council and the Working Group of Fishery Managers and Scientists on VMEs, either to:
 - i. 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 existing bottom fishing areas (footprint), or,
 - ii. Discontinue the exploratory bottom fishing activity and, if necessary, close part or all of the area where which exploratory bottom fishing was carried out, or,
 - iii. Authorize the continued conduct of exploratory bottom fishing activity, in line with Article 18 with a view to gather more information.

Article 22 – Interim Encounter Provision

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

1. Existing bottom fishing areas
 - i. Vessels shall quantify catch of VME indicator species.
 - ii. if the quantity of VME indicator species caught in a fishing operation (such as trawl tow or set of a gillnet or longline) is beyond the threshold defined in paragraph 3 below, the following shall apply:
 - The vessel master shall report the incident to the flag State Contracting Party, which without delay shall forward the information to the Executive Secretary, including the position that is provided by the vessel, either the end point of the tow or set or another position that is closest to the exact encounter location, the VME indicator species encountered, and the quantity (kg) of VME indicator species encountered. Contracting Parties may if they so wish require their vessels to also report the incident directly to the Executive Secretary. The Executive Secretary shall archive the information and report it to all Contracting Parties. The Contracting Parties shall immediately alert all fishing vessels flying their flag.
 - The vessel master shall cease fishing and move away at least 2 nautical miles from the endpoint of the tow/set in the direction least likely to result in further encounters. The captain shall use his best judgment based on all available sources of information.
 - The Executive Secretary shall make an annual report on single and multiple encounters in discrete areas within existing bottom fishing areas to the Scientific Council. The Scientific Council shall evaluate and, on a case-by-case basis the

information and provide advice to the Fisheries Commission on whether a VME exists. The advice shall be based on annually updated assessments of the accumulated information on encounters and the Scientific Council's advice on the need for action, using FAO guidelines as a basis. The Fisheries Commission shall consider the advice in accordance with Article 20.2.

2. Unfished bottom areas

- i. Vessels shall quantify catch of VME indicator species. Observers deployed shall identify corals, sponges and other organisms to the lowest possible taxonomical level. The Exploratory Fishery Data Collection Form found in Part III of Annex I.E shall be used (templates).
- ii. If the quantity of VME indicator species caught in a fishing operation (such as trawl tow or set of a gillnet or longline) is beyond the threshold defined in paragraph 3 below, the following shall apply:
 - The vessel master shall report the incident without delay to its flag state Contracting Party, which shall forward the information to the Executive Secretary, including the position that is provided by the vessel, either the end point of the tow or set or another position that is closest to the exact encounter location, the VME indicator species encountered, and the quantity (kg) of VME indicator species encountered. Contracting Parties may if they so wish require their vessels to also report the incident directly to the Executive Secretary. The Executive Secretary shall archive the information and without delay transmit it to all Contracting Parties. The Contracting Parties shall issue an immediate alert to all vessels flying their flag.
 - The vessel shall cease fishing and move away at least 2 nautical miles from the endpoint of the tow/set in the direction least likely to result in further encounters. The captain shall use his best judgment based on all available sources of information.
 - The Executive Secretary shall at the same time request Contracting Parties to implement a temporary closure of a two mile radius around the reporting position. The reporting position is that provided by the vessel, either the endpoint of the tow/set or another position that the evidence suggests is closest to the exact encounter location.
 - The Executive Secretary shall make an annual report on single and multiple encounters in discrete areas within existing bottom fishing areas to the Scientific Council. This report should also include reports from the exploratory bottom fishing activities conducted in the last year. The Scientific Council at its next meeting shall examine the temporary closure. If the Scientific Council advises that the area consists of a vulnerable marine ecosystem the Executive Secretary shall request Contracting Parties to maintain the temporary closure until such time that the Fisheries Commission has adopted conservation and management measures in accordance with Article 20.2. If the Scientific Council does not conclude that the proposed area is a VME, the Executive Secretary shall inform Contracting Parties which may re-open the area to their vessels.
 - The Executive Secretary shall make an annual report on archived reports from encounters in unfished bottom areas to the Scientific Council. This report shall also include reports from the exploratory bottom fishing activities that were conducted in the last year. The Scientific Council shall evaluate the information and provide advice to the Fisheries Commission on the appropriateness of temporary closures and other measures. The advice should be based on annually updated assessments of the accumulated information on encounters as well as other scientific information. The Scientific Council's advice should reflect provisions outlined in the FAO guidelines. The Fisheries Commission shall consider the advice in accordance with Article 20.2.

3. For both existing bottom fishing areas and unfished bottom areas, an encounter with primary VME indicator species is defined as a catch per set (e.g. trawl tow, longline set, or gillnet set) of more than 7 kg of sea pens, 60 kg of other live coral and 300 kg of sponges. These thresholds are set on a provisional basis and may be adjusted as experience is gained in the application of this measure.

Article 23 – Reassessment of bottom fishing activities

1. The Scientific Council, with the co-operation of Contracting Parties, shall identify, on the basis of best available scientific information, vulnerable marine ecosystems in the Regulatory Area and map sites where these vulnerable marine ecosystem are known to occur or likely to occur and provide such data and information to the Executive Secretary for circulation to all Contracting Parties.

Fisheries Commission will in collaboration with the Scientific Council and the Working Group of Fishery Managers and Scientists on VMEs conduct a reassessment in 2016 and every 5 years thereafter of bottom fishing activities, or when there is new scientific information indicating a VME in a given area. Following the assessment, the Fisheries Commission shall take the necessary actions to protect VMEs.

Article 24 - Review

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

Chapter III

VESSEL REQUIREMENTS AND CHARTERING

Article 25 – Vessel Requirements

Notification of fishing vessels

1. Each Contracting Party shall notify the Executive Secretary by electronic means:
 - (a) a list of its vessels flying its flag which it may authorize to conduct fishing activities, in the Regulatory Area, hereinafter referred to as a “notified vessel”, in the format prescribed in Annex II.C1 (NOT message);
 - (b) from time to time, any deletion from the list of notified vessels, without delay, in the format prescribed in Annex II.C2 (WIT message).
2. No fishing vessel shall conduct fishing activities in the Regulatory Area unless it is listed as a notified vessel.

Authorization to conduct fishing activities

3. No Contracting Party shall:
 - (a) permit a vessel entitled to fly its flag to conduct fishing activities in the Regulatory Area unless it has authorized it to do so; or
 - (b) authorize a fishing vessel entitled to fly its flag to conduct fishing activities in the Regulatory Area unless it is able to exercise effectively its flag state duties in respect of such vessel.
4. Each Contracting Party shall manage the number of authorized fishing vessels and their fishing effort in a manner that takes due account of the fishing opportunities available to that Contracting Party in the Regulatory Area.
5. Each Contracting Party shall transmit to the Executive Secretary by electronic means:
 - (a) the individual authorization for each vessel from the list of notified vessels it has authorized to conduct fishing activities in the Regulatory Area, hereinafter referred to as an “authorized vessel”, in the format prescribed in Annex II.C3 and no later than 30 days before the start of the fishing activities for the calendar year (AUT message).
Each authorization shall in particular identify the start and end dates of validity and, the species for which directed fishery is allowed. If the vessel intends to fish for regulated species referred to in Annexes I.A or I.B, the identification shall refer to the stock, where the regulated species is associated to the area concerned;
 - (b) the suspension of the authorization, in the format prescribed in Annex II.C4, without delay, in case of removal of the authorization concerned or of any modification to its content, where the removal or the modification occurs during the period of validity (SUS message);
 - (c) in case of resuming a suspended authorization, the new authorization, transmitted in accordance with the procedure described in sub-paragraph (a) above.
6. Each Contracting Party shall ensure that the period of validity of the authorization matches with the certification period concerning the certification of the capacity plan referred to in paragraphs 10 and 11 below.

Vessel markings

7. Every fishing vessel shall bear markings that are readily identified in accordance with internationally accepted standards, such as the FAO Standard Specifications for the Marking and Identification of Fishing Vessels.

Vessel documents to be carried on board

8. No fishing vessel shall operate in the Regulatory Area without carrying on board current valid documents issued by the competent authority of the flag state at a minimum establishing the following particulars concerning the vessel:
 - i. its name, if any;
 - ii. the letter(s) of the port or district in which it is registered, if any;

- iii. the number(s) under which it is registered;
- iv. its international radio call sign, if any;
- v. the names and addresses of the owner(s) and, where applicable, the charterers;
- vi. its length overall;
- vii. its engine power;
- viii. the capacity plan referred to in paragraph 10; and
- ix. estimation of freezing capacity or certification of refrigeration system will be provided if possible.

Capacity plan

9. No fishing vessel shall conduct fishing activities in the Regulatory Area without carrying on board an accurate up-to-date capacity plan, the capacity plan must be certified by a competent authority or recognized by its flag State.
10. The capacity plan shall:
 - (a) take the form of a drawing or description, of its fish storage place, including the storage capacity of each fish storage place in cubic meters. The drawing must consist of longitudinal section of the vessel, including a plan for each deck on which a fish storage place is located and the locations of freezers;
 - (b) show in particular the positions of any door, hatch and any other access to each fish storage place, with reference to the bulkheads;
 - (c) indicate the main dimensions of the fish storage tanks (refrigerated sea water tanks) and, for each one, indicating the calibration in cubic meters at intervals of 10 cm; and
 - (d) have the true scale clearly indicated on the drawing.
11. Each Contracting Party shall ensure that, every two years, the capacity plan of its authorized vessels is certified correct by the competent authority.

Duties of the Executive Secretary

12. The Executive Secretary
 - (a) maintains a register of all fishing vessels notified in accordance with paragraph 1.a;
 - (b) identifies in the register the authorized vessels, including chartered vessels; and
 - (c) amends the register and any element related to the authorizations following notification by a Contracting Party of any modification.
13. Subject to the appropriate confidentiality requirements, the Executive Secretary shall:
 - (a) post the register referred to in paragraph 12, on a secure portion of the NAFO website available to each Contracting Party;
 - (b) delete from the register any vessel that has not conducted fishing activities in the Regulatory Area for a period of two consecutive years, or that has been classified as IUU.

Article 26 - Chartering Arrangements

1. For the purpose of this Article "chartering Contracting Party" refers to the Contracting Party that holds an allocation as indicated in Annexes I.A and I.B, and "flag state Contracting Party" refers to the Contracting Party in which the chartered vessel is registered.
2. A Contracting Party may authorize all or part of its allocation to be harvested using a chartered authorized vessel entitled to fly the flag of another Contracting Party, subject to the following conditions:
 - (a) the flag State Contracting Party has consented in writing to the chartering arrangement;
 - (b) the charter is limited to one fishing vessel per flag state of the chartering Contracting Party in any calendar year;
 - (c) the duration of the charter does not exceed six months in any calendar year; and
 - (d) the authorized vessel is not a vessel that has previously been identified as having engaged in IUU fishing activities.
3. Without prejudice to the duties of the chartering Contracting Party, flag State Contracting Party shall ensure that the vessel complies with the CEM. This does not nullify the obligations under the CEM of the chartering Contracting Party to which the quota and fishing days have been allocated originally.

4. All catch and by-catch taken by the chartered vessel according to the chartering arrangement shall be attributed to the chartering Contracting Party.
5. The flag State Contracting Party shall not, for the duration of the charter, authorize the chartered vessel to fish any of the flag State Contracting Party's allocations or under another charter at the same time.
6. No transshipment at sea may be carried out without the prior authorization of the chartering Contracting Party, which shall ensure that it is carried out under the supervision of an observer on board.
7. The chartering Contracting Party shall, before the date the charter is effective, provide the following information in writing to the Executive Secretary:
 - a) the name, registration, and flag State of the vessel;
 - b) previous name(s) and flag state(s) of the vessel, if any;
 - c) the name and address of the owner(s) and operators of the vessel;
 - d) a copy of the chartering arrangement and any fishing authorization or licence it has issued to the vessel;
 - e) the allocation assigned to the vessel and the date that the vessel may start to fish that allocation; and
 - f) the duration of the chartering arrangement.
8. The flag State Contracting Party shall notify the Executive Secretary in writing prior to the start of the chartering arrangement of its consent to the charter and provide to the chartered vessel a copy of the notice sent by the Executive Secretary pursuant to paragraph 14.
9. The chartering Contracting Party and the flag State Contracting Party shall both notify the Executive Secretary immediately upon the occurrence of the following events:
 - (a) termination of the charter;
 - (b) suspension of the charter;
 - (c) resumption of a charter that has been suspended;
 - (d) start of fishing operations under the charter; and
 - (e) end of fishing operations under the charter.
10. The flag State Contracting Party shall maintain a separate record of catch and by-catch data from fishing operations pursuant to every charter of a vessel entitled to fly its flag and report them to the chartering Contracting Party and the Executive Secretary.
11. Each chartering Contracting Party shall report to the Executive Secretary by 1 March each year, all relevant information concerning the implementation of chartering arrangements for the previous calendar year notified under this Article, including information on the catch, fishing effort and by-catch of each vessel it has chartered pursuant to this Article.
12. The chartered vessel shall at all times carry a copy of the documentation referred to in paragraph 7.

Duties of the Executive Secretary

13. Upon receipt of the information specified in paragraphs 7 and 8, the Executive Secretary verifies whether the chartering arrangement complies with this Article, and without delay so notifies the Contracting Parties concerned indicating the date on which the chartering arrangement becomes effective.
14. The Executive Secretary circulates without delay to all Contracting Parties the information notified pursuant to paragraph 9 and ensures that the catch and by-catch notified pursuant to paragraph 11 is attributed to the chartering Contracting Party.
15. By 15 August each year, the Executive Secretary submits a report to the Fisheries Commission detailing the chartering arrangements for the preceding calendar year to ensure that the Fisheries Commission has an opportunity to review compliance with the provisions of this Article at each Annual Meeting.

Chapter IV

MONITORING OF FISHERIES

Article 27 - Product Labelling Requirements

1. When processed, all species harvested in the Regulatory Area shall be labelled in such a way that each species and product category is identifiable. All species must be labelled using respectively the following data:
 - (a) the name of the capture vessel;
 - (b) the 3-Alpha Code for each species as listed in Annex I.C;
 - (c) in the case of shrimps the date of capture;
 - (d) the Regulatory Area and Division of fishing; and
 - (e) the product form presentation code as listed in Annex II.K.
2. Labels shall be securely affixed, stamped or written on packaging and be of a size that can be clearly read by inspectors in the normal course of their duties.
3. Labels shall be marked in ink on a contrasting background.
4. Each package shall contain only:
 - (a) one product form category;
 - (b) one division of capture;
 - (c) one date of capture (in the case of shrimps); and
 - (d) one species.

Article 28 – Monitoring of Catch

Recording of Catch and Stowage

1. Each fishing vessel shall:
 - (a) on entering the Regulatory Area, have on board a record in its fishing logbook of the amount of each species of fish on board;
 - (b) accurately record the catch of each tow/set and complete fishing logbook entries as specified in Annex II.A;
 - (c) accurately record in the daily production logbook all product, labelled in accordance with Article 27;
 - (d) ensure that the records referred to in subparagraphs (b) and (c)
 - i) relate to the smallest geographical area for which a quota has been allocated;
 - ii) show the disposition of the catch, including any discards, and
 - iii) include any catch from the Regulatory Area offloaded or transhipped during the current fishing trip; and
 - iv) are retained on board for at least twelve months.
 - (e) record its cumulative production by species in a production logbook which it shall update daily for the preceding day from 0001 hrs (UTC) until 2400 hrs (UTC);
 - (f) keep the production logbook on board until the vessel has been unloaded completely;
 - (g) with due regard for safety and navigational responsibilities of the master, stow all catch taken in the NAFO Regulatory Area separately from all catch taken outside the NAFO Regulatory Area and ensure that such separation is clearly demarcated using plastic, plywood or netting;
 - (h) maintain a stowage plan that shows the location and quantity of each species clearly showing separate locations and quantity of catches of the same species in the holds expressed as product weight in kilograms;
 - (i) maintain a stowage plan for shrimp that specifies the location in the hold of shrimp taken in Division 3L and in Division 3M that includes the quantity of shrimp in kilograms, by Division;
 - (j) daily update the stowage plan for the preceding day from 0001 to 2400 hrs (UTC);

- (k) keep the stowage plan on board until the vessel has been unloaded completely.

Catch reporting

2. Every fishing vessel shall transmit electronically to its FMC the following reports in accordance with the format and the content prescribed for each type of report in Annex II.D and Annex II.F:
 - (a) catch on entry (COE): quantity of catch on board by species upon entry into the Regulatory Area, transmitted at least six (6) hours in advance of the vessel's entry;
 - (b) catch on exit (COX): quantity of catch onboard by species upon exit from the Regulatory Area transmitted at least six (6) hours in advance of the vessel's exit;
 - (c) catch report (CAT): quantity of catch of all species of the day preceding the report, by Division, including nil catch returns, sent daily before 1200 hours UTC;
 - (d) catch on board (COB): for any vessel fishing shrimp in Division 3L, prior to entry or exit from Division 3L, transmitted one hour prior to crossing the boundary of Division 3L;
 - (e) transshipment (TRA):
 - i) by donor vessel, transmitted at least twenty four (24) hours in advance of the transshipment; and
 - ii) by receiving vessel, no later than one (1) hour after the transshipment.
 - (f) port of landing (POR): by a vessel that has received a transshipment at least twenty four (24) hours in advance of any landing;
 - (g) catch of species listed in Annex I.C for which the total live weight on board is less than 100 kg, may be reported using the 3 alpha code MZZ (marine species not specified), except in the case of sharks. All sharks shall be reported at the species level under their corresponding 3 alpha code, to the extent possible. When species specific reporting is not possible, shark species shall be recorded as either large sharks (SHX) or dogfishes (DGX), as appropriate and in accordance with the 3-alpha codes presented in Annex I.C.

These reports may be cancelled using the format specified in Annex II.F(8). If any of these reports is subject to correction, a new report must be sent without delay after Cancel report within time limits set out in this paragraph.

In case the flag State FMC accepts the cancellation of a report from its vessels it shall communicate it to the Executive Secretary without delay.

3. Each Contracting Party shall ensure that its FMC, immediately upon receipt, transmits electronically the reports referred to in paragraph 2 to the Executive Secretary in the format prescribed in Annex II.D.

Catch and Fishing Effort Reporting by Contracting Parties

4. Each Contracting Party shall 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.

Duties of the Executive Secretary

5. The Executive Secretary:
 - (a) assigns sequential numbers to the reports of each Contracting Party and transmits them to Contracting Parties with an inspection presence in the Regulatory Area as soon as possible;
 - (b) without delay transmits each port of landing report (POR) to the flag State Contracting Party of the receiving vessel and, in conformity with Annex II.B, sends it to all Contracting Parties;
 - (c) upon request, confirms receipt of all electronic reports (RET);
 - (d) no later than 10 days after the end of each calendar month, collates the information received pursuant to paragraph 4 and circulates it together with aggregate catch statistics by stock area to all Contracting Parties.

Article 29 - Vessel Monitoring System (VMS)

VMS data and costs

1. Every fishing vessel operating in the Regulatory Area shall be equipped with a satellite monitoring device capable of continuous reporting of position that automatically transmits to its land-based Fisheries Monitoring Centre (FMC), no less frequently than once an hour, the following VMS data:
 - (a) vessel identification;
 - (b) most recent vessel position, by latitude and longitude, having an error tolerance margin no greater than 500 metres and a confidence interval of 99%;
 - (c) UTC date and time of the fixing of the position; and
 - (d) vessel course/heading and speed.
2. The flag State Contracting Party shall ensure that its FMC:
 - (a) receives the transmissions referred to in paragraph 1 and records them using the following 3 letter codes:
 - i. "ENT", first VMS data report transmitted by each vessel upon entering the Regulatory Area;
 - ii. "POS", every subsequent VMS data report transmitted by each vessel from within the Regulatory Area; and
 - iii. "EXI", first VMS data report transmitted by each vessel upon exiting the Regulatory Area.
 - (b) is equipped with computer hardware and software for automatic data processing and electronic data transmission and applies back-up and recovery procedures and records the data received from fishing vessels in computer readable form that it maintains for no less than three years.
 - (c) notifies the Executive Secretary of the name, address, telephone, telex, e-mail or facsimile numbers of its FMC and any subsequent changes without delay.
3. Each Contracting Party shall assume all costs associated with its own Vessel Monitoring System.

Failure of a device

4. Where an inspector observes a fishing vessel in the Regulatory Area and has not received data in accordance with paragraph 1, 2 or 8 the inspector shall inform the master of the vessel and the Executive Secretary.
5. The flag State Contracting Party shall ensure that the master or the owner of a fishing vessel entitled to fly its flag or its representative is informed when the vessel's satellite monitoring device appears to be defective or non-functioning.
6. Where the satellite monitoring device fails, the master shall ensure it is repaired or replaced within one month following such failure, or, where a fishing trip lasts more than one month, the repair or the replacement is completed upon the vessel's next entry into port.
7. No fishing vessel may commence a fishing trip with a defective satellite monitoring device.
8. Every fishing vessel operating with a defective satellite monitoring device, shall transmit, at least once every 4 hours, the VMS data to its flag State FMC by other available means of communication, in particular, satellite, email, radio, facsimile or telex.

Transmission of VMS data

9. The flag State Contracting Parties shall ensure that:
 - (a) its FMC transmits VMS data reports and messages to the Executive Secretary as soon as possible, but no later than 24 hours after it receives them and may authorize fishing vessels entitled to fly its flag to transmit VMS data reports by satellite, email, radio, facsimile or telex, direct to the Executive Secretary; and
 - (b) the VMS data reports and messages transmitted to the Executive Secretary are in conformity with the data exchange format set out in Annex II.E and further described in Annex II.D.

Duties of the Executive Secretary

10. The Executive Secretary:
 - (a) upon request, confirms receipt of electronic reports using a return message coded "RET";

- (b) makes available as soon as possible the VMS data and messages to all Contracting Parties with an inspection presence in the Regulatory Area;
- (c) treats all VMS data reports and messages in conformity with Annex II.B;
- (d) makes VMS data available in a summary form, that does not include the vessel's identification, to the Scientific Council and other NAFO Constituent bodies to allow them to carry out their mandated responsibilities;
- (e) upon determining that a vessel has failed to transmit two consecutive position VMS data reports or messages as specified in paragraph 1, so notifies the FMC of the flag State Contracting Party without delay;
- (f) upon being informed by an inspector that data has not been received for a fishing vessel in the Regulatory Area in accordance with paragraph 1 and 8, immediately informs the flag State Contracting Party of the vessel; and
- (g) upon request, provides the NAFO VMS data for Search and Rescue and maritime safety purposes as required.

Use of VMS Data for Search and Rescue

11. Any Contracting Party may use NAFO VMS data for search and rescue or for the purpose of maritime safety.

Chapter V

OBSERVER SCHEME

Article 30 - Observer Program

A. General provisions

Duty to Carry Observer

1. Subject to Article 30.B.1 every fishing vessel shall at all times in the Regulatory Area carry at least one independent and impartial observer.

Duties of the flag State Contracting Party

2. Every flag State Contracting Party shall provide to the Executive Secretary a list of the observers it intends to deploy to the vessels entitled to fly its flag operating in the Regulatory Area and shall ensure that the observers on board such vessels carry out only the following duties:
 - (a) monitor compliance with the CEM, in particular verify logbook entries including the composition of catch by species, quantities, live and processed weight; and hail and VMS reports;
 - (b) maintain detailed records of the daily activity of the vessel whether fishing or not;
 - (c) for each haul, record the gear type, mesh size, attachments, catch and effort data, coordinates, depth, time of gear on the bottom, catch composition, discards and retained undersized fish;
 - (d) monitor the functioning of the satellite tracking system and report on any interruptions or interference therewith;
 - (e) use a pre-agreed code to report to an inspection vessel within 24 hours, any infringement of the CEM;
 - (f) perform such scientific work as the Fisheries Commission may request; and
 - (g) submits to the flag State Contracting Party and to the Executive Secretary, within 30 days following completion of a deployment, a report detailing the data recorded pursuant to this paragraph.
3. Each vessel shall provide food and accommodation to the observer of a standard no less than that provided to the crew.
4. The master shall extend such co-operation and assistance as may be required to enable the observer to carry out the observer's duties. Such cooperation shall include providing the observer with such access as may be required to the catch retained onboard, including such catch as the vessel may intend to discard.

Fishing Vessel without Observer

5. Where, contrary to paragraph A.1, a fishing vessel is not carrying an observer, any other Contracting Party may, with the consent of the flag State Contracting Party, deploy an observer to the vessel who may remain onboard until the Flag State Contracting Party deploys an observer to the vessel.

Costs

6. Subject to any arrangement with another Contracting Party, each Contracting Party shall bear the costs of remunerating every observer it has deployed.

Duties of the Executive Secretary

7. The Executive Secretary, upon request, provides to any Contracting Party, a copy of the report referred to in paragraph 2(g), providing daily catch totals by species and division instead of by individual hauls and co-ordinates.

B. Electronic Reporting

1. (a) Only vessels of Contracting Parties with functional VMS systems that have the necessary technical facilities in place to send electronic "observer reports" and "catch reports" are allowed to apply the provisions laid down in this chapter.
- (b) However, by way of derogation from these measures a Contracting Party may withdraw observers from vessels applying the provisions of this chapter on the condition that the technical facilities on board the vessel necessary to send electronic "observer reports" and "catch reports" have been tested with the NAFO Secretariat and Contracting Parties with an inspection presence in the Regulatory Area.
- (c) The testing of this exchange shall be deemed successful once data exchanges have been completed with all recipients at a 100% reliability rate.
- (d) A Contracting Party with a vessel applying the provisions of this chapter shall withdraw the observer for no more than 75% of the time that the vessel spends in the Regulatory Area during the year.

Duties of the flag State Contracting Party

2. Each Contracting Party that intends to apply paragraph B.1 shall:
 - (a) no later than 30 days prior to the start of its fishing season, notify the Executive Secretary of its intention and, before it authorizes a vessel to operate in accordance with this Article, of the name of such vessel and the period of time during which it will not carry an observer.
 - (b) ensure that, for each fishery in which the fishing vessels entitled to fly its flag operating pursuant to this Article are engaged, there is a balance between fishing vessels carrying observers and fishing vessels not carrying observers.
3. Where an inspector issues a notice of an infringement to a fishing vessel applying this Article that is not carrying an observer at the time of the notice, the flag State Contracting Party shall deem the infringement a serious infringement for the purpose of Article 38.1 and, where it does not require the fishing vessel to proceed immediately to port pursuant to Article 38.5, it shall deploy an observer to the fishing vessel without delay.

Report to STACTIC

4. Each Contracting Party applying Article 30.B shall submit to the Executive Secretary by 1 March each year for the previous calendar year a report containing the following information:
 - (a) compliance overall and notably comparison between vessels with and without observers;
 - (b) costs or savings for the industry and for the authorities of the Contracting Party (including those with an inspection presence);
 - (c) interaction with traditional means of control; and
 - (d) technical functioning of the Scheme and reliability.

Costs

5. Subject to a different arrangement with another Contracting Party, each Contracting Party shall pay its own costs of applying this Article.

Daily reports by the Observer and the Master

6. The observer on board a vessel applying this Article shall:
 - (a) in addition to the duties described in Article 30.A.2, transmit daily in accordance with Annex II.G, the OBR report to the flag State Contracting Party FMC which shall in turn, no later than 12:00 UTC of the day following its receipt, transmit it to the Executive Secretary; and

- (b) where electronic data transfer is disabled, daily transmit the report by another means and maintain a written log available to inspectors of the data so transmitted.
- 7. The master of a vessel applying this Article shall:
 - (a) in accordance with Annex II.F(3), transmit daily the CAT report to the Flag State Contracting Party FMC and ensure that the catch so reported corresponds to the log book entries. The FMC shall in turn, no later than 12:00 UTC of the day following its receipt, transmit the report to the Executive Secretary; and
 - (b) where electronic data transfer is disabled, daily transmit the report by another means and maintain, available to inspectors, a written log of the data so transmitted.
- 8. The daily OBR and CAT reports shall set out by Division the amounts of catch retained on board by species, the catch discarded and the undersized catch.

Duties of the Executive Secretary

- 9. The Executive Secretary:
 - (a) transmits as soon as possible to all Contracting Parties the information received pursuant to subparagraph B.2(a);
 - (b) receives OBR and CAT reports pursuant to paragraphs B.6 and 7, and where any such report has not been received for 2 consecutive days, notifies the flag State Contracting Party and any Contracting Party with an inspection presence in the Regulatory Area;
 - (c) compiles the data received pursuant to paragraph B.1 in the format set out in Annex II.H, treats it in accordance with Annex II.B and transmits it weekly to each Contracting Party with an inspection presence in the Regulatory Area; and
 - (d) provides to STACTIC an assessment of issues relevant to the exchange of data pursuant to this Article, including compatibility, collection, compilation, transmission, and incremental cost to the operation of the Secretariat.

Chapter VI

JOINT INSPECTION AND SURVEILLANCE SCHEME

Article 31 - General Provisions

- 1. Inspection and surveillance shall be carried out by inspectors assigned by a Contracting Party to the Joint Inspection and Surveillance Scheme (hereinafter, "Scheme").
- 2. Each Contracting Party with an inspection or surveillance presence in the Regulatory Area shall provide to each inspection platform, upon its entry into the Regulatory Area, a list of sightings and boardings it has conducted in the previous ten-day period including the date, coordinates and any other relevant information.
- 3. Each Contracting Party shall ensure that every inspection platform entitled to fly its flag operating in the Regulatory Area maintains secure contact, daily where possible, with every other inspection platform operating in the Regulatory Area, to exchange information necessary to co-ordinate their activities.
- 4. Inspectors visiting a research vessel shall note the status of the vessel, and shall limit inspection procedures to those necessary to ascertain that the vessel is conducting activities consistent with its Research Plan. Where the inspectors have reasonable grounds to suspect the vessel is conducting activities that are not consistent with its Research Plan, the CEM fully apply.
- 5. A Contracting Party may by mutual agreement deploy inspectors it has assigned to the Scheme to an inspection platform of another Contracting Party. It shall so notify the Executive Secretary in advance of such deployment.
- 6. Each Contracting Party with an inspection presence in the Regulatory Area shall seek to ensure its inspectors treat vessels operating in the Regulatory Area on an equitable footing by avoiding a disproportionate number of inspections on vessels entitled to fly the flag of any one Contracting Party. Accordingly, in respect of any quarter-annual period, the number of inspections its inspectors conduct on vessels entitled to fly the flag of another Contracting Party shall, insofar as possible, reflect the proportion of the total fishing activity in the Regulatory Area by vessels entitled to fly the flag of that Contracting Party. This proportion includes, inter alia, the level of catches and vessel days. In determining the frequency of inspections, inspectors may, however, take into account the fishing patterns and compliance record of any fishing vessel.
- 7. A Contracting Party with more than 15 fishing vessels operating at any one time in the Regulatory Area shall during that time:
 - (a) have an inspector or other competent authority present in the Regulatory Area; or
 - (b) have a competent authority present in the territory of a Contracting Party adjacent to the Convention Area; and

- (c) respond without delay to every notice of infringement in the Regulatory Area by a fishing vessel entitled to fly its flag.
- 8. Every Contracting Party shall ensure that, except when inspecting a fishing vessel entitled to fly its flag and in accordance with its domestic law, inspectors do not carry arms when boarding a vessel entitled to fly the flag of another Contracting Party in the Regulatory Area.
- 9. Each Contracting Party shall ensure that, except when inspecting a fishing vessel entitled to fly its own flag and in accordance with its domestic law, inspectors and inspector trainees it has assigned to this Scheme:
 - (a) remain under its operational control;
 - (b) apply the provisions of this Scheme;
 - (c) when carrying out their duties under this Scheme, in relation to vessels entitled to fly the flag of another Contracting Party, refrain from enforcing laws and regulations related to its own exclusive economic zone;
 - (d) observe generally accepted international regulations, procedures and practices relating to the safety of the vessel being inspected and its crew;
 - (e) do not interference with fishing activities or stowage of product and, to the extent practicable, avoid action which would adversely affect the quality of the catch on board; and
 - (f) open containers in a manner that facilitates their prompt resealing, repacking and eventual re-storage.

Article 32 - Notification Requirements

- 1. Each Contracting Party shall, no later than 1 December each year, notify the Executive Secretary of:
 - (a) the names of inspectors and inspector trainees and the name, radio call sign and communication contact information of each inspection platform it has assigned to the Scheme. It shall notify changes to the particulars so notified, whenever possible, no less than 60 days in advance;
 - (b) its provisional plan for assigning inspectors and platforms to this Scheme in the following calendar year; and
 - (c) the particulars for communicating to its competent authority immediate notification of infringements in the Regulatory Area.
- 2. Each Contracting Party shall ensure that each inspection platform it has so assigned notifies the Executive Secretary in advance, of the date, start time and end of each patrol and enters the start and end dates of the patrol in its logbook or equivalent record. Where notification to the Executive Secretary is not possible or practicable, logbook entries or equivalent constitute fulfilment of this requirement.

Duties of the Executive Secretary

- 3. Upon receiving such information, the Executive Secretary:
 - (a) posts the information received from Contracting Parties on the secure part of the NAFO website; and
 - (b) may make suggestions to Contracting Parties for the co-ordination of their deployment of resources to the Scheme.

Article 33 - Surveillance Procedures

- 1. Where an inspector observes in the Regulatory Area a fishing vessel entitled to fly the flag of a Contracting Party for which the position and catch reports do not correspond with the current information available to that inspector, and where an immediate inspection is not practicable, the inspector shall:
 - (a) fill out the Surveillance Report Form set out in Annex IV.B;
 - (b) take images of the vessel and record the position, date and time the image was taken; and
 - (c) without delay electronically transmit the Surveillance Report and images to the flag State Contracting Party of the vessel and to the Executive Secretary.
- 2. Each Contracting Party shall:
 - (a) on receipt of a Surveillance Report concerning a vessel entitled to fly its flag, whenever possible, promptly board the vessel and conduct such investigation as may be necessary to determine appropriate follow-up action.
 - (b) by 1 March, report to the Executive Secretary the action it has taken with regard to each Surveillance Report it has received in the previous calendar year. In cases where the follow-up action results in penal action, any penalties imposed shall be described in specific terms.

Duties of the Executive Secretary

3. The Executive Secretary maintains the Surveillance Reports until follow-up action is concluded by the Flag State Contracting Party of the vessel concerned.

Article 34 - Boarding and Inspection Procedures

Each Contracting Party with an inspection presence in the Regulatory Area shall ensure that its inspectors:

- (a) prior to boarding, notify the fishing vessel of the name of the inspection vessel;
- (b) display, on the inspection vessel and boarding vessel, the pennant depicted in Annex IV.E;
- (c) ensure that during boarding, the inspection vessel remains at a safe distance from fishing vessels;
- (d) do not require the fishing vessel to stop or maneuver when towing, shooting or hauling;
- (e) limit each inspection team to a maximum of four inspectors including any inspection trainee who may accompany the inspection team for training purposes only. Where an inspection trainee accompanies the inspectors, inspectors shall, upon boarding, identify the trainee to the master. The inspection trainee shall simply observe the inspection operation conducted by the authorized inspectors and shall in no way interfere with the activities of the fishing vessel;
- (f) upon boarding, present to the master their NAFO credentials issued by the Executive Secretary in accordance with Annex IV.D; and
- (g) limit inspections to four hours, or the time required for the net to be hauled in and both the net and the catch to be inspected, whichever is longer, except:
 - i. in the case of an infringement; or
 - ii. where the inspector estimates the quantity of catch on board to be different from the quantity of catch recorded in the fishing logbook, in which case the inspector will limit the inspection to one additional hour with a view to verifying calculations and procedures, and re-examining the relevant documentation used to calculate the catch taken in the Regulatory Area and the catch on board the vessel.

Article 35 - Obligations of Master during Inspection

1. Every master of a fishing vessel shall take such measures as may be required to facilitate inspection by:
 - (a) ensuring, where an inspection vessel has signalled that an inspection is about to commence, that any net about to be hauled is not taken on board for at least 30 minutes following the signal from the inspection vessel;
 - (b) upon request by an inspection platform and to the extent compatible with good seamanship, facilitating boarding by the inspectors;
 - (c) providing a boarding ladder in accordance with Annex IV.G;
 - (d) ensuring any mechanical pilot hoist is fit for use in a safe manner including safe access between the hoist to the deck;
 - (e) providing the inspectors access to all relevant areas, decks and rooms, processed and unprocessed catch, nets or other gear, equipment, and any relevant documents which they consider necessary to verify compliance with the CEM;
 - (f) recording and providing to an inspector upon request, coordinates pertaining to the start and end locations of any trial tow conducted in reference to Article 6.3(c);
 - (g) upon request of the inspector, producing registration documents, drawings or descriptions of fish rooms, production logbooks and stowage plans and rendering such assistance as the inspector reasonably requires to ascertain that actual stowage of catch conforms with the stowage plan;
 - (h) taking such action as may be necessary to preserve the integrity of any seal affixed by an inspector and of any evidence remaining on board, until otherwise directed by the inspector of the flag State Contracting Party;
 - (i) ceasing fishing when requested to do so by the inspector pursuant to Article 38.2(d);
 - (j) providing, upon request, the use of the vessel's communication equipment and operator for messages to be sent out and received by the inspectors;
 - (k) at the request of the inspector, removing any part of the fishing gear which appears to be unauthorized under the CEM; and
 - (l) where the inspector has made any entries in the logbooks, providing the inspector with a copy of each page where such entry appears, and at the request of the inspector, signing each page to confirm that it is a true copy.

2. Where the inspectors are unable to communicate with the competent authority of the flag State Contracting Party, pursuant to Article 38.4(b), the master shall not resume fishing until the inspectors have completed the inspection and secured the evidence.

Article 36 - Inspection Report and follow-up

1. Each Contracting Party with an inspection presence in the Regulatory Area shall ensure that its inspectors complete an inspection report in the form set out in Annex IV.A in relation to each inspection and apply the provisions of this Article in relation thereto.
2. For the purpose of the inspection report:
 - (a) a fishing trip is considered current where the inspected vessel has on board catch harvested in the Regulatory Area during the trip;
 - (b) when comparing entries in the production logbook with entries in the fishing logbook the inspector shall convert production weight into live weight guided by conversion factors used by the master;
 - (c) the inspectors shall:
 - i. summarize from logbook records the vessel's catch in the Regulatory Area by species and by Division either for the current fishing trip, or, where requested by the flag State Contracting Party, for a twelve month period;
 - ii. record summaries in section 14 of the inspection report, as well as differences between the recorded catch and their estimates of the catch onboard in section 17;
 - iii. upon completion of the inspection, sign the inspection report and present the inspection report to the master for signature and comment, and to any witness who may wish to submit a statement; and
 - iv. provide a copy of the report to the master, duly noting in the appropriate section of the inspection report any refusal by the master to acknowledge receipt.
3. The inspecting Contracting Party shall:
 - (a) transmit the original inspection report, if possible within 30 days of the inspection, to the flag state Contracting Party of the inspected vessel;
 - (b) where the inspectors issues a notice of an infringement, within 10 days of the inspection vessel's return to port, transmit a copy of the inspection report with supporting documents, including copies of any images recorded, to the flag state Contracting Party of the inspected vessel and to the Executive Secretary. The Executive Secretary and the inspecting Contracting Party shall treat this information as confidential in accordance with Annex II.B;
 - (c) advise the Executive Secretary monthly of the names of vessels inspected in the preceding calendar month for transmission to each relevant flag state Contracting Party.

Use of surveillance and inspection reports

4. Each Contracting Party shall ensure that inspection and surveillance reports prepared by NAFO inspectors have equivalent evidentiary status for establishing facts as inspection and surveillance reports of its own inspectors. However, nothing in this Article requires a Contracting Party to accord greater evidentiary weight to an inspection report of an inspector of another Contracting Party than would be accorded to it in similar proceedings by the inspector's own Contracting Party.
5. Contracting Parties shall cooperate to facilitate judicial or other proceedings initiated as follow-up to a report submitted by an inspector pursuant to the Scheme.

Article 37 - Procedures Relating to Infringements

Each Contracting Party shall ensure that its inspectors upon detecting an infringement of the CEM:

- (a) record the infringement in the inspection report;
- (b) enter and sign a notation in the fishing logbook or other relevant document of the inspected vessel indicating the date, coordinates, and nature of the infringement, make a copy of any relevant entry and request that the master sign each page to verify that it is a true copy of the original;
- (c) record images of any infringing gear or catch, and give one image to the master and attach a second one to the inspection report;
- (d) request that the master remove any part of the fishing gear which appears to be unauthorized under the CEM;
- (e) affix securely the inspection seal depicted in Annex IV.F to any part of the unauthorized fishing gear and duly note the action taken in the inspection report; and

- (f) within 24 hours, transmit to the flag state Contracting Party written notification of the infringement. The notification shall include the information entered in points 16, 18 and 20 of the inspection report, cite the relevant measures and describe in detail the basis for issuing the notice of infringement, and the evidence in support of the notice.

Article 38 - Additional Procedures for Serious Infringements

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) misrecording of catches contrary to Article 28;
 - (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; and
 - (o) presentation of falsified documents or providing false information to an inspector that would prevent a serious infringement from being detected.

Duties and Authority of the Inspectors

2. Where the inspectors cite a vessel for having committed a serious infringement, they shall:
 - (a) seek to notify the competent authority of the Flag State Contracting Party;
 - (b) report the serious infringement to the Executive Secretary;
 - (c) take all measures necessary to ensure security and continuity of the evidence, including, as appropriate, sealing the vessel's hold for further inspection;
 - (d) request that the master cease all fishing activity that appears to constitute a serious infringement.
3. The inspectors may remain on board to provide information and assistance to the inspector designated by the flag State Contracting Party (designated inspector). During this time, the inspectors shall complete the original inspection provided that, following the arrival of the designated inspector, the competent authority of the flag State Contracting Party does not require the inspectors to leave the vessel.

Duties of the flag State Contracting Party

4. Where notified of a serious infringement, the flag State Contracting Party shall:
 - (a) Acknowledge receipt of the notification without delay;
 - (b) Ensure the fishing vessel does not resume fishing until the inspectors have notified the master that they are satisfied that the infringement will not be repeated; and
 - (c) Ensure that the vessel is inspected within 72 hours by an inspector designated by the flag State Contracting Party.

5. Where justified, the Flag State Contracting Party shall, where authorized to do so, require the vessel to proceed immediately to a port for a thorough inspection under its authority in the presence of an inspector from any other Contracting Party that wishes to participate.
6. Where the flag state Contracting Party does not order the fishing vessel to port, it shall provide written justification to the Executive Secretary no later than 3 working days following the notice of infringement.
7. Where the flag State Contracting Party orders the fishing vessel to port, an inspector from another Contracting Party may board or remain onboard the vessel as it proceeds to port, provided that the competent authority of the flag State Contracting Party does not require the inspector to leave the vessel.
8. (a) Where, pursuant to the inspection referred to in paragraph 3, the designated inspector issues a notice of infringement for:
 - i) directed fishing for a stock which is subject to a moratorium;
 - ii) directed fishing for a stock for which fishing is prohibited under Article 6,
 - iii) mis-recording of catch, contrary to Article 28; or
 - iv) repetition of the same serious infringement during a 100 days period or a single fishing trip, whichever is shorter;
 the flag State Contracting Party shall order the vessel to cease all fishing activities and shall forthwith initiate a full investigation.
- (b) In this paragraph, “mis-recording of catches” means a difference of at least 10 tonnes or 20%, whichever is greater, between the inspectors’ estimates of processed catch on board, by species or in total, and the figures recorded in the production logbook, calculated as a percentage of the production logbook figures. In order to calculate the estimate of the catch on board, the inspectors shall apply a stowage factor agreed between them and the designated inspector.
9. (a) Where the flag State Contracting Party is unable to conduct a full investigation in the Regulatory Area, or where the serious infringement is mis-recording of catches, it shall order the vessel to proceed immediately to a port where it shall conduct a full investigation ensuring that the physical inspection and enumeration of total catch on board takes place under its authority;
- (b) Subject to the consent of the flag State Contracting Party, inspectors of another Contracting Party may participate in the inspection and enumeration of the catch.

Duties of the Executive Secretary

10. 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; and
 - (b) 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.

Article 39 – Follow-up to Infringements

1. A flag State Contracting Party that has been notified of an infringement committed by a fishing vessel entitled to fly its flag shall:
 - (a) investigate immediately and fully, including as appropriate, by physically inspecting the fishing vessel at the earliest opportunity;
 - (b) cooperate with the inspecting Contracting Party to preserve the evidence in a form that will facilitate proceedings in accordance with its laws;
 - (c) take immediate judicial or administrative action in conformity with its national legislation against the persons responsible for the vessel flying its flag where the CEM have not been respected; and
 - (d) ensure that sanctions applicable in respect of infringements are adequate in severity to be effective in securing compliance, deterring further infringements and depriving the offenders of the benefits accruing from the infringement.
2. Each Contracting Party shall ensure that in proceedings it has instituted, it treats a notice of an infringement issued pursuant to Article 38.1(l) as if the infringement was against its own inspector.
3. Each Contracting Party shall take enforcement measures with respect to a vessel flying its flag, where it has been established in accordance with domestic law, that the vessel committed a serious infringement listed in Article 38.8.
4. The measures referred to in paragraph 3 and the sanctions referred to in paragraph 1(d) may include the following depending on the gravity of the offence and in accordance with domestic law:
 - (a) fines;

- (b) seizure of the vessel, illegal fishing gear and catches;
 - (c) suspension or withdrawal of authorization to fish; and
 - (d) reduction or cancellation of any fishing allocations.
5. The flag State Contracting Party shall immediately notify the Executive Secretary of the measures taken against its vessel in accordance with paragraphs 3 and 4.

Article 40 - Contracting Party Reports on Inspection, Surveillance and Infringements

1. Each Contracting Party shall annually by 1 March report to the Executive Secretary pursuant to the Scheme:
 - (a) the number of inspections of fishing vessels entitled to fly the flag of each Contracting Party it has conducted in the previous calendar year;
 - (b) the name of every fishing vessel in relation to which its inspectors have issued a notice of infringement including the date and position of the inspection and the nature of the infringement;
 - (c) the number of hours flown by the its surveillance aircraft on patrol, the number of sightings made by such aircraft, the number of surveillance reports it has transmitted and, for each such report, the date, time and position of the sightings;
 - (d) the action it has taken during the previous year concerning every infringement notified to it by a Contracting Party; and
 - (e) differences that it considers significant between records of catches in the logbooks of fishing vessels entitled to fly its flag and the inspectors' estimates of those catches.
2. A Contracting Party that has been notified of a serious infringement referred to in Article 38.8(a), shall provide the Executive Secretary with:
 - (a) as soon as practicable but no later than four months following the notification, a report setting out the progress of the investigation, including details of any action it has taken or has initiated in relation to the infringement; and
 - (b) upon completion of its investigation, a report on final disposition.
3. The reports referred to in subparagraph 1(d) shall indicate the current status of the case (e.g. case pending, under appeal, still under investigation) and describe in specific terms any penalties imposed (e.g. amount of fines, value of forfeited fish and/or gear, written warning given). The Contracting Party shall continue to list such infringement on each subsequent report until it reports the final disposition of the infringement.
4. A Contracting Party shall provide an explanation regarding every infringement concerning which it has taken no action.

Duties of the Executive Secretary

5. The Executive Secretary makes available to all Contracting Parties at the annual meeting reports that summarize the information contained in paragraphs 1 and 2.

Article 41 - Dispute Resolution Regarding the Interpretation or Application of this Scheme

1. Where two or more Contracting Parties disagree on the interpretation or application of this Chapter, they shall consult with each other with a view to resolving their disagreement.
2. Where following consultations the disagreement remains unresolved, the Chair of the Standing Committee on International Control (STACTIC) shall at the request of one of them convene a special meeting of STACTIC to consider the dispute and seek to recommend a resolution to the Contracting Parties concerned.
3. No later than 60 days following its special meeting, STACTIC shall transmit a report to all members of the Fisheries Commission setting out its findings and recommendations.
4. No later than 60 days after receiving the report referred to in paragraph 3, any member of the Fisheries Commission may, by request addressed to the Chair of the Fisheries Commission through the Executive Secretary, ask the Fisheries Commission to convene a special meeting to consider the report and to take appropriate action.
5. Following receipt of the request referred to in paragraph 4, the Fisheries Commission considers whether to convene a special meeting to consider the report.

Chapter VII

PORT STATE CONTROL

Article 42 - Scope

Subject to the right of the port State Contracting Party to impose requirements of its own for access to its ports, the provisions in this Article apply to landings or transshipments in ports of Contracting Parties by fishing vessels flying the flag of another Contracting Party. The provisions apply to landing or transshipment of fish caught in the Regulatory Area, or fish products originating from such fish, that have not been previously landed or offloaded at a port.

This Article also sets out the respective duties of the flag State Contracting Party and obligations of the master of fishing vessels seeking to land catch in a port of a Contracting Party.

Article 43 - Duties of the Port State Contracting Party

1. The port State Contracting Party shall designate ports to which fishing vessels may be permitted access for the purpose of landing or transshipment. It shall transmit to the Executive Secretary a list of these ports. Any subsequent changes to the list shall be notified to the Executive Secretary no less than fifteen days before the change comes into effect.
2. The port State Contracting Party shall establish a minimum prior notification period. The prior notification period should be 3 working days before the estimated time of arrival. However the port State Contracting Party may make provisions for another prior notification period, taking into account, inter alia, distance between fishing grounds and its ports. The port State Contracting Party shall advise the Executive Secretary of the prior notification period.
3. The port State Contracting Party shall designate the competent authority which shall act as the contact point for the purposes of receiving notifications in accordance with Article 45 (1, 2 and/or 3), receiving confirmations in accordance with Article 44.2 and issuing authorizations in accordance with paragraph 6. The port State Contracting Party shall advise the Executive Secretary about the competent authority name and its contact information.
4. The requirements contained in paragraphs 1, 2 and 3 do not apply to a Contracting Party that does not permit any landings or transshipments in its ports by vessels flying the flag of another Contracting Party.
5. The port State Contracting Party shall forward a copy of the form as referred to in Article 45 (1 and 2) without delay to the flag State Contracting Party of the vessel and to the flag State Contracting Party of donor vessels where the vessel has engaged in transshipment operations.
6. Landing or transshipment operations may only commence after authorization has been given by the competent authorities of the port State Contracting Party. Such authorization shall only be given if the confirmation from the flag Contracting Party as referred to in Article 44.2 has been received.
7. By way of derogation from paragraph 6 the port State Contracting Party may authorize all or part of a landing in the absence of the confirmation referred to in paragraph 6. In such cases the fish concerned shall be kept in storage under the control of the competent authorities. The fish shall only be released to be sold, taken over, produced or transported once the confirmation referred to in paragraph 6 has been received. If the confirmation has not been received within 14 days of the landing the port State Contracting Party may confiscate and dispose of the fish in accordance with national rules.
8. The port State Contracting Party shall without delay notify the master of the fishing vessel of its decision on whether to authorize the landing or transshipment by returning a copy of the form PSC 1 or 2 with Part C duly completed. This copy shall also be transmitted to the Executive Secretary without delay.
9. In case of cancellation of the prior notification referred to in Article 45, paragraph 2, the port State Contracting Party shall forward a copy of the cancelled PSC 1 or 2 to the flag state Contracting Party and the Executive Secretary.
10. Unless otherwise required in a recovery plan, the port State Contracting Party shall carry out inspections of at least 15 % of all such landings or transshipments during each reporting year.
11. Inspections shall be conducted by authorized Contracting Party inspectors who shall present credentials to the master of the vessel prior to the inspection.
12. The port State Contracting Party may invite inspectors of other Contracting Parties to accompany their own inspectors and observe the inspection of landings or transshipment operations.
13. An inspection shall involve the monitoring of the entire discharge or transshipment in that port and the port State Contracting Party shall as a minimum:
 - (a) cross-check against the quantities of each species landed or transhipped,
 - i. the quantities by species recorded in the logbook

- ii. catch and activity reports, and
 - iii. all information on catches provided in the prior notification (PSC 1 or 2)
 - (b) verify and record the quantities by species of catch remaining on board upon completion of landing or transshipment;
 - (c) verify any information from inspections carried out pursuant to Chapter VI;
 - (d) verify all nets on board and record mesh size measurements;
 - (e) verify fish size for compliance with minimum size requirements.
14. Each inspection shall be documented by completing form PSC 3 (port State Control inspection form) as set out in Annex IV.C. The inspectors may insert any comments they consider relevant. They shall sign the report and request that the master sign the report. The master may insert any comment he considers relevant and shall be provided with a copy of the report.
 15. The port State Contracting Party shall without delay transmit a copy of each port State Control inspection report and, upon request, an original or a certified copy thereof, to the flag State Contracting Party and to the flag State of any vessel that transhipped catch to the inspected fishing vessel. A copy shall also be sent to the Executive Secretary without delay.
 16. The port State Contracting Party shall make all possible efforts to avoid unduly delaying the fishing vessel and ensure that the vessel suffers the minimum interference and inconvenience and that unnecessary degradation of the quality of the fish is avoided.

Article 44 - Duties of the Flag State Contracting Party

1. The flag State Contracting Party shall ensure that the master of any fishing vessel entitled to fly its flag complies with the obligations relating to masters set out in this Article.
2. The flag State Contracting Party of a fishing vessel intending to land or tranship, or where the vessel has engaged in transshipment operations outside a port, the flag State Contracting Party or parties, shall confirm by returning a copy of the form, PSC 1 or 2, transmitted pursuant to Article 43.5 with part B duly completed, stating that:
 - (a) the fishing vessel declared to have caught the fish had sufficient quota for the species declared;
 - (b) the declared quantity of fish on board has been duly reported by species and taken into account for the calculation of any catch or effort limitations that may be applicable;
 - (c) the fishing vessel declared to have caught the fish had authorization to fish in the areas declared; and
 - (d) the presence of the vessel in the area in which it has declared to have taken its catch has been verified by VMS data.
3. The Flag State Contracting Party shall designate the competent authority, which shall act as the contact point for the purposes of receiving notifications in accordance with Article 43.5 and providing confirmation in accordance with Article 43.6, and communicate this information to the NAFO Secretariat for dissemination to Contracting Parties.

Article 45 - Obligations of the Master of a Fishing Vessel

1. The master or the agent of any fishing vessel intending to make a port call shall notify the competent authorities of the port State Contracting Party within the notification period referred to in Article 43.2. Such notification shall be accompanied by the form provided for in Annex II.L with Part A duly completed as follows:
 - (a) Form PSC 1, as referred to in Annex II.L.A shall be used where the vessel is landing or transshipping its own catch; and
 - (b) Form PSC 2, as referred to in Annex II.L.B, shall be used where the vessel has engaged in transshipment operations. A separate form shall be used for each donor vessel.
 - (c) Both forms PSC 1 and PSC 2 shall be completed in cases where a vessel is intending to land both its own catch and catch that was received through transshipment.
2. A master or the agent may cancel a prior notification by notifying the competent authorities of the port they intended to use. The notification shall be accompanied by a copy of the original PSC 1 or 2 with the word “cancelled” written across it.
3. The master of a fishing vessel shall:
 - (a) co-operate with and assist in the inspection of the fishing vessel conducted pursuant to these procedures and shall not obstruct, intimidate or interfere with the port State inspectors in the performance of their duties;
 - (b) provide access to any areas, decks, rooms, catch, nets or other gear or equipment, and provide any relevant information which the port State inspectors request including copies of any relevant documents.

Article 46 - Duties of the Executive Secretary

1. The Executive Secretary shall without delay post on the NAFO website:
 - (a) the list of designated ports;
 - (b) the prior notification periods established by each Contracting Party;
 - (c) the information about the designated competent authorities in each port State Contracting Party; and,
 - (d) the information about the designated competent authorities in each Flag State Contracting Party.
2. The Executive Secretary shall without delay post on the secure part of the NAFO website:
 - (a) copies of all PSC 1 and 2 forms transmitted by port State Contracting Parties;
 - (b) copies of all inspection reports, as referred to in Annex IV.C (PSC 3 form), transmitted by port State Contracting Parties.
3. All forms related to a specific landing or transshipment shall be posted together.

Article 47 - Serious Infringements

The following infringements shall be considered serious:

- (a) preventing inspectors from carrying out their duties (Article 45.3);
- (b) landing or transshipping in a port not designated in accordance with the provisions of Article 43.1;
- (c) failure to comply with the provisions of Article 45.1;
- (d) landing or transshipping without authorization of the port State as referred to in Article 43.6;

Such infringements shall be followed up according to appropriate national legislation.

The provisions in Article 40 (1), (2) and (3) shall apply.

Chapter VIII

NON-CONTRACTING PARTY SCHEME

Article 48 - Scope and Objectives

1. The purpose of this Scheme is to promote compliance by non-Contracting Party vessels with recommendations established by NAFO and to prevent, deter and eliminate fishing activities by non-Contracting Party vessels that undermine the effectiveness of the Conservation and Enforcement Measures established by the Organization.
2. Nothing in this Scheme shall affect the sovereign rights of Contracting Parties to impose additional measures to promote compliance by NCP vessels, in accordance with international law.
3. Nothing in this Scheme shall be interpreted to prevent a port State Contracting Party from allowing a non-Contracting Party vessel entry into its ports for the purpose of conducting an investigation of, or taking appropriate enforcement action against the vessel.
4. This Scheme shall be interpreted in a manner consistent with international law, including the rights of port access in case of force majeure or distress in accordance with the United Nations Law of the Sea, and the principles, rights and obligations in WTO agreements, and be implemented in a fair and transparent manner.

Article 49 - Sightings and Identifications of non Contracting Party vessels / Presumption of NCP vessels undermining NAFO Conservation and Enforcement Measures

1. A non-Contracting Party vessel that has been sighted or by other means identified by a Contracting Party as engaging in fishing activities in the Regulatory Area is presumed to be undermining the effectiveness of Conservation and Enforcement Measures. In the case of any transshipment activities involving a sighted non-Contracting Party vessel, inside or outside the Regulatory Area, the presumption of undermining Conservation and Enforcement Measures applies to any other non-Contracting Party vessel that has engaged in such activities with that vessel.
2. For the purposes of paragraph 1, recognizing the adjacent boundary of the NRA with the Convention Area of North East Atlantic Fisheries Commission (NEAFC); the existence of stocks that straddle the boundary between these areas; and the global nature of

IUU vessel activities, a non-Contracting Party vessel that has been placed on the NEAFC IUU list is presumed to be engaging in fishing activities in the NRA and thereby undermining the effectiveness of Conservation and Enforcement Measures.

3. Information regarding sightings or identifications as specified in paragraph 1 shall be immediately transmitted to the Secretariat. For sightings, the Surveillance Report provided in Annex IV.B shall be used. The Secretariat shall then transmit this information to all Contracting Parties and other relevant Regional Fisheries Management Organizations within one business day of receiving this information, and to the flag State as soon as possible.
4. The Contracting Party shall attempt to inform the vessel that it has been sighted or identified engaging in fishing activities, and is accordingly presumed to be undermining the Conservation and Enforcement Measures, and that this information will be distributed to all Contracting Parties, other Regional Fisheries Management Organizations and to the flag State of the vessel.

Article 50 - Inspections at Sea

1. NAFO inspectors shall, if appropriate, request permission to board non-Contracting Party vessels that are sighted engaging in fishing activities in the Regulatory Area. If the vessel consents to be boarded the inspectors' findings shall be transmitted to the Secretariat without delay. The Secretariat shall transmit this information to all Contracting Parties and other relevant Regional Fisheries Management Organizations within one business day of receiving this information, and to the Flag State as soon as possible. The non-Contracting Party vessel that is boarded shall be provided with a copy of the findings of the NAFO inspectors.
2. Where evidence so warrants, a Contracting Party may take such action as may be appropriate in accordance with international law.

Article 51 - Entry and Inspection in Port

1. Masters of non-Contracting Party vessels intending to call into a port shall notify the competent authority of the port State Contracting Party in accordance with the provisions of Article 45. The port State Contracting Party shall forward without delay this information to the flag State of the vessel and to the Executive Secretary.
2. The port State Contracting Party shall prohibit the entry into its ports of vessels that have not given the required prior notice and provided the information referred to in paragraph 1. The vessel shall in any case not be allowed to enter the port unless a confirmation issued by the flag State in accordance with the provisions in Article 44.2 is presented.
3. When a non-Contracting Party vessel referred to in Article 45.1 enters a port of any Contracting Party, it shall be inspected by authorized Contracting Party officials knowledgeable of the Conservation and Enforcement measures (and this Scheme), and shall not be allowed to land or tranship until this inspection has taken place. Such inspections shall include the vessels documents, log books, fishing gear, catch on board any other matter relating to the vessels activities in the Regulatory Area. The inspection shall be documented by at least completing the inspection form provided in Annex IV.C.
4. Information on the results of all inspections of non-Contracting Party vessels conducted in the ports of Contracting Parties, and any subsequent action, shall without delay be sent to the Executive Secretary who shall post the information on the secured part of the NAFO website and inform the flag State, relevant RFMOs and other Contracting Parties.

Article 52 - Fishing Activities

1. Contracting Parties shall ensure that their vessels do not receive or deliver transhipments of fish to or from a non-Contracting Party vessel referred to in Article 49 or engage in joint fishing operations with such vessels.
2. Landings and transhipments of all fish from a non-Contracting Party vessel referred to in Article 49 shall be prohibited in all Contracting Party ports, unless:
 - (a) The vessel establishes that the fish subject to the NAFO Convention were caught outside the Regulatory Area; or
 - (b) The vessel establishes that it has applied all relevant Conservation and Enforcement Measures.
3. Contracting Parties denying landings or transhipments shall inform the vessel, the flag State of the vessel and the NAFO Secretariat of this decision.

Article 53 - Notification of presumed IUU Activities and Establishment of a Provisional List

1. Upon receipt of information from Contracting Parties pursuant to Articles 49 to 52, the Secretariat shall enter the flag State, vessel name and letters and numbers of registration, and other identifying features of the vessel as available, on a Provisional List. The Secretariat shall place the Provisional List on a secure section of the NAFO website.
2. In addition to information submitted from Contracting Parties pursuant to Articles 49 to 52, Contracting Parties may at any time submit to the Secretariat any further information, which might be relevant for the identification of non-Contracting Party vessels that might be carrying out IUU fishing in the Regulatory Area.

3. At the same time, the Executive Secretary shall, in consultation with the Chair of STACTIC where practicable, advise relevant non-Contracting Parties of the vessels flying their flag that have been included in the Provisional List and provide the following information to the non-Contracting Party:
 - (a) the reasons for the inclusion on the Provisional List and all relevant evidence upon which inclusion of the vessel on the list is based;
 - (b) a copy of the NAFO Conservation and Enforcement Measures, including this Scheme;
 - (c) request that it take measures in accordance with its applicable legislation to ensure that the vessel or vessels in question desist from any activities that undermine the effectiveness of Conservation and Enforcement Measures;
 - (d) a request to report back to NAFO within 30 days from the date the letter is sent on the results of enquiries and/or measures it has taken in respect of the vessel or vessels concerned; and,
 - (e) the dates when STACTIC and the General Council will be considering recommendations with respect to the composition of the IUU List, and an invitation to the non-Contracting Party to attend the meeting of STACTIC and the General Council as an observer, with the opportunity to further respond to the request specified in sub-paragraph (d).
4. The Secretariat shall promptly provide non-Contracting Parties concerned with any additional information received pursuant to Articles 49 to 52 in respect of vessels flying their flag that have already been included on the Provisional List.
5. The Secretariat shall promptly distribute any information received from non-Contracting Parties to all Contracting Parties.
6. If a non-Contracting Party that has received information regarding one of the vessels entitled to fly its flag pursuant to paragraph 2 agrees to a listing the vessel concerned shall be transferred from the Provisional List to the IUU List.

Article 54 - Establishment of the IUU list

1. STACTIC shall consider the Provisional List and as appropriate recommend to the General Council that the vessels either:
 - (a) be removed from the Provisional List;
 - (b) be retained on the Provisional List pending the receipt of further information; or,
 - (c) be transferred to the IUU List.
2. STACTIC shall only consider vessels for inclusion on the IUU list if the period referred to in Article 53.3(d) has elapsed.
3. STACTIC shall undertake a review of the current IUU List and as appropriate recommend to the General Council that vessels are maintained thereon or removed. STACTIC shall only recommend that the General Council remove a vessel from either the Provisional or IUU list if the flag State of the vessel concerned provides satisfactory information to establish that:
 - (a) it has taken effective action in response to the IUU fishing in question, including prosecution and imposition of sanctions of adequate severity;
 - (b) it has taken measures to ensure the granting of the right to the vessel to fly its flag will not result in IUU fishing;
 - (c) the vessel has changed ownership and the new owner can establish the previous owner no longer has any legal, financial, or real interests in the vessel, or exercises control over it and that the new owner does not have any legal, financial or real interest in, or exercise control over, a vessel that is on the IUU list or any equivalent type of list established by other Regional Fisheries Management Organizations;
 - (d) the vessel did not take part in IUU fishing; or,
 - (e) the vessel has sunk, been scrapped, or permanently reassigned for purposes other than for fishing activities.

STACTIC may also recommend that the vessel be removed from the Provisional List or the IUU List if a Contracting Party provides satisfactory evidence that the conditions under (e) have been met.
4. The General Council shall review the recommendations made by STACTIC pursuant to this Article, and shall determine the composition of the IUU List.
5. The Executive Secretary shall place the IUU List on the NAFO website. This list shall include the name and flag state of the vessel and, where available, the IMO number, the previous name(s), the previous flag state(s), the radio call sign.
6. The Secretariat shall transmit the IUU List and any relevant information regarding the List, including the reasons for listing or de-listing each vessel, to the secretariats of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), the North East Atlantic Fisheries Commission (NEAFC) and the South East Atlantic Fisheries Organisation (SEAFO). The Secretariat shall also circulate the IUU List to other regional fisheries management organizations.
7. The Secretariat shall provide to relevant flag States the names of vessels on the IUU List flagged to that state.

8. Upon receipt of NEAFC's IUU List and any relevant information regarding the list, the Secretariat shall circulate this information to the Contracting Parties. Notwithstanding paragraph 2, vessels that have been added to or deleted from the NEAFC IUU List that are flagged to non-Contracting Parties shall be incorporated into or deleted from the NAFO IUU List as appropriate, unless any Contracting Party objects within 30 days of the date of the transmittal by the Secretariat on the grounds that:
 - (a) there is satisfactory information to establish that any of the requirements in paragraph 3 (a)-(d) have been met with regard to a vessel placed on the NEAFC IUU List, or
 - (b) there is satisfactory information to establish that none of the requirements in paragraph 3 (a)-(d) have been met with regard to a vessel taken off the NEAFC IUU List.

In the event of an objection to a NEAFC IUU-listed vessel being incorporated into or deleted from the NAFO IUU List, such vessel shall be placed on the Provisional List. Article 53 shall not apply to vessels placed on the Provisional List pursuant to this paragraph.

Article 55 - Follow-up Action

Contracting Parties shall take all necessary measures to the extent possible in accordance with their applicable legislation with regard to vessels on the IUU List, including:

- (a) prohibiting fishing vessels, support vessels, refueling vessels, the mother-ships and cargo vessels flying their flag to assist vessels on the IUU List in any way, engage in fish processing operations or participate in any transshipment or joint fishing operations with vessels on the IUU List;
- (b) prohibiting the supply of provisions, fuel or other services to vessels on the IUU List.
- (c) prohibiting the entry into their ports of such vessels, except in case of force majeure;
- (d) prohibiting the change of crew, except as required in relation to force majeure;
- (e) refusing authorization of such vessels to fish in waters under their national jurisdiction;
- (f) prohibiting the chartering of such vessels;
- (g) refusing to entitle such vessels to fly their flag;
- (h) prohibiting where traceable the imports of fish coming from such vessels;
- (i) prohibiting the landing of fish coming from such vessels;
- (j) encouraging importers, transporters and other sectors concerned, to refrain from negotiating and from transshipping of fish caught by such vessels;
- (k) collecting and exchanging any appropriate information regarding vessels appearing on the IUU List with other Contracting Parties, non-Contracting Parties and other Regional Fisheries Management Organizations with the aim of detecting, controlling and preventing false import/export certificates regarding fish from such vessels.

Article 56 - Actions vis-à-vis Flag States

1. Contracting Parties shall jointly and/or individually request non-Contracting Parties whose vessels appear on the IUU List to co-operate fully with the Organization in order to avoid undermining the effectiveness of the Conservation and Enforcement Measures adopted pursuant to the Convention.
2. The General Council shall review, at subsequent annual meetings as appropriate, actions taken by such non-Contracting Parties and identify those that have not rectified their fishing activities.
3. Contracting Parties should - to the extent possible, consistent with their international obligations and in accordance with applicable legislation - restrict the export and transfer of their formerly licensed fishing vessels to non-Contracting Parties identified in paragraph 2.

ANNEX I – FISHERIES MANAGEMENT

Annex I.A Annual Quota Table

QUOTA TABLE. Total allowable catches (TACs) and quotas (metric tons) for 2013 of particular stocks in Subareas 1-4 of the NAFO Convention Area. The values listed include quantities to be taken both inside and outside the 200-mile fishing zone, where applicable.

Species	Cod				Redfish					American plaice		Yellowtail
Division/Contracting Party	3L	3M	% of 3M Cod TAC	3NO	3LN	% of 3LN Redfish TAC	3M	3O	Sub-Area 2 and Div. 1F+3K	3LNO	3M	3LNO
Canada		113	0.80	0	2769	42.60	500	6000	0 ^{2,4}	0	0	16575 ⁵
Cuba		522	3.70	-	637	9.80	1750		0 ^{2,4}	-	-	-
Denmark (Faroe Islands and Greenland)		3154	22.35	-	-		69 ¹⁹		0 ^{2,3}	-	-	-
European Union		8049 ²⁵	57.03	0 ¹¹	1185 ²⁶	18.23	7813 ¹²	7000	0 ^{2,3} 0 ^{2,15}	0	0 ¹¹	-
France (St. Pierre et Miquelon)		-		-	-		69 ¹⁹		0 ^{2,4}	-	-	340 ⁵
Iceland		-		-	-		-		0 ^{2,3}	-	-	-
Japan		-		-	-		400	150	0 ^{2,4}	-	-	-
Korea		-		-	-		69 ¹⁹	100	0 ^{2,4}	-	-	-
Norway		1305	9.25	-	-		-		0 ^{2,3}	-	-	-
Russian Federation		913	6.47	0	1870	28.77	9137	6500	0 ^{2,3}	-	0	-
Ukraine								150	0 ^{2,4}			
United States of America		-		-	-		69 ¹⁹		0 ^{2,4}	-	-	-
Others		57	0.40	0	39	0.60	124	100	-	0	0	85 ⁵
TOTAL ALLOWABLE CATCH	*9	14113 ²³	100.0	*9,20	6500 ²⁴	100.0	6500 ⁸	20000	0 ^{10,17}	*21	*9,16	17000 ^{21,22}

Species	Witch		White hake	Capelin	Skates	Greenland halibut	Squid (Illex) ¹	Shrimp	
Division/Contracting Party	3L	3NO	3NO	3NO	3LNO	3LMNO	Sub-areas 3+4	3L	3NO
Canada		0	294	0	1167	1724	N.S. ⁶	7160	
Cuba		-		0		-	510	96	
Denmark (Faroe Islands and Greenland)		-		-		199	-	96	
European Union		0 ¹¹	588	0 ¹¹	4408	6738 ¹⁸	N.S. ⁶ 611 ¹³	480 ¹⁴	
France (St. Pierre et Miquelon)		-		-		188	453	96	
Iceland		-		-		-	-	96	
Japan		-		0		1178	510	96	
Korea		-		-		-	453	96	
96*10Norway		-		0		-	-	96	
Russian Federation		0	59	0	1167	1466	749	96	
Ukraine						-		96	
United States of America		-		-		-	453	96	
Others		0	59	-	258	0 ⁷	794	0	
TOTAL ALLOWABLE CATCH	*9,20	*9	1000 ²⁷	*9,20	7000 ¹⁶	11493	34000 ²⁰	8600	*9

* Ban on fishing in force.

- Any quota listed for squid may be increased by a transfer from any “coastal state” as defined in Article 1, paragraph 3 of the NAFO Convention, provided that the TAC for squid is not exceeded. Transfers made to Contracting Parties conducting fisheries for squid in the Regulatory Area shall be reported to the Executive Secretary, and the report shall be made as promptly as possible.
- The Executive Secretary shall notify without delay all Contracting Parties the dates on which accumulated reported catch taken by vessels of Contracting Parties estimated equal to 50% and then 100% of that allocation.
- Quota to be shared by vessels from Denmark (Greenland and Faroe Islands), European Union, Iceland, Norway and Russia. Catches in the NAFO Convention Area shall be deducted from the quotas allocated in the NEAFC Convention Area.
- Quota to be shared by vessels from Canada, Cuba, France (St. Pierre et Miquelon), Japan, Korea, Ukraine and USA.
- Contracting Parties shall inform the Executive Secretary before 01 December 2012 of the measures to be taken to ensure that total catches do not exceed the levels indicated.
- The allocation to these Contracting Parties are as yet undetermined, although their sum shall not exceed the difference between the total of allocations to other Contracting Parties and the TAC (= 29,458 tons).
- In 2005, the previous 935 t “Others” quota was assigned to three Contracting Parties. When the TAC exceeds 30,000 t the next 1,300 t beyond 30,000 will be allocated to an Others quota which can be accessed by those who do not hold Greenland halibut allocation. In deciding the relevant contributions of Contracting Parties to the 1,300 t Others quota, the Fisheries Commission will take into account the fact that some Contracting Parties received a benefit from the 935 t quota which was reassigned in 2005.

8. Not more than 3250 tons may be fished before 01 July 2013.
9. The provisions of Article 6, paragraph 1.b) of the Conservation and Enforcement Measures shall apply.
10. In the case of the NEAFC decision which modifies the level of TAC in 2013 as compared to 2012, these figures shall be accordingly adjusted by NAFO and formalized through a mail vote.
11. Including fishing entitlements of Estonia, Latvia, and Lithuania following their accession to the European Union and in accordance with sharing arrangements of the former USSR quota adopted by the Fisheries Commission at its Annual Meeting in 2003 (FC Working Paper 03/7).
12. Including allocations of 1571 tonnes each for Estonia, Latvia and Lithuania out of a sharing of 20,000 tonnes, following their accession to the European Union.
13. Allocations of 128 tonnes each for Estonia, Latvia and Lithuania as well as 227 tonnes for Poland out of a TAC of 34,000 tonnes, following their accession to the European Union.
14. Including allocations of 96 tonnes each for Estonia, Latvia, Lithuania and Poland out of a TAC of 8,600 tonnes, following their accession to the European Union.
15. Allocation of 17.85% to Lithuania and 2.15% to Latvia following their accession to the European Union.
16. Applicable to 2013 and 2014.
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 377 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 until at least 2013.
21. In lieu of Article 6.1 (a) and (b) of the CEM, the following by-catch provisions for American plaice only in the 3LNO yellowtail fishery shall apply: Contracting Parties fishing for yellowtail flounder allocated under the NAFO allocation table will be restricted to an overall Am. plaice by-catch harvest limit equal to 15% of their total yellowtail fishery as calculated in accordance with Article 6.1 (c). If a Scientific Council projection indicates that this rate is likely to undermine stock recovery or cause an unreasonable delay in reaching B_{lim} , this rate may be subject to a reassessment by the Fisheries Commission.
22. Following the NAFO annual meeting and prior to January 1 of the succeeding year, at the request of the USA, Canada will transfer 1000 tonnes of its 3LNO yellowtail quota to the USA.
23. The allocation key of this stock is based on the 1998 Quota Table. In 1999, a moratorium on cod in Division 3M was declared.
24. The allocation key of this stock is based on the 1997 Quota Table. In 1998, a moratorium on redfish in Division 3LN was declared.
25. Including fishing entitlements of 157 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 536 tons for Poland following their accession to the European Union.
26. Including fishing entitlements of 322 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 apparently was the case in 2002 and 2003 - is taking place, then that Contracting Party shall notify the Executive Secretary. Upon this notification, the TAC is increased to 5,000 metric tons. The Executive Secretary shall notify all Contracting Parties of the increased TAC. Within one month that Contracting Party shall submit a summary of evidence for its conclusion (higher than normal CPUE and any other additional relevant information). 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. In case of a positive vote, the TAC is confirmed to be 5,000 metric tons. In case of a negative vote, the TAC is 1,000 metric tons and catches between the notification of high availability and the notification to Contracting Parties of the result of the vote will not be accounted for the catch limitation provided in Article 5 of the NCEM.

Annex I.B
Effort Allocation Scheme for Shrimp Fishery in the
NAFO Regulatory Area Div. 3M, 2013

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

¹When 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 I.C List of Species

Common English Name	Scientific Name	3-Alpha Code	Common English Name	Scientific Name	3-Alpha Code
Groundfish			Groundfish (continued)		
Atlantic Cod	<i>Gadus morhua</i>	COD	Polar cod	<i>Boreogadus saida</i>	POC
Haddock	<i>Melanogrammus aeglefinus</i>	HAD	Roundnose grenadier	<i>Coryphaenoides rupestris</i>	RNG
Atlantic redfishes	<i>Sebastes sp.</i>	RED	Roughhead grenadier	<i>Macrourus berglax</i>	RHG
Golden redfish	<i>Sebastes marinus</i>	REG	Sandeels (=Sand Lances)	<i>Ammodytes sp.</i>	SAN
Beaked redfish (deepwater)	<i>Sebastes mentella</i>	REB	Sculpins	<i>Myoxocephalus sp.</i>	SCU
Acadian redfish	<i>Sebastes fasciatus</i>	REN	Scup	<i>Stenotomus chrysops</i>	SCP
Silver hake	<i>Merluccius bilinearis</i>	HKS	Tautog	<i>Tautoga onitis</i>	TAU
Red hake*	<i>Urophycis chuss</i>	HKR	Tilefish	<i>Lopholatilus chamaeleonticeps</i>	TIL
Pollock (=Saithe)	<i>Pollachius virens</i>	POK	White hake*	<i>Urophycis tenuis</i>	HKW
American plaice	<i>Hippoglossoides platessoides</i>	PLA	Longfin hake	<i>Urophycis chesteri</i>	GPE
			Threebeard rockling	<i>Gaidropsarus ensis</i>	GDE
Witch flounder	<i>Glyptocephalus cynoglossus</i>	WIT	Wolffishes (NS)	<i>Anarhichas sp.</i>	CAT
			Atlantic wolffish	<i>Anarhichas lupus</i>	CAA
Yellowtail flounder	<i>Limanda ferruginea</i>	YEL	Spotted wolffish	<i>Anarhichas minor</i>	CAS
			Northern wolffish	<i>Anarhichas denticulatus</i>	CAB
Greenland halibut	<i>Reinhardtius hippoglossoides</i>	GHL	Groundfish (NS)		GRO
Atlantic halibut	<i>Hippoglossus hippoglossus</i>	HAL	Pelagics		
Winter flounder	<i>Pseudopleuronectes americanus</i>	FLW	Atlantic herring	<i>Clupea harengus</i>	HER
Summer flounder	<i>Paralichthys dentatus</i>	FLS	Atlantic mackerel	<i>Scomber scombrus</i>	MAC
Windowpane flounder	<i>Scophthalmus aquosus</i>	FLD	Atlantic butterfish	<i>Peprilus triacanthus</i>	BUT
Flatfishes (NS)	<i>Pleuronectiformes</i>	FLX	Atlantic menhaden	<i>Brevoortia tyrannus</i>	MHA
American angler (=Goosefish)	<i>Lophius americanus</i>	ANG	Atlantic saury	<i>Scomberesox saurus</i>	SAU
Atlantic searobins	<i>Prionotus sp.</i>	SRA	Bay anchovy	<i>Anchoa mitchilli</i>	ANB
Atlantic tomcod	<i>Microgadus tomcod</i>	TOM	Bluefish	<i>Pomatomus saltatrix</i>	BLU
Blue antimora	<i>Antimora rostrata</i>	ANT	Crevalle jack	<i>Caranx hippos</i>	CVJ
Blue whiting	<i>Micromesistius poutassou</i>	WHB	Frigate tuna	<i>Auxis thazard</i>	FRI
Cunner	<i>Tautoglabrus adspersus</i>	CUN	King mackerel	<i>Scomberomourus cavalla</i>	KGM
Cusk (=Tusk)	<i>Brosme brosme</i>	USK	Atlantic Spanish mackerel	<i>Scomberomourus maculatus</i>	SSM
Greenland cod	<i>Gadus ogac</i>	GRC	Sailfish	<i>Istiophorus platypterus</i>	SAI
Blue ling	<i>Molva dypterygia</i>	BLI	White marlin	<i>Tetrapturus albidus</i>	WHM
Ling	<i>Molva molva</i>	LIN	Blue marlin	<i>Makaira nigricans</i>	BUM
Lumpfish (=Lumpsucker)	<i>Cyclopterus lumpus</i>	LUM	Swordfish	<i>Xiphias gladius</i>	SWO
Northern kingfish	<i>Menticirrhus saxatilis</i>	KGF	Albacore tuna	<i>Thunnus alalunga</i>	ALB
Northern puffer	<i>Sphoeroides maculatus</i>	PUF	Atlantic bonito	<i>Sarda sarda</i>	BON
Eelpouts (NS)	<i>Lycodes sp.</i>	ELZ	Little tunny	<i>Euthynnus alletteratus</i>	LTA
Ocean pout	<i>Macrozoarces americanus</i>	OPT	Bigeye tunny	<i>Thunnus obesus</i>	BET

Common English Name	Scientific Name	3-Alpha Code	Common English Name	Scientific Name	3-Alpha Code
Pelagics (continued)			Other Fish (continued)		
Northern bluefin tuna	<i>Thunnus thynnus</i>	BFT	Spotted weakfish	<i>Cynoscion nebulosus</i>	SWF
Skipjack tuna	<i>Katsuwonus pelamis</i>	SKJ	Squeteague (Gray Weakfish)	<i>Cynoscion regalis</i>	STG
Yellowfin tuna	<i>Thunnus albacares</i>	YFT	Striped bass	<i>Morone saxatilis</i>	STB
Tunas (NS)	Scombridae	TUN	Sturgeons (NS)	Acipenseridae	STU
Pelagic fish (NS)		PEL	Tarpon	<i>Tarpon (=megalops) atlanticus</i>	TAR
Other Fish			Trouts (NS)		
Alewife	<i>Alosa pseudoharengus</i>	ALE	White perch	<i>Morone americana</i>	PEW
Amberjacks	<i>Seriola sp.</i>	AMX	Alfonsinos (NS)	<i>Beryx sp.</i>	ALF
American conger	<i>Conger oceanicus</i>	COA	Spiny (=picket) dogfish	<i>Squalus acantias</i>	DGS
American eel	<i>Anguilla rostrata</i>	ELA	Dogfishes (NS)	<i>Squalidae</i>	DGX
Atlantic hagfish	<i>Myxine glutinosa</i>	MYG	Sand Tiger shark	<i>Odontaspis taurus</i>	CCT
American shad	<i>Alosa sapidissima</i>	SHA	Porbeagle	<i>Lamna nasus</i>	POR
Argentines (NS)	<i>Argentina sp.</i>	ARG	Shortfin mako shark	<i>Isurus oxyrinchus</i>	SMA
Atlantic croaker	<i>Micropogonias undulatus</i>	CKA	Dusky shark	<i>Carcharhinus obscurus</i>	DUS
Atlantic needlefish	<i>Strongylura marina</i>	NFA	Great Blue shark	<i>Prionace glauca</i>	BSH
Atlantic salmon	<i>Salmo salar</i>	SAL	Large sharks (NS)	<i>Squaliformes</i>	SHX
Atlantic silverside	<i>Menidia menidia</i>	SSA	Atlantic Sharpnose shark	<i>Rhizoprionodon terraenova</i>	RHT
Atlantic thread herring	<i>Opisthonema oglinum</i>	THA	Black Dogfish	<i>Centroscyllium fabricii</i>	CFB
Baird's slickhead	<i>Alepocephalus bairdii</i>	ALC	Boreal (Greenland) shark	<i>Somnousus microcephalus</i>	GSK
Black drum	<i>Pogonias cromis</i>	BDM	Basking shark	<i>Cetorhinus maximus</i>	BSK
Black seabass	<i>Centropristis striata</i>	BSB	Skates (NS)	<i>Raja sp.</i>	SKA
Blueback herring	<i>Alosa aestivalis</i>	BBH	Little skate	<i>Leucoraja erinacea</i>	RJD
Capelin	<i>Mallotus villosus</i>	CAP	Arctic skate	<i>Amblyraja hyperborea</i>	RJG
Chars (NS)	<i>Salvelinus sp.</i>	CHR	Barndoor skate	<i>Dipturus laevis</i>	RJL
Cobia	<i>Rachycentron canadum</i>	CBA	Winter skate	<i>Leucoraja ocellata</i>	RJT
Common (Florida) pompano	<i>Trachinotus carolinus</i>	POM	Thorny skate (Starry Ray)	<i>Amblyraja radiata</i>	RJR
Gizzard shad	<i>Dorosoma cepedianum</i>	SHG	Smooth skate	<i>Malcoraja senta</i>	RJS
Grunts (NS)	<i>Pomadasyidae</i>	GRX	Spinytail skate (Spinetail Ray)	<i>Bathyraja spinicauda</i>	RJQ
Hickory shad	<i>Alosa mediocris</i>	SHH	Finfishes (NS)		FIN
Lanternfish	<i>Notoscopelus sp.</i>	LAX	Invertebrates		
Mullets (NS)	<i>Mugilidae</i>	MUL	Long-finned squid (<i>Loligo</i>)	<i>Loligo pealei</i>	SQL
North atlantic harvestfish	<i>Peprilus alepidotus (=paru)</i>	HVF	Short-finned squid (<i>Illex</i>)	<i>Illex illecebrosus</i>	SQI
Pigfish	<i>Orthopristis chrysoptera</i>	PIG	Squids (NS)	Loliginidae, Ommastrephidae	SQU
Rainbow smelt	<i>Osmerus mordax</i>	SMR	Atlantic razor clam	<i>Ensis directus</i>	CLR
Red drum	<i>Sciaenops ocellatus</i>	RDM	Hard clam	<i>Mercenaria mercenaria</i>	CLH
Red porgy	<i>Pagrus pagrus</i>	RPG	Ocean quahog	<i>Arctica islandica</i>	CLQ
Rough scad	<i>Trachurus lathami</i>	RSC	Soft clam	<i>Mya arenaria</i>	CLS
Sand perch	<i>Diplectrum formosum</i>	PES	Surf clam	<i>Spisula solidissima</i>	CLB
Sheepshead	<i>Archosargus probatocephalus</i>	SPH	Stimpson's surf clam	<i>Spisula polynyma</i>	CLT
Spot croaker	<i>Leiostomus xanthurus</i>	SPT	Clams (NS)	Prionodesmacea, Teleodesmacea	CLX

Common English Name	Scientific Name	3-Alpha Code
Invertebrates (continued)		
Bay scallop	<i>Argopecten irradians</i>	SCB
Calico scallop	<i>Argopecten gibbus</i>	SCC
Iceland scallop	<i>Chlamys islandica</i>	ISC
Sea scallop	<i>Placopecten magellanicus</i>	SCA
Scallops (NS)	Pectinidae	SCX
American cupped oyster	<i>Crassostrea virginica</i>	OYA
Blue mussel	<i>Mytilus edulis</i>	MUS
Whelks (NS)	<i>Busycon sp.</i>	WHX
Periwinkles (NS)	<i>Littorina sp.</i>	PER
Marine molluscs (NS)	Mollusca	MOL
Atlantic rock crab	<i>Cancer irroratus</i>	CRK
Blue crab	<i>Callinectes sapidus</i>	CRB
Green crab	<i>Carcinus maenas</i>	CRG
Jonah crab	<i>Cancer borealis</i>	CRJ
Queen crab	<i>Chionoecetes opilio</i>	CRQ
Red crab	<i>Geryon quinqueedens</i>	CRR
Stone king crab	<i>Lithodes maia</i>	KCT
Marine crabs (NS)	Reptantia	CRA
American lobster	<i>Homarus americanus</i>	LBA
Northern prawn	<i>Pandalus borealis</i>	PRA
Aesop shrimp	<i>Pandalus montagui</i>	AES
Penaeus shrimps (NS)	<i>Penaeus sp.</i>	PEN
Pink (=Pandalid) shrimps	<i>Pandalus sp.</i>	PAN
Marine crustaceans (NS)	Crustacea	CRU
Sea-urchin	<i>Strongylocentrotus sp.</i>	URC
Marine worms (NS)	<i>Polychaeta</i>	WOR
Horseshoe crab	<i>Limulus polyphemus</i>	HSC
Marine invertebrates (NS)	Invertebrata	INV

*In accordance with a recommendation adopted by STACRES at the 1970 Annual Meeting (ICNAF Redbook 1970, Part I, Page 67), hakes of the Genus *Urophycis* are designated as follows for statistical reporting: (a) hake reported from Subareas 1, 2, and 3, and Divisions 4R, S, T and V be designated as white hake, *Urophycis tenuis*; (b) hake taken by line gears or any hake greater than 55 cm standard length, regardless of how caught, from Divisions 4W and X, Subarea 5 and Statistical Area 6 be designated as white hake, *Urophycis tenuis*; (c) Except as noted in (b), other hake of the Genus *Urophycis* taken in Divisions 4W and X, Subarea 5 and Statistical Area 6 be designated as red hake, *Urophycis chuss*

Annex I.D
Minimum Fish Size*

Species	Gilled and gutted fish whether or not skinned; fresh or chilled, frozen, or salted.			
	Whole	<i>Head Off</i>	Head and Tail Off	Head Off and Split
Atlantic Cod	41 cm	27 cm	22 cm	27/25 cm**
Greenland halibut	30 cm	N/A	N/A	N/A
American plaice	25 cm	19 cm	15 cm	N/A
Yellowtail flounder	25 cm	19 cm	15 cm	N/A

* Fish size refers to fork length for Atlantic cod; whole length for other species.

**Lower size for green salted fish.

Annex I.E
Templates for the conduct of exploratory bottom fishing activities

I. CONTRACTING PARTY SUBMITS NOTICE OF INTENT TO UNDERTAKE EXPLORATORY FISHING TO THE NAFO SECRETARIAT

HARVESTING PLAN	MITIGATION PLAN	CATCH MONITORING PLAN	DATA COLLECTION PLAN
<ul style="list-style-type: none"> TARGET SPECIES 	MEASURES TO PREVENT SIGNIFICANT ADVERSE IMPACTS TO VMEs	IDENTIFY AND RECORD ALL SPECIES BROUGHT ONBOARD TO THE LOWEST POSSIBLE TAXONOMIC LEVEL	DATA WILL BE COLLECTED AND REPORTED IN A STANDARDIZED FORMAT
<ul style="list-style-type: none"> FISHING DATES 		100% SATELLITE COVERAGE	
<ul style="list-style-type: none"> DESCRIPTION OF AREA TO BE FISHED 		100% OBSERVER COVERAGE	
<ul style="list-style-type: none"> ANTICIPATED EFFORT 			
<ul style="list-style-type: none"> BOTTOM FISHING GEAR-TYPE(S) USED 			

II. CONTRACTING PARTY SUBMITS TRIP REPORT TO THE NAFO SECRETARIAT

ADVANCED NOTICE OF INTENT TO UNDERTAKE EXPLORATORY FISHING¹

NAME OF VESSEL:

FLAG STATE OF VESSEL:

ANTICIPATED LOCATION(S) OF EXPLORATORY FISHING ACTIVITIES (INCLUDE LAT/LONG):

ANTICIPATED DATES OF EXPLORATORY FISHING ACTIVITIES:

HAS ANY PREVIOUS FISHING BEEN UNDERTAKEN IN ADJACENT AREAS (IF SO, IDENTIFY INFORMATION SOURCE):

DEPTHS EXPECTED TO BE ENCOUNTERED DURING EXPLORATORY FISHING ACTIVITIES:

DO HABITAT MAPS OF THE AREA EXIST (IF SO, PLEASE IDENTIFY SOURCE(S)):

ARE TAXONOMIC KEYS IDENTIFYING POTENTIALLY VULNERABLE SPECIES AVAILABLE (IF SO, IDENTIFY SOURCES(S)):

KNOWN VULNERABLE MARINE ECOSYSTEMS (VMEs)² IN THE LOCATION(S) TO BE FISHED:

MITIGATION MEASURES TO PREVENT SIGNIFICANT ADVERSE IMPACT TO VMEs, IF ENCOUNTERED:

DO BATHYMETRIC MAPS OF THE EXPLORATORY AREA EXIST (IF SO, PLEASE IDENTIFY SOURCE(S)):

DOES ANY FISHERIES SCIENTIFIC INFORMATION IN THE EXPLORATORY AREA EXIST (IF SO, IDENTIFY SOURCE(S)):

TARGET SPECIES BEING SOUGHT:

WHAT GEAR TYPE(S) ARE BEING PROPOSED TO BE USED (PLEASE IDENTIFY) IN WHAT AREAS (INCLUDE LAT/LONG):

¹ EXPLORATORY FISHING IS DEFINED AS ALL BOTTOM FISHING ACTIVITIES IN NEW AREAS OR WITH BOTTOM GEAR NOT PREVIOUSLY USED IN THE AREA CONCERNED AND NOT IDENTIFIED IN ARTICLE 17

² REFER TO FAO INTERNATIONAL GUIDELINES FOR THE MANAGEMENT OF DEEP-SEA FISHERIES IN THE HIGH SEAS

CONTRACTING PARTY EXPLORATORY FISHING¹ TRIP REPORT SUBMITTED TO THE NAFO SCIENTIFIC COUNCIL

NAME OF VESSEL:

FLAG STATE OF VESSEL:

LOCATION(S) OF AREAS FISHED (INCLUDE LAT/LONG):

DATES OF FISHING ACTIVITIES:

DEPTHS ENCOUNTERED DURING FISHING (LIST FOR EACH HAUL INCLUDING LAT/LONG):

TOTAL HOURS/AREA FISHED (LIST FOR EACH HAUL INCLUDING LAT/LONG):

GEAR TYPE(S) USED (PLEASE IDENTIFY) IN WHAT AREAS (INCLUDE LAT/LONG):

VULNERABLE MARINE ECOSYSTEMS (VMEs)² ENCOUNTERED (LIST FOR EACH HAUL INCLUDE LAT/LONG):

MITIGATION MEASURES TAKEN TO PREVENT SIGNIFICANT ADVERSE IMPACT TO VMEs IF ENCOUNTERED:

LIST OF ALL ORGANISMS (RETAINED, BYCATCH) BROUGHT ONBOARD (IDENTIFIED TO THE LOWEST TAXONOMIC UNIT):

LIST OF POTENTIAL VULNERABLE INDICATOR SPECIES³ BROUGHT ONBOARD BY LOCATION (INCLUDE LAT/LONG):

LIST OF ORGANISMS RETAINED FOR **BIOLOGICAL SAMPLING** (E.G., LENGTH-WEIGHT, SEX, AGE), IF ANY:

¹ EXPLORATORY FISHING IS DEFINED AS ALL BOTTOM FISHING ACTIVITIES IN NEW AREAS OR WITH BOTTOM GEAR NOT PREVIOUSLY USED IN THE AREA CONCERNED AND NOT IDENTIFIED IN ARTICLE 17

² REFER TO FAO INTERNATIONAL GUIDELINES FOR THE MANAGEMENT OF DEEP-SEA FISHERIES IN THE HIGH SEAS

³ REFER TO ANNEX 1 FAO INTERNATIONAL GUIDELINES FOR THE MANAGEMENT OF DEEP-SEA FISHERIES IN THE HIGH SEAS

NOTE: DATA REPORTING SHOULD FOLLOW A STANDARDIZED SPECIFICATION, FOR EXAMPLE, AS ADOPTED BY SCIENTIFIC OBSERVER PROGRAMS

A. Fishing Trip Information

Flag state	Vessel Name	Call sign	Date of encounter (ddmmyy)
------------	-------------	-----------	----------------------------

Fishing Gear (e.g. trawl, gill net, hook and line, etc)		Gear Details:	Gear type (e.g. bottom trawl, set gill net, etc.)	
			Gear size (groundrope length, panel length, etc.)	
			Other details (cod end mesh size, # of hooks, etc.)	

		hr	min			degrees		minutes				meters
Tow or Set Start:	GMT Time:				Latitude	N					Depth	
					Longitude	W						
Tow or Set End:	GMT Time:				Latitude	N					Depth	
					Longitude	W						

Live Corals total weight in the haul (kg)*		Live Sponges total weight in the haul (kg)*	
--	--	---	--

[illegible]

--

****Refer to Annex I of the FAO International Guidelines for the Management of Deep-Sea Fisheries in the High Seas. Also, use NAFO Coral and Sponge Identification Guides as appropriate.**

IV. Exploratory Protocol

The Exploratory Protocol shall consist of:

- A harvesting plan which outlines target species, dates and areas. Area and effort restrictions should be considered to ensure fisheries occur on a gradual basis in a limited geographical area.
- A mitigation plan including measures to prevent significant adverse impact to vulnerable marine ecosystems that may be encountered during the fishery.
- A catch monitoring plan that includes recording/reporting of all species caught, 100% satellite tracking and 100% observer coverage. The recording/reporting of catch should be sufficiently detailed to conduct an assessment of activity, if required.
- A data collection plan to facilitate the identification of vulnerable marine ecosystems/species in area fished.

V. Assessment of Bottom Fishing Activities

Assessments should consider the best available scientific and technical information on the current state of fishery resources.

Assessments should address, *inter alia*:

1. Type(s) of fishing conducted or contemplated, including vessels and gear types, fishing areas, target and potential bycatch species, fishing effort levels and duration of fishing (harvesting plan);
2. Existing baseline information on the ecosystems, habitats and communities in the fishing area, against which future changes are to be compared;
3. Identification, description and mapping of VMEs known or likely to occur in the fishing area;
4. Identification, description and evaluation of the occurrence, scale and duration of likely impacts, including cumulative impacts of activities covered by the assessment on VMEs;
5. Consideration of VME elements known to occur in the fishing area;
6. Data and methods used to identify, describe and assess the impacts of the activity, the identification of gaps in knowledge, and an evaluation of uncertainties in the information presented in the assessment;
7. Risk assessment of likely impacts by the fishing operations to determine which impacts on VMEs are likely to be significant adverse impacts; and
8. The proposed mitigation and management measures to be used to prevent significant adverse impacts on VMEs, and the measures to be used to monitor effects of the fishing operations.

VI. List of VME indicator species

Benthic Invertebrate VME Indicator Species			
Common name of taxonomic group	Known Taxon	Family	Phylum
Large-sized sponges			Porifera
	<i>Iophon piceum</i>	Acanthidae	
	<i>Stelletta normani</i>	Ancorinidae	
	<i>Stelletta</i> sp.	Ancorinidae	
	<i>Stryphnus ponderosus</i>	Ancorinidae	
	<i>Axinella</i> sp.	Axinellidae	
	<i>Phakellia</i> sp.	Axinellidae	
	<i>Esperiopsis villosa</i>	Esperiopsidae	
	<i>Geodia barretti</i>	Geodiidae	
	<i>Geodia macandrewii</i>	Geodiidae	
	<i>Geodia phlegraei</i>	Geodiidae	
	<i>Mycale (Mycale) lingua</i>	Mycalidae	
	<i>Thenea muricata</i>	Pachastrellidae	
	<i>Polymastia</i> spp.	Polymastiidae	
	<i>Weberella bursa</i>	Polymastiidae	
	<i>Weberella</i> sp.	Polymastiidae	
	<i>Asconema foliatum</i>	Rosellidae	
	<i>Craniella cranium</i>	Tetillidae	

Stony corals (known seamount species may not occur in abundance in the NRA)	<i>Lophelia pertusa</i> <i>Solenosmilia variabilis</i> <i>Enallopsammia rostrata</i> <i>Madrepora oculata</i>	Caryophylliidae Caryophylliidae Dendrophylliidae Oculinidae	Cnidaria
Small gorgonian corals	<i>Anthothela grandiflora</i> <i>Chrysogorgia</i> sp. <i>Radicipes gracilis</i> <i>Metallogorgia melanotrichos</i> <i>Acanella arbuscula</i> <i>Acanella eburnea</i> <i>Swiftia</i> sp. <i>Narella laxa</i>	Anthothelidae Chrysogorgiidae Chrysogorgiidae Chrysogorgiidae Isididae Isididae Plexauridae Primnoidae	Cnidaria
Large gorgonian corals	<i>Acanthogorgia armata</i> <i>Iridogorgia</i> sp. <i>Corallium bathyrubrum</i> <i>Corallium bayeri</i> <i>Keratoisis ornata</i> <i>Keratoisis</i> sp. <i>Lepidisis</i> sp. <i>Paragorgia arborea</i> <i>Paragorgia johnsoni</i> <i>Paramuricea grandis</i> <i>Paramuricea placomus</i> <i>Paramuricea</i> spp. <i>Placogorgia</i> sp. <i>Placogorgia terceira</i> <i>Calyptrophora</i> sp. <i>Parastenella atlantica</i> <i>Primnoa resedaeformis</i> <i>Thouarella grasshoffi</i>	Acanthogorgiidae Chrysogorgiidae Coralliidae Coralliidae Isididae Isididae Isididae Paragorgiidae Paragorgiidae Plexauridae Plexauridae Plexauridae Plexauridae Plexauridae Primnoidae Primnoidae Primnoidae Primnoidae	Cnidaria
Sea pens	<i>Anthoptilum grandiflorum</i> <i>Funiculina quadrangularis</i> <i>Halipteris</i> cf. <i>christii</i> <i>Halipteris finmarchica</i> <i>Halipteris</i> sp. <i>Kophobelemnnon stelliferum</i> <i>Pennatula aculeata</i> <i>Pennatula grandis</i> <i>Pennatula</i> sp. <i>Distichoptilum gracile</i> <i>Protoptilum</i> sp. <i>Umbellula lindahli</i> <i>Virgularia</i> cf. <i>mirabilis</i>	Anthoptilidae Funiculinidae Halipteridae Halipteridae Halipteridae Kophobelemnidae Pennatulidae Pennatulidae Pennatulidae Protoptilidae Protoptilidae Umbellulidae Virgulariidae	Cnidaria
Tube-dwelling anemones	<i>Pachycerianthus borealis</i>	Cerianthidae	Cnidaria
Erect bryozoans	<i>Eucratea loricata</i>	Eucrateidae	Bryozoa
Sea lilies (Crinoids)	<i>Trichometra cubensis</i> <i>Conocrinus lofotensis</i> <i>Gephyrocrinus grimaldii</i>	Antedonidae Bourgueticrinidae Hyocrinidae	Echinodermata
Sea squirts	<i>Boltenia ovifera</i> <i>Halocynthia aurantium</i>	Pyuridae Pyuridae	Chordata

VII. List of physical VME indicator elements

Physical VME indicator elements	
Seamounts	Fogo Seamounts (Div. 3O, 4Vs) Newfoundland Seamounts (Div. 3MN) Corner Rise Seamounts (Div. 6GH) New England Seamounts (Div. 6EF)
Canyons	Shelf-indenting canyon; Tail of the Grand Bank (Div. 3N) Canyons with head > 400 m depth; South of Flemish Cap and Tail of the Grand Bank (Div. 3MN) Canyons with heads > 200 m depth; Tail of the Grand Bank (Div. 3O)
Knolls	Orphan Knoll (Div. 3K) Beothuk Knoll (Div. 3 LMN)
Southeast Shoal	Tail of the Grand Bank Spawning grounds (Div. 3N)
Steep flanks > 6.4°	South and Southeast of Flemish Cap. (Div. 3 LM)

Annex I.F

Greenland Halibut Management Strategy

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

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

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

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

Annex I.G

Exceptional Circumstances Protocol

1. Background:

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

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

2. Exceptional Circumstances

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

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

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

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

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

3. Implementation/ Next Steps

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

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

ANNEX II – REPORTING

Annex II.A Recording of Catch (Logbook Entries)

FISHING LOGBOOK ENTRIES

Item of Information

Vessel name

Vessel nationality

Vessel registration number

Registration port

Type of gear used

Date - dd-mm-yyyy

Start time of tow (UTC)

Start Position - latitude
- longitude
- Division
- Water Depth

End Position - latitude
- longitude
- Division
- Water Depth

End time of tow (UTC)

Species names (Annex I.C)

Catch of each species (kilograms live weight)

Catch of each species for human consumption in the form of fish

Catch of each species for reduction

Discards of each species

By-Catch limits exceeded Art. 6 para. 2 Y/N

Trial tow Art. 6 para. 3(c) Y/N

Place(s) of transshipment

Date(s) of transshipment

Master's signature

Instructions:

* Please see Annex I.C for Species codes; Annex II.J for applicable gear and attachment codes.

Annex II.B

Rules on Confidentiality

PROVISIONS ON SECURE AND CONFIDENTIAL TREATMENT OF ELECTRONIC REPORTS AND MESSAGES TRANSMITTED PURSUANT TO ARTICLES 28-29 OF THE CONSERVATION AND ENFORCEMENT MEASURES

1. Field of application

The provisions set out below shall apply to all electronic reports and messages transmitted and received pursuant to Articles 28-29 of the Conservation and Enforcement Measures, hereinafter referred to as “reports and messages”.

2. General Provisions

- 2.1 The Executive Secretary and the appropriate authorities of Contracting Parties transmitting and receiving reports and messages shall take all necessary measures to comply with the security and confidentiality provisions set out in sections 3 and 4.
- 2.2 The Executive Secretary shall inform all Contracting Parties of the measures taken in the Secretariat to comply with these security and confidentiality provisions.
- 2.3 The Executive Secretary shall take all the necessary steps to ensure that the requirements pertaining to the deletion of reports and messages handled by the Secretariat are complied with.
- 2.4 Each Contracting Party shall guarantee the Executive Secretary the right to obtain as appropriate, the rectification of reports and messages or the erasure of reports and messages the processing of which does not comply with the provisions of the Conservation and Enforcement Measures.
- 2.5 Notwithstanding the provisions in Article 29.10(b)-(d), the Fisheries Commission may instruct the Executive Secretary not to make available the reports and messages received under Article 28 and 29 to a Contracting Party, where it is established that the Contracting Party in question has not complied with these security and confidentiality provisions.

3. Provisions on Confidentiality

- 3.1 Reports and messages shall be used only for the purposes stipulated in the Conservation and Enforcement Measures. No report or message referred to in section 1 shall be kept in a computer database at the Secretariat unless explicitly provided for in the Conservation and Enforcement Measures.
- 3.2 Each inspecting Contracting Party shall make available reports and messages only to their means of inspection and their inspectors assigned to the Scheme of Joint International Inspection and Surveillance. Reports and messages shall be transmitted to the inspection platforms and inspectors not more than 48 hours prior to entry into the Regulatory Area.
- 3.3 The Executive Secretary shall delete all the original reports and messages referred to in section 1 from the database at the Secretariat by the end of the first calendar month following the year in which the reports and messages have originated. Thereafter the information related to the catch and movement of the fishing vessels shall only be retained by the Executive Secretary, after measures have been taken to ensure that the identity of the individual vessels can no longer be established.
- 3.4 The Executive Secretary shall not make available reports and messages to other parties than those specified explicitly in Article 29.10(b)-(d) of the Conservation and Enforcement Measures.
- 3.5 Inspecting Contracting Parties may retain and store reports and messages transmitted by the Secretary until 24 hours after the vessels to which the reports and messages pertain have departed from the Regulatory Area without re-entry. Departure is deemed to have been effected six hours after the transmission of the intention to exit from the Regulatory Area.

4. Provisions on security

4.1 Overview

Inspecting Contracting Parties and the Secretariat shall ensure the secure treatment of reports and messages in their respective electronic data processing facilities, in particular where the processing involves transmission over a network. Contracting Parties and the Secretariat must implement appropriate technical and organizational measures to protect reports and messages against accidental or unlawful destruction or accidental loss, alteration, unauthorized disclosure or access, and against all inappropriate forms of processing.

The following security issues must be addressed from the outset:

- System access control:
The system has to withstand a break-in attempt from unauthorized persons.
- Authenticity and data access control:
The system has to be able to limit the access of authorized parties to a predefined set of data only.

- Communication security:
It shall be guaranteed that reports and messages are securely communicated.
- Data security:
It has to be guaranteed that all reports and messages that enter the system are securely stored for the required time and that they will not be tampered with.
- Security procedures:
Security procedures shall be designed addressing access to the system (both hardware and software), system administration and maintenance, backup and general usage of the system.

Having regard to the state of the art and the cost of their implementation, such measures shall ensure a level of security appropriate to the risks represented by the processing of the reports and the messages.

Security measures are described in more detail in the following paragraphs.

4.2 **System Access Control**

For their main computer systems the Contracting Parties and the Secretariat shall aim to meet the criteria of a C2-level trusted system, (as described in Section 2.2 of the U.S. Department of Defence Trusted Computer System Evaluation Criteria (TCSEC), DOD 5200.28-STD, December 1985).

The following features are some of the ones provided by a C2-level trusted system:

- A stringent password and authentication system. Each user of the system is assigned a unique user identification and associated password. Each time the user logs on to the system he/she has to provide the correct password. Even when successfully logged on the user only has access to those and only those functions and data that he/she is configured to have access to. Only a privileged user has access to all the data.
- Physical access to the computer system is controlled.
- Auditing; selective recording of events for analysis and detection of security breaches.
- Time-based access control; access to the system can be specified in terms of times-of-day and days-of-week that each user is allowed to login to the system.
- Terminal access control; specifying for each workstation which users are allowed to access.

4.3 **Authenticity and Data Access Security**

Data exchange protocols for electronic transmission of reports and messages between Contracting Parties and the Secretariat shall be duly tested by the Secretariat and approved by the Fisheries Commission. Electronic transmission is subject to security procedures laid down in this Annex.

4.4 **Communication Security**

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

4.5 **Data Security**

Access limitation to the data shall be secured via a flexible user identification and password mechanism. Each user shall be given access only to the data necessary for his task.

4.6 **Security Procedures**

Each Contracting Party and the Executive Secretary shall nominate a security system administrator. The security system administrator shall review the log files generated by the software, properly maintain the system security, restrict access to the system as deemed needed and act as a liaison with the Secretariat in order to solve security matters.

Annex II.C

Vessel Notification and Authorization

1) Format for register of vessels

Data Element	Code	Mandatory /Optional	Remarks
Start record	SR	M	System detail; indicates start of record
Address	AD	M	Message detail; destination, "XNW" for NAFO Secretariat
From	FR	M	Message detail; ISO-3 code of the transmitting Contracting Party
Record Number	RN	M	Message detail; message serial number in current year
Record Date	RD	M	Message detail; date of transmission
Record Time	RT	M	Message detail; time of transmission
Type of Message	TM	M	Message detail; message type, "NOT" as Notification of vessels that may conduct fishing activities in NAFO RA
Vessel Name	NA	M	Name of the vessel
Radio Call Sign	RC	M	International radio call sign of the vessel
Flag State	FS	M	State where the vessel is registered
Internal Reference Number	IR	O ¹	Unique Contracting Party vessel number as ISO-3 flag state code followed by number
External Registration Number	XR	M	The side number of the vessel
Vessel IMO Number	IM	M ³	IMO number in the absence of a side number
Port Name	PO	M	Port of registration or home port
Vessel Owner	VO	M ²	Registered owner and address
Vessel Charterer	VC	M ²	Responsible for using the vessel
Vessel Type	TP	M	FAO vessel code (Annex II.I)
Vessel Gear	GE	O	FAO statistical classification of fishing gear (Annex II.J)
Vessel Tonnage measurement method tonnage	VT	M	Vessel tonnage capacity in pairs as needed "OC" = "OSLO" Convention 1947, "LC" "London" Convention ICTM-69 Total capacity in metric tons
Vessel length measurement method length	VL	M	Length in meters in pairs as needed "OA" = overall; length in meters
Vessel Power measurement method power	VP	M	Engine power in pairs as needed in "KW" PE = propulsion engine AE= Auxiliary summary engines Total installed engine power in vessel measured in "KW"
End of record	ER	M	System detail; indicates end of the record

¹ Mandatory when used as a single identification in other messages.

² Whichever one is appropriate.

³ Mandatory when External Registration Number is absent.

2) Format for withdrawal of vessels from the register

Data Element	Code	Mandatory /Optional	Remarks
Start record	SR	M	System detail; indicates start of record
Address	AD	M	Message detail; destination, "XNW" for NAFO Secretariat
From	FR	M	Message detail; ISO-3 code of the transmitting Contracting Party
Record Number	RN	M	Message detail; message serial number in current year
Record Date	RD	M	Message detail; date of transmission
Record Time	RT	M	Message detail; time of transmission
Type of Message	TM	M	Message detail; message type, "WIT" as Withdrawal of notified vessels
Vessel Name	NA	M	Name of the vessel
Radio Call Sign	RC	M	International radio call sign of the vessel
Internal Reference Number	IR	O	Unique Contracting Party vessel number as ISO-3 flag state code followed by number, if exists
External Registration Number	XR	M	The side number of the vessel
Vessel IMO Number	IM	M ⁴	IMO number in the absence of a side number
Start Date	SD	M	The first date as from which the withdrawal takes affect
End of record	ER	M	System detail; indicates end of the record

⁴ Mandatory when External Registration Number is absent

3) Format for authorization to conduct fishing activities

Data Element	Code	Mandatory /Optional	Remarks
Start record	SR	M	System detail; indicates start of record
Address	AD	M	Message detail; destination, "XNW" for NAFO Secretariat
From	FR	M	Message detail; ISO-3 code of the transmitting Contracting Party
Record Number	RN	M	Message detail; message serial number in current year
Record Date	RD	M	Message detail; date of transmission
Record Time	RT	M	Message detail; time of transmission
Type of Message	TM	M	Message detail; message type, "AUT" as Authorization of vessels to conduct fishing activities in the NAFO RA
Vessel Name	NA	M	Name of the vessel
Radio Call Sign	RC	M	International radio call sign of the vessel
Internal reference Number	IR	O	Unique Contracting Party vessel number as ISO-3 flag state code followed by number, if exists

External registration Number	XR	M	The side number of the vessel
Vessel IMO Number	IM	M ₅	IMO number in the absence of a side number
Start Date	SD	M	License detail; date as from which the Authorization takes effect
End date	ED	O	License detail: Date on which the authorization go to the end. Maximum time validity is 12 months.
Directed Species	DS	M	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 i.e. //DS//GHL/3LMNO COD/3M RED/3LN//)
End of record	ER	M	System detail; indicates end of the record

⁵ Mandatory when External Registration Number is absent

4) Format to suspend the authorization to conduct fishing activities

Data Element	Code	Mandatory /Optional	Remarks
Start record	SR	M	System detail; indicates start of record
Address	AD	M	Message detail; destination, "XNW" for NAFO Secretariat
From	FR	M	Message detail; ISO-3 code of the transmitting Contracting Party
Record Number	RN	M	Message detail; message serial number in current year
Record Date	RD	M	Message detail; date of transmission
Record Time	RT	M	Message detail; time of transmission
Type of Message	TM	M	Message detail; message type, "SUS" as Suspension of authorized vessels
Vessel Name	NA	M	Name of the vessel
Radio Call Sign	RC	M	International radio call sign of the vessel
Internal Reference Number	IR	O	Unique Contracting Party vessel number as ISO-3 flag state code followed by number, if exists
External Registration Number	XR	M	The side number of the vessel
Vessel IMO Number	IM	M ⁶	IMO number in the absence of a side number
Start Date	SD	M	License detail; date as from which the Suspension takes effect
End of record	ER	M	System detail; indicates end of the record

⁶ Mandatory when External Registration Number is absent

Annex II.D

Data Exchange Format and Protocols

A. Data transmission format

Each data transmission is structured as follows:

1. Data characters in accordance with ISO 8859.1
2. Each data transmission is structured as follows:
 - double slash ("/") and the characters "SR" indicate the start of a message;
 - a double slash ("/") and field code indicate the start of a data element;
 - a single slash ("/") separates the field code and the data;
 - pairs of data are separated by space;
 - the characters "ER" and a double slash ("/") at the end indicates the end of a record.

B. Data exchange protocols

Authorized data exchange protocols for electronic transmission of reports and messages between Contracting Parties and the Secretary shall be in accordance with Annex II.B, Rules on Confidentiality.

**C. Format for electronic exchange of fisheries monitoring information
(The North Atlantic Format)**

Category	Data Element	Field code	Type	Contents	Definitions
System	Start Record	SR			Indicates start of the record
Details	End Record	ER			Indicates end of the record
	Return Status	RS	Char*3	Codes	ACK / NAK = Acknowledged / Not Acknowledged
	Return Error Number	RE	Num*3	001 – 999	Codes indicating errors as received at operation centre, see Annex II.D.D(2)
Message	Address destination	AD	Char*3	ISO-3166 Address	Address of the party receiving the message, “XNW” for NAFO
Details	From	FR	Char*3	ISO-3166 Address	Address of the transmitting party, (Contracting Party)
	Type of Message	TM	Char*3	Code	Code for the message type
	Sequence Number	SQ	Num*6	NNNNNN	Message serial number
	Record Number	RN	Num*6	NNNNNN	Serial number of the record in the relevant year
	Record Date	RD	Num*8	YYYYMMDD	Year, month and date
	Record Time	RT	Num*4	HHMM	Hours and minutes in UTC
	Date	DA	Num*8	YYYYMMDD	Year, month and date
	Time	TI	Num*4	HHMM	Hours and minutes in UTC
	Cancelled report	CR	Num*6	NNNNNN	Number of the record to be cancelled
	Year of the report cancelled	YR	Num*4	NNNN	Year of the report to be cancelled
Vessel	Radio Call Sign	RC	Char*7	IRCS Code	International Radio Call Sign of the vessel
Registration	Vessel name	NA	Char*30		Name of the vessel
Details	Ext. registration	XR	Char*14		Side Number of the vessel
	Flag State	FS	Char*3	ISO-3166	State of registration
	Contracting Party internal ref. number	IR	Char*3 Num*9	ISO-3166 +max. 9N	Unique vessel number attributed by the flag State pursuant to registration
	Port Name	PO	Char*20		Port of registration of the vessel/homeport
	Vessel Owner	VO	Char*60		Name and address of the vessel owner
	Vessel Charterer	VC	Char*60		Name and address of the vessel charterer
Vessel IMO Number	IMO Number	IM	Num*7	NNNNNNN	IMO ship identification number
Vessel Character. Details	Vessel Tonnage Unit	VT	Char*2 Num*4	“OC”/“LC” Tonnage	According to: “OC” OSLO 1947 Convention /“LC” LONDON ICTM-69
	Vessel Power Unit	VP	Char*2 Num*5	0-99999	Total main engine power in “KW”
	Vessel Length	VL	Char*2 Num*3	“OA” Length in meters	Unit “OA” length overall. Total length of the vessel in meters, rounded to the nearest whole meter
	Vessel Type	TP	Char*3	Code	As listed in Annex II.I
	Fishing Gear	GE	Char*3	FAO Code	International Standard Statistical Classification of the Fishing Gear as Annex II.J
Authorization details	Start Date	SD	Num*8	YYYYMMDD	Licence detail; date on which the authorization starts
	End Date	ED	Num*8	YYYYMMDD	Licence detail; date on which the authorization ends
	Directed Species	DS	Char*3 Num*6	FAO Species Code/Area Code	Licence 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	Latitude	LA	Char*5	NDDMM (WGS-84)	e.g. //LA/N6235 = 62°35’ North

	Longitude	LO	Char*6	E/WDDMM (WGS-84)	e.g. //LO/W02134 = 21°34' West
	Latitude (decimal)	LT	Char*7	+/-DD.ddd	Value negative if latitude is in the southern hemisphere ¹ (WGS84)
	Longitude (decimal)	LG	Char*8	+/-DDD.ddd	Value negative if longitude is in the western hemisphere ¹ (WGS84)
	Trip Number	TN	Num*3	001-999	Number of the fishing trip in current year
	Catch Species Quantity	CA	Char*3 Num*7	FAO species code 0-9999999	Daily catch by species and by Division, retained on board, in kilograms live weight
Activity Details (contd)	Quantity onboard Species Quantity	OB	Char*3 Num*7	FAO species code 0-9999999	Total quantity by species on board the vessel at the moment of sending the hail message concerned in kilograms live weight
	Discard Species Quantity	RJ	Char*3 Num*7	FAO species code 0 - 9999999	Catch discarded by species and by Division in kilograms live weight
	Undersize Species Quantity	US	Char*3 Num*7	FAO species code 0 - 9999999	Undersize catch by species and by Division in kilograms live weight
	Transferred species Species Quantity	KG	Char*3 Num*7	FAO species code 0-9999999	Information concerning the quantities transferred between vessels by species in kilograms live weight rounded to the nearest 100 Kg. whilst operating in the R.A.
	Relevant Area	RA	Char*6	ICES/NAFO Codes	Code for the relevant fishing area
	Directed Species	DS	Char*3	FAO species codes	Code for the species the vessel is targeting. Allow for several species, separated by a space. e.g. //DS/species species species//
	Observer on board	OO	Char*1	Y or N	Presence of a compliance observer on board
	Transhipped From	TF	Char*7	IRCS Code	International Radio Call Sign of the donor vessel
	Transhipped To	TT	Char*7	IRCS Code	International Radio Call Sign of the receiving vessel
	Master Name	MA	Char*30		Name of the vessels master
	Coastal State	CS	Char*3	ISO-3166 3 Alpha Code	Coastal State of Port of Landing
	Predicted Date	PD	Num*8	YYYYMMDD	Estimated date UTC when the master intends to be in port
	Predicted Time	PT	Num*4	HHMM	Estimated time UTC when the master intends to be in port
	Port Name	PO	Char*20		Name of the actual port of landing
	Speed	SP	Num*3	Knots*10	e.g. //SP/105 = 10.5 knots
	Course	CO	Num*3	360° degree scale	e.g. //CO/270 = 270
	Chartering Flag Catches	CH	Char*3	ISO-3166	Flag of Chartering Contracting Party
	Area of Entry	AE	Char*6	ICES/NAFO Codes	NAFO Division entering into
	Days fished	DF	Num*3	1-365	Number of days the vessel spent in the fishing zone during the trip.
	Apparent Infringement	AF	Char*1	Y or N	For onboard observer to report his observations
	Mesh Size	ME	Num*3	0 – 999	Average mesh size in millimetres
	Production	PR	Char*3	Code	Code for the production Annex II.K
	Log Book	LB	Char*1	Y or N	For onboard observer to approve the entries in the vessels log book
	Hails	HA	Char*1	Y or N	For onboard observer to approve the hails sent from the vessel
	Observer Name	ON	Char*30	Text	Name of the onboard observer
	Free Text	MS	Char*255	Text	Activity detail; for further comments by observer

¹ The plus sign (+) does not need to be transmitted; leading zeros can be omitted.

D. 1) Structure of reports and messages as laid down in Annex II.E and Annex II.F when forwarded by Contracting Parties to the Secretary.

Where appropriate, each Contracting Party shall retransmit to the Secretary reports and messages received from its vessels in accordance with Articles 28 and 29; subject to the following amendments:

- the address (AD) shall be replaced by the address of the Secretary (XNW)
- the data elements “record date” (RD), “record time” (RT), “record number” (RN) and “from” (FR) shall be inserted.

D. 2) Return messages.

If a Contracting Party so requests, the Secretary shall send a return message every time an electronic transmission of a report or message is received.

A) Return message format:

Data Element	Field Code	Mandatory/Optional	Remarks
Start Record	SR	M	System detail; indicates start of record
Address	AD	M	Message detail; destination, Contracting Party sending the report
From	FR	M	Message detail; XNW is NAFO (who is sending the return message)
Type of message	TM	M	Message detail; message type RET for return message
Radio call sign	RC	O	Reporting detail; international radio call sign of the vessel, copied from the report which is received.
Sequence number	SQ	O	Reporting detail; serial number of the report from the vessel in the relevant year, copied from the report which is received.
Return Status	RS	M	Reporting detail; code showing whether the message is acknowledged or not (ACK or NAK)
Return error number	RE	O	Reporting detail; number showing the type of error. See table B) for return error numbers.
Record number	RN	M	Reporting detail; record number of the message which is received
Date	DA	M	Message detail; date of transmission
Time	TI	M	Message detail; time of transmission
End of Record	ER	M	System detail; indicates end of the record

B) Return error numbers

Subject/Article:	Errors		Error Cause
	Follow up action required	Accepted	
Communication	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.
Article 25		250	Attempt to re-Notify a vessel
		251	Vessel is not Notified
Article 28	302		Transshipment prior to Catch on Entry

	303		Catch on Exit prior to Catch on Entry
	304		No position received (TRA, COX)
		350	Position without Catch on Entry

E. Types of reports and messages

Annex	Provisions	Code	Message / Report	Remarks
II.C	Article 25.1a	NOT	Notification	Notification of fishing vessels
II.C	Article 25.1b	WIT	Withdrawal	Notification of the withdrawal of a registered vessel
II.C	Article 25.6a	AUT	Authorization	Notification of vessels authorized to conduct fishing activities in the RA
II.C	Article 25.6b	SUS	Suspension	Notification of the suspension of an authorization to conduct fishing activities in the Regulatory Area, within its initial period of validity
II.E	Article 29.2 Article 29.8	ENT POS EXI MAN	Entry Position Exit Manual position	VMS messages Reports transmitted by fishing vessels with a defective satellite tracking device to the Contracting Party
II.F	Article 28.2(a) Article 28.2(c) Article 28.2(d) Article 28.2(e) Article 28.2(f) Article 28.2(b) Article 28.2	COE CAT COB TRA POR COX CAN	Catch on Entry Catch Cross boundary Transshipment Port of Landing Catch on Exit Cancel	Report transmitted by fishing vessels, prior to entering the R.A. Catch report daily, for all species by Division. Catch report prior to crossing boundary to 3L. Report on quantities on-loaded or off-loaded in the R.A. Report on catch onboard and weight to be landed Report transmitted by fishing vessels, prior to leaving the R.A. Report for cancellation of a report set out in the Article 28.2.
II.D.D	Article 29.10(a) Article 28.5(c)	RET	Return	Automatic electronic message pursuant to reception of records
II.G.	Article 30.B.6(a)	OBR	Observer	Daily Observer report

Annex II.E

VMS Data Format

Data Element:	Field Code:	Mandatory / Optional	Remarks:
Start record	SR	M	System detail; indicates start of record
Address	AD	M	Message detail; destination; “XNW” for NAFO
Sequence Number	SQ	M ¹	Message detail; message serial number in current year
Type of Message	TM ⁴	M	Message detail; message type, “POS” as Position report/message to be communicated by VMS or other means by vessels with a defective satellite tracking device
Radio call sign	RC	M	Vessel registration detail; international radio call sign of the vessel
Trip Number	TN	O	Activity detail; fishing trip serial number in current year
Vessel Name	NA	O	Vessel registration detail; name of the vessel
Contracting Party Internal Reference Number	IR	O	Vessel registration detail. Unique Contracting Party vessel number as ISO-3 flag state code followed by number
External Registration Number	XR	O	Vessel registration detail; the side number of the vessel
Latitude	LA	M ²	Activity detail; position at time of transmission
Longitude	LO	M ²	Activity detail; position at time of transmission
Latitude (decimal)	LT	M ³	Activity detail; position at time of transmission
Longitude (decimal)	LG	M ³	Activity detail; position at time of transmission
Speed	SP	M	Activity detail; speed at time of transmission
Course	CO	M	Activity detail; course at time of transmission
Date	DA	M	Message detail; date of transmission
Time	TI	M	Message detail; time of transmission
End of record	ER	M	System detail; indicates end of the record

¹ Optional in case of a VMS message

² Mandatory for manual messages

³ Mandatory for VMS messages

⁴ Type of message shall be “ENT” for the first VMS message from the Regulatory Area as detected by the FMC of the Contracting Party. Type of message shall be “EXI” for the first VMS message from outside the Regulatory Area as detected by the FMC of the Contracting Party, and the values for latitude and longitude are, in this type of message, optional. Type of message shall be “MAN” for reports communicated by vessels with a defective satellite tracking device in accordance with Article 29.8.

Annex II.F

Format for the Communication of Catches and Reports by Fishing Vessels

1) The sequence of messages that fishing vessels shall communicate electronically via the FMC to the Secretariat shall be as follows:

Report	Code	Requirements for the field
Catch on Entry	COE	6 hours in advance of the vessels entry into the RA.
Entry	ENT	The first position report from a vessel detected to be inside the RA.
Position	POS	Position report every hour
Catch	CAT	Reporting of catches; on a daily basis, for all species by Division.
Cross Boundary	COB	Reporting of catches; prior to crossing the boundary to 3L as appropriate.
Transshipment	TRA	Report on quantities to be on-loaded (receiving vessel) or off-loaded (donor vessel), for each transshipment.
Catch on Exit	COX	6 hours in advance of the vessels departure from the RA.
Exit	EXI	The first position report from a vessel detected to be outside the RA.
Port of Landing	POR	Report (receiving vessel) on catch onboard to be landed, for each landing after transshipment.

2) “Catch on ENTRY” report

Data Element	Field Code	Mandatory/Optional	Requirements for the field
Start record	SR	M	System detail; indicates start of record
From	FR	M	Name of transmitting Party
Address	AD	M	Message detail; destination, “XNW” for NAFO
Sequence Number	SQ	M	Message detail; serial number in current year
Type of Message	TM	M	Message detail; message type, “COE” as Catch on Entry report
Radio call sign	RC	M	Vessel registration detail; international radio call sign of the vessel
Trip Number	TN	O	Activity detail; fishing trip serial number in current year
Vessel Name	NA	O	Vessel registration detail; name of the vessel
Master Name	MA	M	Name of the master of vessel
External Registration Number	XR	O	Vessel registration detail; the side number of the vessel.
Latitude	LA	M	Activity detail; position at time of transmission
Longitude	LO	M	Activity detail; position at time of transmission
Relevant Area	RA	M	NAFO Division into which the vessel is about to enter
Date	DA	M	Message detail; date of transmission
Time	TI	M	Message detail; time of transmission
On Board	OB	M	Activity detail; Total quantity by species on board rounded to the nearest 100 kg, upon entry in the RA. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //OB/speciesspaceweightspacesspeciesspaceweightspacesspecies spaceweight//
Observer on board	OO	M	Activity detail; "Yes" or "No"
End of record	ER	M	System detail; indicates end of the record

3) “Catch” report

Data Element	Field Code	Mandatory/ Optional	Requirements for the field
Start record	SR	M	System detail; indicates start of record
Address	AD	M	Message detail; destination, “XNW” for NAFO
From	FR	M	Message detail; Address of the transmitting party (ISO-3)
Sequence Number	SQ	M	Message detail; serial number in current year
Type of Message	TM	M	Message detail; message type, “CAT” as Daily Catch report
Radio call sign	RC	M	Vessel registration detail; international radio call sign of the vessel
Trip Number	TN	O	Activity detail; fishing trip serial number in current year
Vessel Name	NA	O	Vessel registration detail; name of the vessel
Contracting Party Internal Reference Number	IR	O	Vessel registration detail; unique Contracting Party vessel number as ISO-3 flag state code followed by number
External Registration Number	XR	O	Vessel registration detail; the side number of the vessel.
Relevant Area	RA	M	Activity detail; NAFO Division
Latitude	LA	M ¹	Activity detail; position at time of transmission
Longitude	LO	M ¹	Activity detail; position at time of transmission
Catch species live weight	CA	M	Activity detail; Catch retained onboard by species and by Division since last CAT report in kilograms rounded to the nearest 100 kilograms. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes)+live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //CA/speciesspaceweightspacspeciespaceweightspace speciesspaceweightspace//
Discarding species live weight	RJ	M	Activity detail; Catch discarded by species and by Division since last CAT report, in kg rounded to the nearest 100 kg. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //RJ/speciesspaceweightspacspeciespaceweightspacspecies spaceweight//
Chartering Flag	CH	M ²	Flag of Chartering Contracting Party to which the catch must be allocated.
Days Fished	DF	M ³	Activity detail; number of fishing days in the Regulatory Area since last CAT report, as appropriate
Date	DA	M	Message detail; date of transmission
Time	TI	M	Message detail; time of transmission
End of record	ER	M	System detail; indicates end of the record

¹ Optional if the vessel is subject to satellite tracking in accordance with Article 29.1.

² Mandatory if fishing activity under chartering agreement.

³ By default, the normal reporting period should be 1 day

4) “Catch on crossing Boundary” 3L report (for PRA)

Data Element	Field Code	Mandatory/ Optional	Requirements for the field
Start record	SR	M	System detail; indicates start of record
Address	AD	M	Message detail; destination, “XNW” for NAFO
From	FR	M	Message detail; Address of the transmitting party (ISO-3)
Sequence Number	SQ	M	Message detail; serial number in current year
Type of Message	TM	M	Message detail; message type, “COB” for Cross Boundary Catch report
Radio call sign	RC	M	Vessel registration detail; international radio call sign of the vessel
Trip Number	TN	O	Activity detail; fishing trip serial number in current year
Vessel Name	NA	O	Vessel registration detail; name of the vessel
Contracting Party Internal Reference Number	IR	O	Vessel registration detail; unique Contracting Party vessel number as ISO-3 flag state code followed by number
External Registration Number	XR	O	Vessel registration detail; the side number of the vessel.

Relevant Area	RA	M	Activity detail; NAFO Division entering from
Latitude	LA	M ¹	Activity detail; position at time of transmission
Longitude	LO	M ¹	Activity detail; position at time of transmission
Catch	CA	M	Activity detail; Catch retained onboard by species and by Division since last CAT report in kilograms rounded to the nearest 100 kilograms. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes)+live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //CA/speciesspaceweightspacspeciespaceweightspace speciesspaceweightspace//
Area of entry	AE	M	Activity detail; NAFO Division entering into
Catch	OB	M	Activity detail; Total quantity by species on board rounded to the nearest 100 kg, upon crossing the 3L border. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //OB/speciesspaceweightspacspeciespaceweightspacspecies spaceweight//
Days Fished	DF	M	Activity detail; number of fishing days in the Regulatory Area
Date	DA	M	Message detail; date of transmission
Time	TI	M	Message detail; time of transmission
End of record	ER	M	System detail; indicates end of the record

¹ Optional if the vessel is subject to satellite tracking in accordance with Article 29.1.

5) “TRANSHIPMENT” report

Data Element	Field Code	Mandatory /Optional	Requirements for the field
Start record	SR	M	System detail; indicates start of record
From	FR	M	Name of transmitting Party
Address	AD	M	Message detail; destination, “XNW” for NAFO
Sequence Number	SQ	M	Message detail; message serial number in current year
Type of Message	TM	M	Message detail; message type, “TRA” as Transhipment report
Radio call sign	RC	M	Vessel registration detail; international radio call sign of the vessel
Trip Number	TN	O	Activity detail; fishing trip serial number in current year
Vessel Name	NA	O	Vessel registration detail; name of the vessel
Name of Master	MA	O	Name of master of vessel
External Registration Number	XR	O	Vessel registration detail; the side number of the vessel
Quantity on-loaded or off-loaded	KG	M	Quantity by species in the Regulatory Area on-loaded or off-loaded in kilograms rounded to the nearest 100 kilograms. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes)+live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //KG/speciesspaceweight spacespeciesspaceweightspacspeciespaceweightspace//
Transhipped To	TT	M ¹	Vessel registration detail; International radio call sign of the receiving vessel
Transhipped From	TF	M ¹	Vessel registration detail; International radio call sign of the donor vessel
Latitude	LA	M ²	Activity detail; estimated latitude where the master intends to do the transhipment
Longitude	LO	M ²	Activity detail; estimated longitude where the master intends to do the transhipment
Predicted Date	PD	M ²	Activity detail; estimated date UTC when the master intends to do the transhipment (YYYYMMDD)
Predicted Time	PT	M ²	Activity detail; estimated time UTC when the master intends to do the transhipment (HHMM)
Date	DA	M	Message detail; date of transmission
Time	TI	M	Message detail; time of transmission
End of record	ER	M	System detail; indicates end of the record

¹ Whichever one is appropriate.

² Optional for reports sent by the receiving vessel after the transhipment.

6) "Catch on EXIT" report

Data Element	Field Code	Mandatory/Optional	Requirements for the field
Start record	SR	M	System detail; indicates start of record
Address	AD	M	Message detail; destination, "XNW" for NAFO
From	FR	M	Name of transmitting party
Sequence Number	SQ	M	Message detail; message serial number in current year
Type of Message	TM	M	Message detail; "COX" as Catch on Exit report
Radio call sign	RC	M	Vessel registration detail; international radio call sign of the vessel
Trip Number	TN	O	Activity detail; fishing trip serial number in current year
Vessel Name	NA	O	Vessel registration detail; name of the vessel
Master Name	MA	O	Name of master of vessel
External Registration Number	XR	O	Vessel registration detail; the side number of the vessel
Latitude	LA	O ¹	Activity detail; position at time of transmission
Longitude	LO	O ¹	Activity detail; position at time of transmission
Relevant Area	RA	M	NAFO area from which the vessel is about to exit
Catch	CA	M	Activity detail; Catch retained onboard by species and by Division since last CAT report in kilograms rounded to the nearest 100 kilograms. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes)+live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //CA/speciesspaceweightspacesspeciesspaceweightspace speciesspaceweightspace//
Catch	OB	M	Activity detail; Total quantity by species on board rounded to the nearest 100 kg, upon exit from the RA. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //OB/speciesspaceweightspacesspeciesspaceweightspacesspecies spaceweight//
Days Fished	DF	O	Activity detail; number of fishing days in the Regulatory Area
Date	DA	M	Message detail; date of transmission
Time	TI	M	Message detail; time of transmission
End of record	ER	M	System detail; indicates end of the record

¹ Optional if the vessel is subject to satellite tracking in accordance with Article 29.1.

7) "PORT OF LANDING" report

Data Element	Field Code	Mandatory/Optional	Requirements for the field
Start record	SR	M	System detail; indicates start of record
From	FR	M	Name of transmitting Party
Address	AD	M	Message detail; destination, "XNW" for NAFO
Sequence Number	SQ	M	Message detail; serial number of the report from the vessel in the relevant year
Type of Message	TM	M	Message detail; message type, "POR"
Radio call sign	RC	M	Vessel registration detail; international radio call sign of the vessel
Trip Number	TN	O	Activity detail; fishing trip serial number in current year
Vessel Name	NA	O	Vessel registration detail; name of the vessel
Name of Master	MA	O	Name of master of vessel
External Registration Number	XR	O	Vessel registration detail; the side number of the vessel
Latitude	LA	M ¹	Activity detail; position at time of transmission
Longitude	LO	M ¹	Activity detail; position at time of transmission
Coastal State	CS	M	Activity detail; coastal State of Port of Landing
Name of Port	PO	M	Activity detail; name of Port for landing
Predicted Date	PD	M	Activity detail; estimated date UTC when the master intends to be in port (YYYYMMDD)

Predicted Time	PT	M	Activity detail; estimated time UTC when the master intends to be in port (HHMM)
Quantity to be landed species live weight	KG	M	Activity detail; Quantity by species in kilograms rounded to the nearest 100 kilograms, to be landed in a port. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes)+live weight in kilograms (until 9 digits), with each field separated by a space, e.g.//KG/speciesspaceweightspace speciesspaceweightspace speciesspaceweightspace//
Quantity on board species live weight	OB	M	Activity detail; Total quantity by species on board rounded to the nearest 100 kg, in advance of landing of the transhipped quantities. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //OB/speciesspaceweightspace speciesspaceweightspace speciesspaceweight//
Date	DA	M	Message detail; UTC date of transmission
Time	TI	M	Message detail; UTC time of transmission
End of record	ER	M	System detail; indicates end of the record

¹ Optional if a vessel is subject to satellite tracking.

8) “CANCEL” report

Data Element	Field Code	Mandatory/Optional	Requirements for the field
Start record	SR	M	System detail; indicates start of record
From	FR	M	Name of transmitting Party
Address	AD	M	Message detail; destination, “XNW” for NAFO
Type of Message	TM	M	Message detail; message type, “CAN ¹ ” as Cancel report
Radio call sign	RC	M	Vessel registration detail; international radio call sign of the vessel
Cancelled report	CR	M	Message detail; the record number of the report to be cancelled
Year of the report cancelled	YR	M	Message detail; year of the report to be cancelled
Date	DA	M	Message detail; date of transmission
Time	TI	M	Message detail; time of transmission
End of record	ER	M	System detail; indicates end of the record

¹ Cancel report should not be used to cancel other Cancel report.

Annex II.G

Observer Report

Data Element	Code	Mandatory / Optional	Requirements for the field
Start record	SR	M	System detail; indicates start of record
Address	AD	M	Message detail; destination, “ XNW ” for NAFO
Sequence Number	SQ	M	Message detail; message serial number in current year
Type of Message	TM	M	Message detail; message type, “ OBR ” as Observer report
Radio call sign	RC	M	Vessel registration detail; international radio call sign of the vessel
Fishing Gear	GE	M	Activity detail; FAO code for fishing gear
Directed Species ⁶	DS	M	Activity detail; FAO species code
Mesh Size	ME	M	Activity detail; average mesh size in millimetres
Relevant Area	RA	M	Activity detail; NAFO Division
Daily Catches	CA	M M	Activity detail; catch retained on board by species and by Division since last OBR report in kilograms rounded to the nearest 100 kilograms. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //CA/speciesspaceweightspacspeciespaceweightspacspeiesspaceweight//
Discarding	RJ	M ¹	Activity detail; Catch discarded by species and by Division since last OBR report, in kg rounded to the nearest 100 kg. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //RJ/speciesspaceweightspacspeciespaceweightspacspeciespaceweight//
Undersize	US	M ¹	Activity detail; Undersize catch by species and by Division since last OBR report, in kg rounded to the nearest 100 kg. Allow for several pairs of fields, consisting of species (FAO 3 alpha codes) + live weight in kilograms (until 9 digits), with each field separated by a space, e.g. //US/speciesspaceweightspacspeciespaceweightspacspeciespaceweight//
Log Book	LB	M	Activity detail; “Yes” or “No” ²
Production	PR	M	Activity detail; code for the production. See Annex II.K
Hails	HA	M	Activity detail; observers verification if the reports made by the captain are correct, “Yes” or “No” ³
Apparent Infringements	AF	M	Activity detail; “Yes” or “No” ⁴
Observer Name	ON	M	Message detail; name of the observer signing the report
Date	DA	M	Message detail; date of transmission
Free Text	MS	O ⁵	Activity detail; for further comments by the observer
Time	TI	M	Message detail; time of transmission
End of record	ER	M	System detail; indicates end of the record

1. Only to be transmitted if relevant
2. “Yes” if the observer approves the Log Book entries by the captain
3. “Yes” if the observer approves the Hails transmitted by the captain
4. “Yes” if an infringement is observed
5. Mandatory if “LB” = “No”, or “HA” = “No”, or “AF” = “Yes”.
6. Directed species is the species which represents the greatest catch for that day

Annex II.H Weekly Reports

Data to be compiled by Executive Secretary and Forwarded to Inspection Parties

Catch and Catch Rate Report (Weekly)

Vessel Type	Division	Species	Total Catch	Total Effort	Catch Rate
With observer –Masters					
With observer – observer					
Without observer					

By-catch Report (Weekly)

Vessel Type	Division	Species	Total Catch	Total Overall Catch	By-Catch %
With observer –Masters					
With observer – observer					
Without observer					

Discards Report (Weekly)

Vessel Type	Division	Species	Total catch	Total Discards	Discard %
With observer –Masters					
With observer – observer					
Without observer					

Annex II.I Fishing Vessel Codes

A. Main Vessel Types

FAO Code	Type of vessel	FAO Code	Type of vessel
BO	Protection vessel	NOX	Lift netter NEI
CO	Fish training vessel	PO	Vessel using pumps
DB	Dredger non continuous	SN	Seine netter
DM	Dredger continuous	SO	Seiner
DO	Beamer	SOX	Seiner NEI
DOX	Dredger NEI	SP	Purse seiner
FO	Fish carrier	SPE	Purse seiner european
FX	Fishing vessel NEI	SPT	Tuna purse seiner
GO	Gill netter	TO	Trawler
HOX	Mother ship NEI	TOX	Trawlers NEI
HSF	Factory mother ship	TS	Side trawler
KO	Hospital ship	TSF	Side trawler freezer
LH	Hand liner	TSW	Side trawler wetfish
LL	Long liner	TT	Stern trawler
LO	Liner	TTF	Stern trawler freezer
LP	Pole and line vessel	TTP	Stern trawler factory
LT	Troller	TU	Outrigger trawlers
MO	Multipurpose vessels	WO	Trap setter
MSN	Seiner hand liner	WOP	Pot vessels
MTG	Trawler drifter	WOX	Trap setters NEI
MTS	Trawler purse seiner	ZO	Fish research vessel
ZOT	Temporary Fish Research Vessel	NB	Lift netter tender
DRN	Driftnetter	NO	Lift netter
VOS	Support vessel	VOB	Bunker
VOX	Other non-fishing vessels		

NEI = Not Elsewhere Identified

B. Main vessel activities

Alpha Code	Category
ANC	Anchoring
DRI	Drifting
FIS	Fishing
HAU	Hauling
PRO	Processing
STE	Steaming
TRX	Trans-shipping on or off loading
OTH	Others - to be Specified

Annex II.J

Gear Codes

<i>Gear Categories</i>	<i>Standard Abbreviation Code</i>	<i>Gear Categories</i>	<i>Standard Abbreviation Code</i>
<i>SURROUNDING NETS</i>		<i>GILLNETS AND ENTANGLING</i>	
With purse lines (purse seines)	PS	<i>NETS</i>	
One boat operated purse seines	PS1	Set gillnets (anchored)	GNS
Two boat operated purse seines	PS2	Drift nets	GND
Without purse lines (lampara)	LA	Encircling gillnets	GNC
<i>SEINE NETS</i>	SB	Fixed gillnets (on stakes)	GNF
Boat or vessel seines	SV	Trammel nets	GTR
Danish seines	SDN	Combined gillnets-Trammel nets	GTN
Scottish seines	SSC	Gillnets and entangling nets (not specified)	GEN
Pair seines	SPR	Gillnets (not specified)	GN
Seine nets (not specified)	SX		
<i>TRAWLS</i>		<i>TRAPS</i>	
Bottom trawls		Pots	FPO
Beam trawls	TBB	Stationary uncovered pound-nets	FPN
Otter trawls ¹	OTB	Fyke nets	FYK
Pair trawls	PTB	Stow nets	FSN
Nephrops trawls	TBN	Barriers, fences, weirs, etc.	FWR
Shrimp trawls	TBS	Aerial traps	FAR
Bottom trawls (not specified)	TB	Traps (not specified)	FIX
Midwater trawls		<i>HOOKS AND LINES</i>	
Otter trawls	OTM	Hand-lines and pole-lines (hand operated) ²	LHP
Pair trawls	PTM	Hand-lines and pole-lines (mechanized) ²	LHM
Shrimp trawls	TMS	Set lines (longlines set)	LLS
Midwater trawls (not specified)	TM	Drifting longlines	LLD
Otter twin trawls	OTT	Longlines (not specified)	LL
Otter shrimp twin trawls	OTS	Trolling lines	LTL
Otter trawls (not specified)	OT	Hooks and lines (not specified) ³	LX
Pair trawls (not specified)	PT		
Other trawls (not specified)	TX	<i>GRAPPLING AND WOUNDING</i>	
		Harpoons	HAR
<i>DREDGES</i>		<i>HARVESTING MACHINES</i>	
Boat dredges	DRB	Pumps	HMP
Hand dredges	DRH	Mechanized dredges	HMD
		Harvesting machines (not specified)	HMX
<i>LIFT NETS</i>		<u>MISCELLANEOUS GEAR</u> ⁴	MIS
Portable lift nets	LNP		
Boat operated lift nets	LNB	<i>RECREATIONAL FISHING GEAR</i>	RG
Shore operated stationary lift nets	LNS		
Lift nets (not specified)	LN	<i>GEAR NOT KNOWN OR NOT SPECIFIED</i>	NK
<i>FALLING GEAR</i>			
Cast nets	FNC		
Falling Gear (not specified)	FG		

¹ Fisheries agencies may indicate side and stern bottom and side and stern midwater trawls, as OTB-1 and OTB-2, and OTM-1 and OTM-2, respectively.

² Including jigging lines.

³ Code LDV for dory operated line gears will be maintained for historical data purposes.

⁴ This item includes: hand and landing nets, drive-in-nets, gathering by hand with simple hand implements with or without diving equipment, poisons and explosives, trained animals, electrical fishing.

Annex II.K
Product Form Presentation
3-Alpha Codes

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

Annex II.L
Port State Control Prior Notification Forms
A-PSC-1

PORT STATE CONTROL FORM – PSC 1								
PART A: To be completed by the Master of the Vessel. Please use black ink.								
Name of Vessel:	IMO Number ¹ :	Radio Call Sign:		Flag State:				
Email Address:	Telephone Number:	Fax Number:		Inmarsat Number:				
Port of Landing or Transshipment:								
Estimated Time of Arrival:		Date:	Time UTC:					
Total catch on board – all areas							Catch to be landed ²	
Species ³	Product ⁴	Area of catch			Conversion factor	Product weight (kg)	Product weight (kg)	
		NEAFC CA (ICES subareas and divisions)	NAFO RA (Sub Division)	Other areas				
PART B: For official use only – to be completed by the Flag State								
The Flag State of the vessel must respond to the following questions by marking in the box “Yes” or “No”					NEAFC CA		NAFO RA	
					Yes	No	Yes	No
a) The fishing vessel declared to have caught the fish had sufficient quota for the species declared								
b) The quantities on board have been duly reported and taken into account for the calculation of any catch or effort limitations that may be applicable								
c) The fishing vessel declared to have caught the fish had authorization to fish in the area declared								
d) The presence of the fishing vessel in the area of catch declared has been verified according to VMS data								
Flag State Confirmation: <i>I confirm that the above information is complete, true and correct to the best of my knowledge and belief.</i>								
Name and Title:					Date:			
Signature:					Official Stamp:			
PART C: For official use only – to be completed by the Port State								
Name of Port State:								
Authorization:	Yes:		No:		Date:			
Signature:				Official Stamp:				
¹ Fishing vessels not assigned an IMO number shall provide their external registration number.								
² If necessary an additional form or forms shall be used.		³ FAO Species Codes – NEAFC Annex V – NAFO Annex I.C			⁴ Product presentations – NEAFC Appendix I to Annex IV- NAFO Annex II.K			

B-PSC-2

PORT STATE CONTROL FORM – PSC 2									
PART A: To be completed by the Master of the Vessel. A separate form shall be completed for each donor vessel. Please use black ink.									
Name of Vessel:		IMO Number ¹ :		Radio Call Sign:		Flag State:			
Email Address:		Telephone Number:		Fax Number:		Inmarsat Number:			
Port of Landing or Transshipment:									
Estimated Time of Arrival:				Date:		Time UTC:			
Catch Information for Donor Vessels *A separate form shall be completed for each Donor Vessel*									
Name of Vessel		IMO Number ¹		Radio Call Sign		Flag State			
Total catch on board – all areas						Catch to be landed²			
Species ³	Product ⁴	Area of catch			Conversion factor	Product weight (kg)	Product weight (kg)		
		NEAFC CA (ICES subareas and divisions)	NAFO RA (Sub Division)	Other areas					
PART B: For official use only – to be completed by the Flag State									
The Flag State of the vessel must respond to the following questions by marking in the box “Yes” or “No”						NEAFC CA		NAFO RA	
						Yes	No	Yes	No
a) The fishing vessel declared to have caught the fish had sufficient quota for the species declared									
b) The quantities on board have been duly reported and taken into account for the calculation of any catch or effort limitations that may be applicable									
c) The fishing vessel declared to have caught the fish had authorization to fish in the area declared									
d) The presence of the fishing vessel in the area of catch declared has been verified according to VMS data									
Flag State Confirmation: I confirm that the above information is complete, true and correct to the best of my knowledge and belief.									
Name and Title:				Date:					
Signature:				Official Stamp:					
PART C: For official use only – to be completed by the Port State									
Name of Port State:									
Authorization:	Yes	No	Date:						
Signature:				Official Stamp:					
¹ Fishing vessels not assigned an IMO number shall provide their external registration number.									
² If necessary an additional form or forms shall be used.		³ FAO Species Codes – NEAFC Annex V – NAFO Annex I.C				⁴ Product presentations – NEAFC Appendix I to Annex IV- NAFO Annex II.K			

ANNEX III – GEAR

Annex III.A Mesh Measurements and Gauges

1. Description of mesh gauges

- a. A mesh gauge to be used for determining mesh sizes shall be 2 mm thick, flat, of durable material and non-deformable. It shall be designed either as a number of parallel-edged sides connected by tapering edges with a taper of 1:8 on each side or only tapering edges with the taper defined above. The mesh gauge shall have a hole at the narrowest extremity.
- b. The face of the mesh gauge shall be inscribed with the width in millimetres both on the parallel-sided section, if this design is used and on the tapering section. In the case of the latter, the width shall be inscribed for every interval of 1mm and the width shall be indicated at regular intervals.

2. Use of the mesh gauge

- a. The net shall be kept stretched so that the meshes are stretched in the direction of the long diagonal.
- b. The tapered end of the mesh gauge described in point 1 shall be inserted into the mesh opening in a direction perpendicular to the netting along the long axis of the net.
- c. The gauge shall be inserted into the mesh opening either manually or using a weight until the mesh gauge is stopped by the resistance of the mesh at the tapering edges.

3. Selection of meshes for measuring

- a. The meshes to be measured shall form a series of 20 consecutive meshes selected in the direction of the long axis of the net.
- b. Meshes positioned less than 50 cm from lacings, ropes and codlines shall not be measured. This distance shall be measured perpendicular to the lacings, the ropes or the codline with the net stretched in the direction of measuring. Any mesh that has been mended or torn or to which attachments to the net are fixed shall not be measured.
- c. By way of derogation from 3a), the meshes to be measured need not be consecutive if this is prevented by the application of 3b).
- d. Nets shall be measured only when wet and non-frozen.

4. Sizes of individual meshes

- a. The size of a mesh shall be equal to the width of the gauge inscribed at the point where the gauge is stopped when used in accordance with point 2.
- b. The sides of a mesh shall be accepted as being of the same length if, when measured, the two knots that keep the mesh together in the lateral direction appear to be off the centre of the mesh gauging device.

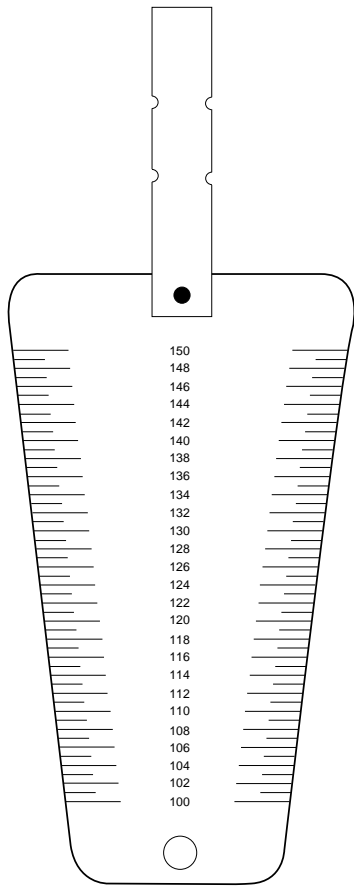
5. Determination of the mesh size of a net

- a. The mesh size of a net shall be expressed in mm as the average of the sizes of the total number of meshes selected and measured according to points 3 and 4. The average value shall be rounded up to the next full number of millimetres.
- b. The total number of meshes to be measured is specified in point 6.

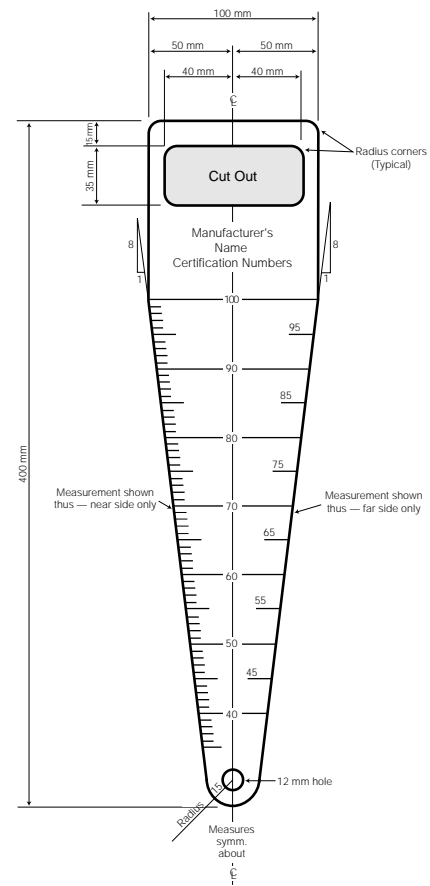
6. Mesh gauging procedure

- a. Only meshes which have 4 sides, equally long, of the same material, and 4 permanent joints or knots are permitted.
- b. Mesh size shall be calculated by averaging:
 - in respect of the codend of a net, including any lengthener(s), the measurements, in millimetres, of any 20 consecutive meshes running parallel to the long axis of the codend, beginning at the after end of the codend, and at least 10 meshes from the lacings; and
 - in respect of any part of a net, the measurements, in millimetres, of any 20 consecutive meshes that are at least 10 meshes from the lacings.

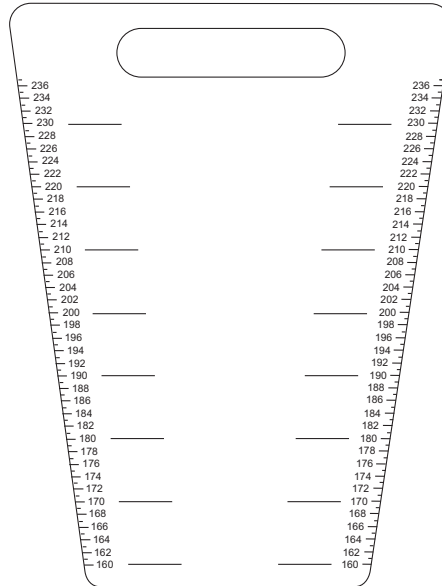
EXAMPLE OF LARGE SIZE GAUGE



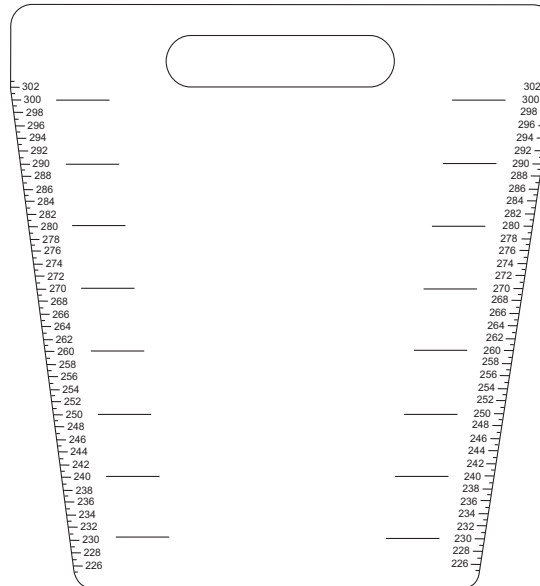
EXAMPLE OF SMALL SIZE GAUGE



Example of Skate Gauges



160-236 mm



226-302 mm

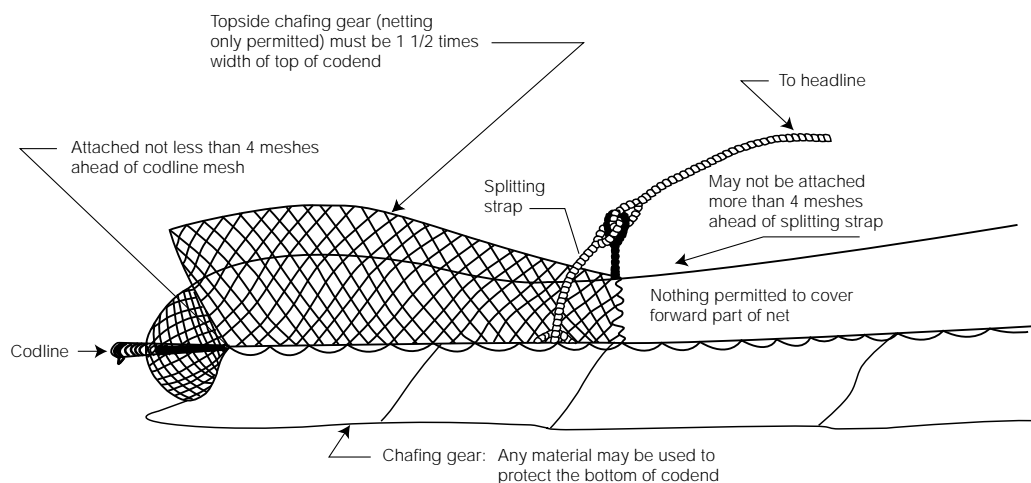
Annex III.B

Authorized Topside Chafers / Shrimp Toggle Chains

1. ICNAF-type topside chafer

The ICNAF-type topside chafer is a rectangular piece of netting to be attached to the upper side of the codend of the trawl net to reduce and prevent damage so long as such netting conforms to the following conditions:

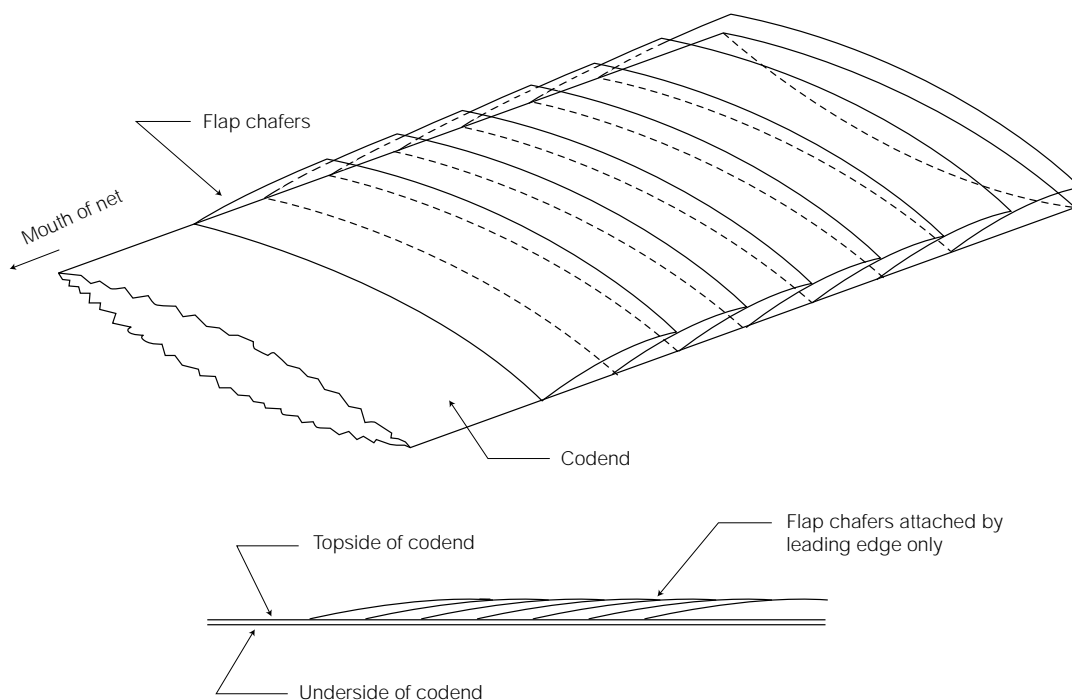
- (a) this netting shall have a mesh size not less than that specified for the codend in Article 13;
- (b) this netting may be fastened to the codend only along the forward and lateral edges of the netting and at no other place in it, and shall be fastened in such a manner that it extends forward of the splitting strap no more than four meshes and ends not less than four meshes in front of the cod line mesh; where a splitting strap is not used, the netting shall not extend to more than one-third of the codend measured from not less than four meshes in front of the cod line mesh;
- (c) the width of this netting shall be at least one and a half times the width of the area of the codend which is covered, such widths to be measured at right angles to the long axis of the codend.



2. *Multiple flap-type topside chafer*

The multiple flap-type topside chafer is defined as pieces of netting having in all their parts meshes the size of which, whether the pieces of netting are wet or dry, is not less than that of the codend, provided that:

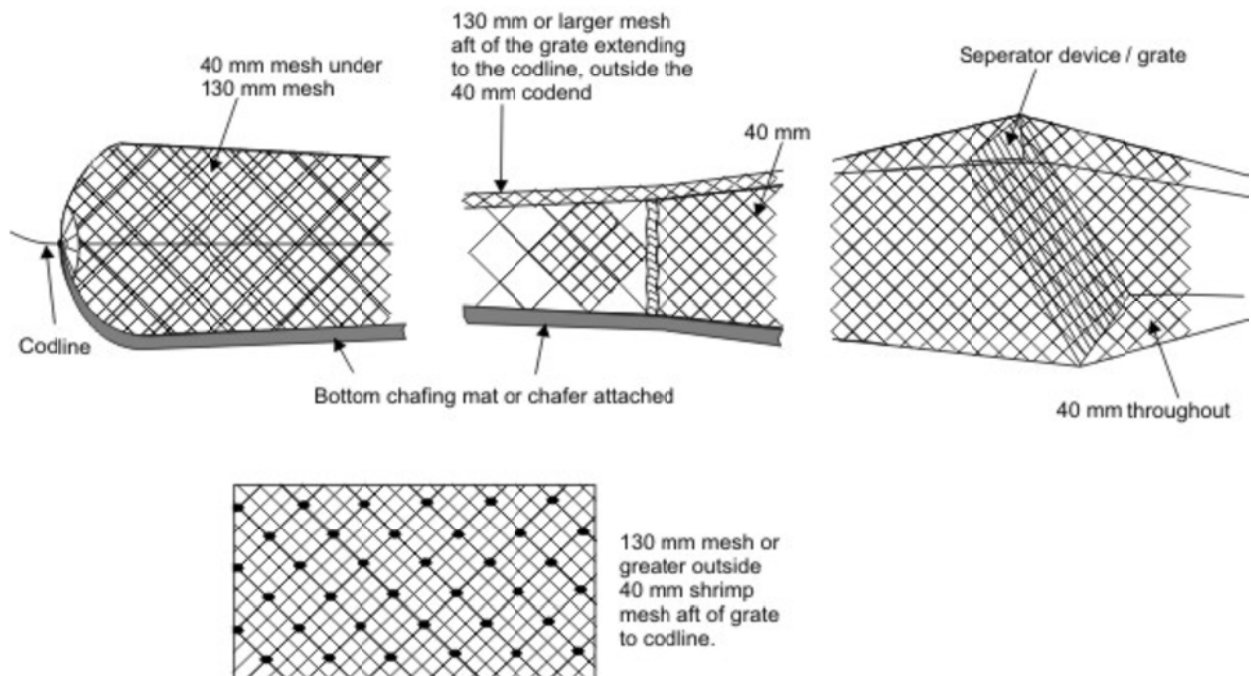
- (i) each piece of netting
 - (a) is fastened by its forward edge only across the codend at right angles to its long axis;
 - (b) is of a width of at least the width of the codend (such width being measured at right angles to the long axis of the codend at the point of attachment); and
 - (c) is not more than ten meshes long; and
- (ii) the aggregate length of all the pieces of netting so attached does not exceed two-thirds of the length of the codend.



3. Shrimp Trawl – Codend Strengthening Bag, for vessels directing for shrimp in the NRA

A strengthening bag is defined as an outer covering of netting that can be used on a shrimp trawl to protect and provide strength to the codend of the shrimp trawl.

- (a) Vessels shall not use a strengthening bag of which the mesh size is less than 130 millimetres.
- (b) The strengthening bag shall not extend forward of the sorting grids or grates or obstruct the sorting grids or grates in any way.
- (c) A strengthening bag shall not be attached in any way that restricts the authorized mesh or obstructs the mesh opening.
- (d) Vessels shall not use a strengthening bag with any other top-side chafers simultaneously.



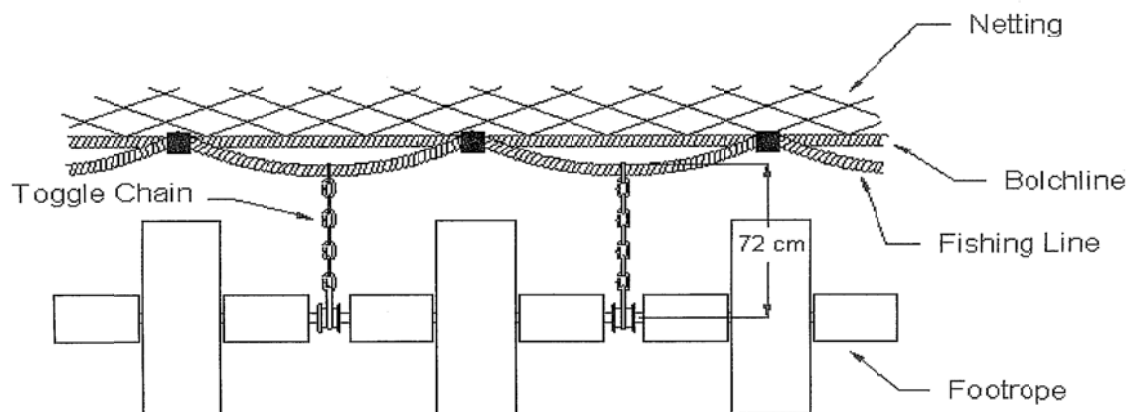
Shrimp Toggle Chains

Toggle chains are chains, ropes, or a combination of both, which attach the footrope to the fishing line or bolchline at varying intervals.

The terms “fishing line” and “bolchline” are interchangeable. Some vessels use one line only; others use both a fishing line and a bolchline as shown in the sketch.

The toggle chain length should be measured from the center of the chain or wire running through the footrope (center of footrope) to the underside of the fishing line.

The attached sketch shows how to measure the toggle and chain length.



[illegible]

Rest of Net - Samples of 20 meshes

[illegible]

11. Have the records of catches been retained aboard for the duration of the quota period? YES/NO

Result of Inspection of Fish on board

12. Result of Inspection of Fish Observed in last tow (if appropriate)

[illegible]

13. Result of inspection of catches on board

Fish species with 3-Alpha Code	Inspectors Estimate (tonnes)

Inspectors comments on how estimates were calculated:

.....

.....

.....

.....

14. Summary of catches from logbooks for current fishing trip/quota period:

[illegible]

15.

Nature of infringement: Signature of inspector: Signature of master:
--

COMMENTS AND OBSERVATIONS

16. Documents inspected following an infringement.....

17. Comments: (In the case of a difference between the inspector's estimates of the catches on board and the related summaries of catches from the logbooks, note this difference with the percentage)

.....

.....

.....

18. Subjects of photographs taken relating to an infringement

.....

.....

19. Other comments, statements and/or observations by Inspector(s)

.....

.....

20. Statements of Second Inspector or Witness

.....

.....

21. Name and Signature of Second Inspector or Witness.....

22. Signature of Inspector in charge.....

23. Statement of Master's Witness(es)

.....

.....

.....

24. Name and Signature of Master's Witness(es)

.....

25. Acknowledgement and receipt of report:

I, the undersigned, Master of the vessel....., hereby confirm that a copy of this report and second photographs taken have been delivered to me on this date. My signature does not constitute acceptance of any part of the contents of the report.

Date..... Signature.....

26. Comments and signature by the Master of vessel

.....

.....

.....

COPY TO MASTER, ORIGINAL TO BE RETAINED BY INSPECTOR FOR REQUIRED DISTRIBUTION

1. The forms for the Report of Inspection shall be collated in a booklet with each page having an original and two self-carbon copies (preferably coloured and preferably 1 yellow and 1 green).
2. Page packets are to be perforated at the top and bottom of the page for easy removal.
3. Items 1 through 8 and item 17 of the Report are to be highlighted with red ink.
4. Booklets should be bound preferably with 20 complete sets of the 3-page report.
5. The size of every page, after removal from the packet, should be 355.5 mm (14") in length by 216 mm (8 1/2") in width.

Annex IV.B Surveillance Report Form

THE NORTHWEST ATLANTIC FISHERIES ORGANIZATION SURVEILLANCE REPORT PART I

OFFICIAL

1. Name(s) Document Identity No.(s).....

 Contracting Party
2. Identification/Call Sign of Surveillance Craft.....
 Patrol Commenced in NRA at Position (Lat/Long).....on..... (Date/time-UTC)
 Patrol Terminated in NRA at Position (Lat/Long).....on..... (Date/time-UTC)

DETAILS OF VESSEL OBSERVED

3. Contracting Party/Flag State.....
 4. Vessels Name, Call Sign, Side Number (& IMO#).....
 5. Other Identifying Features (Type of vessel, colour of hull, superstructure, etc.)

 6. Date/Time-UTC When First Identified Course & Speed
 Position When First Identified NAFO Division.....
 Lat.
 Long.
 Equipment used in Determining Position
7. Vessel Activity.....
8. Fishing Gear in Use.....
9. WEATHER CONDITIONS
 Wind Dir..... Sea State
 Wind Speed..... Visibility

10. DETAILS OF IMAGES/PHOTOGRAPHS TAKEN

Image Number	Date and Time	Position	Fishing Vessel Activity	Comments
1.				
2.				
3.				
4.				
5.				

PART II

(to be completed by the inspector not less than 72 hours following the observation recorded in Part I)

(NOT APPLICABLE TO NON-CONTRACTING PARTIES)

I hereby certify that to date, in respect of the fishing vesselinformation received by theauthorities from the competent authorities of the Contracting Party pursuant to Articles 28 and 29 of the Conservation and Enforcement Measures, does not correspond with the observation recorded in Part I of this report.

Name of Official:.....

Signature:

¹Fishing vessels not assigned an IMO number shall provide their external registration number.
²In case where a vessel has engaged in transshipment operations. A separate form shall be used for each donor vessel.
³FAO Species Codes – NEAFC Annex V – NAFO Annex I.C
⁴FAO Species Codes – NEAFC Annex V – NAFO Annex I.C
⁵Product presentations – NEAFC Appendix 1 to Annex IV – NAFO Annex II.K

[illegible]

⁶ FAO Species Codes NEAFC Annex V – NAFO Annex I.C

⁷Product presentations – NEAFC Appendix 1 to Annex IV – NAFO Annex II.K

E. INFRINGEMENTS AND FOLLOW-UP			
E 1. NAFO			
E.1A Sea Inspection			
Infringements resulting from inspections inside NAFO R.A.			
Inspection Party	Date of inspection	Division	NAFO CEM infringement legal reference
E.1B Port Inspection results			
(a) – Confirmation of Infringements found at sea inspection			
NAFO CEM infringement legal reference		National infringement legal reference	
(b) – Infringements found at sea inspection and not possible to be confirmed during the Port inspection.			
Comments:			
(c) – Additional infringements found during the Port Inspection			
NAFO CEM infringement legal reference		National infringement legal reference	
E 2. NEAFC INFRINGEMENT NOTED			
Article	NEAFC provision(s) violated and summary of pertinent facts		
Observations:			
Inspectors Name		Inspectors Signature	Date and Place
F. DISTRIBUTION			
Copy to Flag State	Copy to NEAFC Secretary	Copy to NAFO Executive Secretary	


Annex IV.D Document of Identity

INSPECTOR'S/TRAINEE'S DOCUMENT OF IDENTITY

(not smaller than 8.5 cm x 5.5 cm).

Front

Northwest Atlantic Fisheries
Organization




Identity Card


Inspector

Photograph

Back



FISHERIES COMMISSION



The bearer of this document

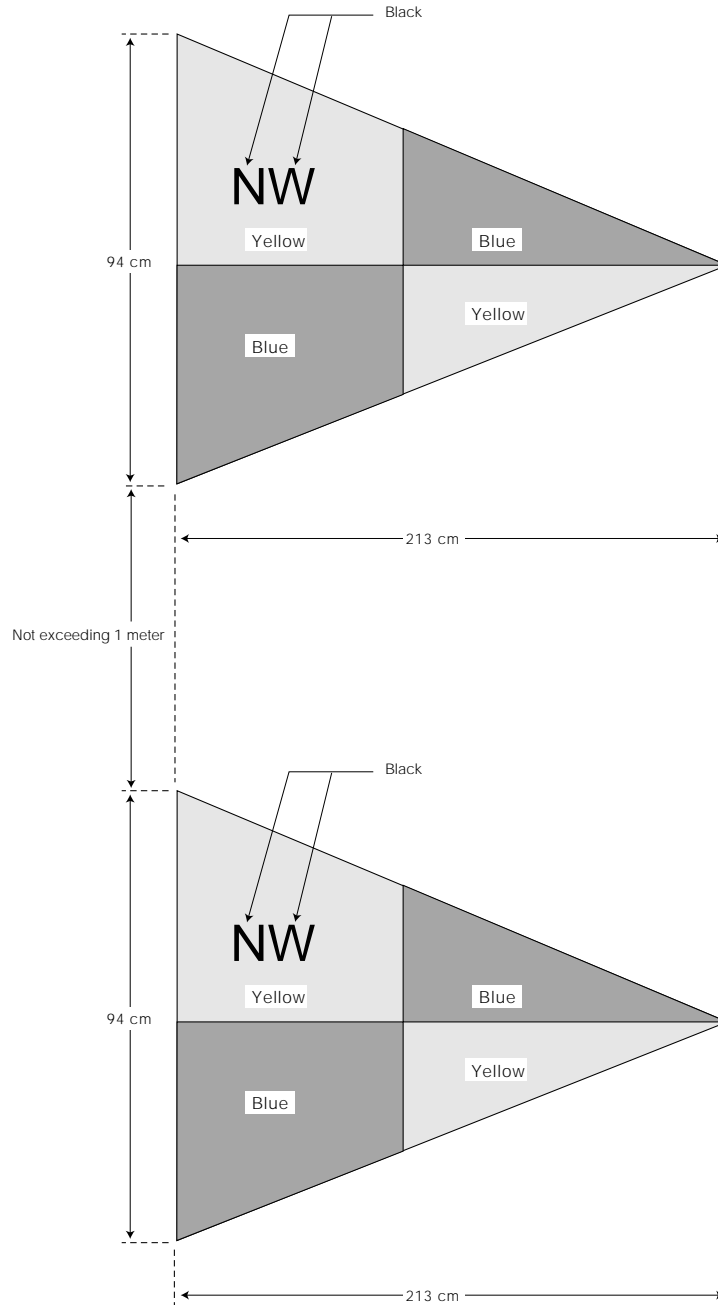
is an **inspector** duly appointed under the terms of the Scheme of Joint International Inspection and Surveillance of the Fisheries Commission of the Northwest Atlantic Fisheries Organization, and has authority to act under the provisions of the NAFO Convention and Enforcement Measures.

Signature (Executive Secretary)

NAFO Member:

No.

Annex IV.E NAFO Inspection Pennants



Pennants to be displayed by a NAFO inspection vessel. A boarding vessel shall display one pennant, which may be half-size.

Annex IV.F
NAFO Inspection Seal



The NAFO Inspection Seal shall be as follows:

Name	NAFO INSPECTION SEAL
Mark	"NAFO Inspection No. of six digits"
Material	polyethylene recyclable
Colour	orange
Melt index	6.70 + .60 (by international standard)
Density	953 + .003 (by international standard)
Breaking point (load)	min. 45 kg (τ° 20°C)

Annex IV.G

Construction and Use of Boarding Ladders

1. A boarding ladder shall be provided which shall be efficient for the purpose of enabling inspectors to embark and disembark safely at sea. The boarding ladder shall be kept clean and in good order.
2. The ladder shall be positioned and secured so that:
 - (a) it is clear of any possible discharges from the vessel;
 - (b) it is clear of the finer lines and as far as practicable in the midlength of the vessel;
 - (c) each step rests firmly against the vessel's side.
3. The steps of the boarding ladder shall:
 - (a) be of hardwood or other material of equivalent properties, made in one piece free of knots; the four lowest steps may be made of rubber of sufficient strength and stiffness, or of other suitable material of equivalent characteristics;
 - (b) have an efficient non-slip surface;
 - (c) be not less than 480 mm long, 115 mm wide, and 23 mm in thickness, excluding any non-slip device or grooving;
 - (d) be equally spaced not less than 300 mm or more than 380 mm apart;
 - (e) be secured in such a manner that they will remain horizontal.
4. No boarding ladder shall have more than two replacement steps which are secured in position by a method different from that used in the original construction of the ladder and any steps so secured shall be replaced, as soon as reasonably practicable, by steps secured in position by the method used in the original construction of the ladder. When any replacement step is secured to the side ropes of the boarding ladder by means of grooves in the side of the step, such grooves shall be in the longer sides of the steps.
5. The side ropes of the ladder shall consist of two uncovered manila or equivalent ropes not less than 60 mm in circumference on each side; each rope shall be left uncovered by any other material and be continuous with no joints below the top step; two main ropes, properly secured to the vessel and not less than 65 mm in circumference, and a safety line shall be kept at hand ready for use if required.
6. Battens made of hardwood, or other material of equivalent properties, in one piece, free of knots and between 1,8 and 2 m long, shall be provided at such intervals as will prevent the boarding ladder from twisting. The lowest batten shall be on the fifth step from the bottom of the ladder and the interval between any batten and the next shall not exceed nine steps.
7. Means shall be provided to ensure safe and convenient passage for inspectors embarking on or disembarking from the vessel between the head of the boarding ladder or of any accommodation ladder or other appliance provided. Where such passage is by means of a gateway in the rails or bulwark, adequate handholds shall be provided. Where such passage is by means of a bulwark ladder, such ladder shall be securely attached to the bulwark rail or platform and two handhold stanchions shall be fitted at the point of boarding or leaving the vessel not less than 0,70 m or more than 0,80 m apart. Each stanchion shall be rigidly secured to the vessel's structure at or near its base and also at a higher point, shall be not less than 40 mm in diameter, and shall extend not less than 1,20 m above the top of the bulwark.
8. Lighting shall be provided at night so that both the boarding ladder overside and also the position where the inspector boards the vessel shall be adequately lit. A lifebuoy equipped with a self-igniting light shall be kept at hand ready for use. A heaving line shall be kept at hand ready for use if required.
9. Means shall be provided to enable the boarding ladder to be used on either side of the vessel. The inspector in charge may indicate which side he would like the boarding ladder to be positioned.
10. The rigging of the ladder and the embarkation and disembarkation of an inspector shall be supervised by a responsible officer of the vessel. The responsible officer shall be in radio contact with the bridge.
11. Where on any vessel constructional features such as rubbing bands would prevent the implementation of any of these provisions, special arrangements shall be made to ensure that inspectors are able to embark and disembark safely.