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Northwest Atlantic Fisheries Organization



# **Conservation and Enforcement Measures**



Supplement of FC Doc. 02/9

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# Introduction

This publication of the NAFO Conservation and Enforcement Measures supplements the basic FC Doc. 02/9 and compiles all new/amended measures adopted by the Fisheries Commission during the 24th Annual Meeting, Santiago de Compostela, Spain, September 2003 (Fisheries Commission Annual Meeting Report) and any subsequent voting procedures. The following measures were incorporated:

Part I.A	- Incidental Catch Limits – amended paragraphs
	5(a)  and  5(d)
Part I.B	- Chartering Arrangements – extended for 2003
Part I.F	- 3L Cod - year amended to 2003
Part I.G	- 3M Shrimp - year amended to 2003
Part I.H	- 3NO Shrimp – year amended to 2003
Part I.I	- 3L Witch – year amended to 2003
Part I.K	- 3L Shrimp – paragraphs 1, 2 and 9 amended;
	year amended to 2003
Part III.D	- amended to allow automatic communication of
	such administrative reports
Part III.E	- Amended text and Annexes
Part V	- Schedule I - Quota Table, 2003
Part VI.B	- amended paragraph 5
Part VIII	- Secure and Confidential Treatment of
	Electronic Reports and Messages Transmitted
	Pursuant to Part III.E, VI and VII of the
	Conservation and Enforcement Measures

**Special Note**: The basic document of the NAFO Conservation and Enforcement Measures during 2003 will be FC Doc. 02/9, supplemented and amended by the measures as listed above.





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#### A. 5. Incidental Catch Limits

- (a) Masters shall not conduct directed fisheries for species for which incidental catch limits apply. A directed fishery for a species is conducted when that species comprises the largest percentage by weight of the catch in any one haul.
- (b) Vessels of a Contracting Party shall limit their incidental catch to a maximum of 2500kg or 10%, whichever is the greater, for each species listed in Schedule I for which no quota has been allocated in that division to that Contracting Party.
- (c) In cases where a ban on fishing is in force or an "Others" quota has been fully utilized, incidental catches of the species concerned may not exceed 1,250 kg or 5%, whichever is the greater.
- (d) The percentages in (b) and (c) are calculated as the percentage, by weight, for each species of the total catch retained onboard.
- (e) Catches of shrimp shall not be used in the calculation of by-catch level of groundfish species.
- (f) To avoid excessive incidental catch the following fishing strategy shall be implemented;
  - (i) If the amount of incidental catch of any one species listed in Schedule I for which no quota has been allocated in that division to that Contracting Party, in any one haul exceeds 10% of the total catch of the other species in that haul, the vessel shall immediately change fishing area to reduce the incidental catch. The vessel must move a minimum 5 nautical miles from any position of the previous haul.
  - (ii) In cases where a ban on fishing is in force for any particular species or an "Others" quota for any species has been filly utilized, and the amount of incidental catch of this species in any one haul exceeds 5% of the total catch of other species in that haul, the vessel shall immediately change fishing area to reduce the incidental catch. The vessel must move a minimum 5 nautical miles from any position of the previous haul.
  - (iii) If any future haul exceeds the permitted incidental catch limit outlined in (i) or (ii) above, whichever is applicable, the vessel shall again immediately change fishing area to reduce the incidental catch. The vessel must move a minimum 5 nautical miles from any position of the previous hauls and shall not return to the area for at least 48 hours.

#### B. Chartering Operations

- 1. Each Contracting Party may utilize partly or wholly quota and shrimp fishing days allocated to that Party under Schedule I and Part I.G by way of charter arrangement with a fishing vessel flying the flag of another Contracting Party notified in accordance with Part III.D, subject to:
  - the consent of the flag Contracting Party;
  - a favourable proposal adopted through a mail vote in accordance with Article XI.2 of the Convention.
- 2. Contracting Parties shall limit such charter arrangements to one fishing vessel per year and for a limited duration not exceeding 6 months.

- 3. Contracting Parties intending to have recourse to such charter arrangements shall together with a request for a mail vote notify the following information to the NAFO Executive Secretary:
  - the name and registration of the chartered vessel and the relevant flag Contracting Party
  - a copy of the charter
  - the fishing possibilities concerned
  - the date as from which the vessel is authorized to commence fishing on these fishing possibilities
  - the duration of the charter
- 4. The relevant flag Contracting Party shall notify in writing its consent to the NAFO Executive Secretary.
- 5. The NAFO Executive Secretary shall circulate the above information and the consent of the flag Contracting Party without delay to Contracting Parties.
- 6. The relevant flag Contracting Party is responsible for ensuring that the vessel complies with the requirements of the NAFO Conservation and Enforcement Measures. This does not nullify the obligations of the Contracting Party to which the quota and shrimp fishing days have been allocated under Part I of the Conservation and Enforcement Measures, as appropriate.
- 7. All catches and incidental catches from such chartering arrangements shall be recorded by the relevant flag Contracting Party separate from other national catch data recorded according to Part I.D., and shall be reported to the Contracting Party to which the fishing possibilities have been allocated and to the Executive Secretary separate from other national catch data according to Part I.D. The Executive Secretary shall add these catches to the catch statistics of the Contracting Party to which the fishing possibilities have originally been allocated.
- 8. As a pilot project, these provisions shall apply only to the year 2003.

#### F. Other Measures - No Directed Fishery for Cod in Div. 3L in the Regulatory Area

Noting differences that have been expressed on the subject of 2J3KL cod by Contracting Parties,

Noting the need to avoid prejudice to the legal position of any Contracting Party on this subject,

Noting the provisions of Article XI(3) of the NAFO Convention, which aim at ensuring consistency between the measures established for the Regulatory Area and the measures adopted by the relevant coastal State;

Noting that the advice from the Scientific Council strongly suggests a continuation of the moratorium for the entire stock;

Directed fisheries for cod in Division 3L in the Regulatory Area shall not be permitted in 2003.

Contracting Parties other than Canada expressed their serious concern that management measures for this stock may not be consistent throughout its range in the Convention Area in the year 2003.

#### G. Other Measures - Management Measures for Shrimp in Div. 3M

- 1. Vessels fishing for shrimps in Division 3M in 2003 shall use nets with a minimum mesh size of 40 mm.
- 2. Vessels fishing for shrimp in Division 3M in 2003 shall use sorting grids or grates maximum spacing between the bars of 22 mm.
- 3. In the event that total by-catches of all regulated groundfish species in any haul exceed 5 percent by weight, vessel shall immediately change fishing area (minimum of 5 nautical miles) in order to seek to avoid further by-catches of regulated groundfish.

- 4. a) Each Contracting Party shall limit in 2003 the number of vessels fishing for shrimp in Div. 3M to the number that have participated in this fishery in the period from 1 January 1993 to 31 August 1995.
  - b) Each Contracting Party shall, in 2003, limit the number of fishing days by its vessels fishing for shrimp in Div. 3M to 90% of the maximum number of fishing days observed for their vessels in one of the years 1993, 1994 or 1995 (until 31 August 1995). However, for Contracting Parties with a track record in the period from 1 January 1993 to 31 August 1995, a minimum level of 400 fishing days is permitted.
  - c) Contracting Parties with no track record in the shrimp fishery in the period from 1 January 1993 to 31 August 1995 may, in 2003, fish for shrimp with one vessel in 100 fishing days.
  - d) Each Contracting Party shall communicate the number of fishing days to the Executive Secretary before 1 November 2002, that are available to that Contracting Party for 2003. The number of days shall be counted from the hail reports of vessels fishing for shrimp in Div. 3M and shall include the days of entry and exit from the Regulatory Area. In the case where vessels fishing for shrimp and other species on the same trip the number of days shall be counted from the day the vessel entered the shrimp fishery to the day the vessel ceased that fishery.

The Executive Secretary shall scrutinize the communications from the Contracting Parties, work with the relevant Contracting Parties if discrepancies are revealed, and by 1 December 2002 notify the number of vessels and fishing days applicable to all Contracting Parties.

- e) Vessels fishing for shrimp in Division 3M may fish this stock in 2003 in the area defined by the coordinates in footnote 1. However, in the period from June 1, 2003 (00.01 GMT) to December 31, 2003 (24.00 GMT) fishing for shrimps in the area defined by the coordinates in footnote 2 is prohibited.
- f) Each Contracting Party shall, within 30 days following the calendar month in which the catches were made, report provisional monthly fishing days in Div. 3M and the area defined in footnote 1 to the Executive Secretary. The Executive Secretary shall, within 10 days following the monthly deadlines for receipt of the provisional fishing days statistics, collate the information received and circulate it to Contracting Parties.
- g) Each Contracting Party shall in 2003 closely monitor its vessels fishing for shrimp and close the fishery when the number of fishing days available to that Party is exhausted. The number of fishing days shall be counted from the hail reports of vessel fishing for shrimp and shall include the days of entry into Div. 3M and the area defined in footnote 1 and the days of exit from Div. 3M and the area defined in footnote 1.
- h) In the case where a vessel is fishing for shrimp and other species on the same trip, the change of fishery shall be hailed and the number of fishing days counted accordingly.
- i) Fishing days of a Contracting Party may only be utilized by a vessel flying the flag of another Contracting Party under the conditions provided in I.B (chartering arrangements).
- j) Fishing days are not transferable between Contracting Parties.

1		_			
Point No.	Latitude	Longitude	Point No.	Latitude	Longitude
1	47°20'0	46°40'0	1 (same as no. 7)	47°55'0	45°00'0
2	47°20'0	46°30'0	2	47°30'0	44°15'0
3	46°00'0	46°30'0	3	46°55'0	44°15'0
4	46°00'0	46°40'0	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



Objections recorded by the NAFO Secretariat (under Article XII of the NAFO Convention): - *Iceland is not bound by provisions I.G.4 pursuant to its objection (GF/02-649 of November 8, 2002).* 

# H. Other Measures - Management Measures for Shrimp in Div. 3NO

All Contracting Parties shall ensure that their vessels shall not conduct a directed fishery for shrimp in Divisions 3NO in 2003.

# I. Other Measures - No Directed Fishery for Witch in Division 3L in the Regulatory Area

Noting the available scientific advice, and

Noting the current moratorium that is being applied by Canada to the directed fishing of this stock inside the Canadian 200 mile zone,

Directed fisheries for witch in Division 3L in the Regulatory Area shall not be permitted in 2003.

45°00'0

#### K. Other Measures – Management Measures for Shrimp in Division 3L

- Note: The following measures apply in Division 3L except that portion of Division 3L adjacent to 3M and defined in PART IG-4e) of the NAFO Conservation and Enforcement Measures.
- 1. The total allowable catch (TAC) of shrimp in Division 3L for 2003 shall be set at 13,000t. Contracting Parties shall not conduct exploratory or research fisheries that take catch beyond that allocated to the Contracting Party.
- 2. 10,833t of the TAC shall be allocated to Canada to be fished within the Canadian zone and 2,167t shall be allocated within the NAFO Regulatory Area between all other Contracting Parties.
- 3. As a preliminary measure, the quota in the NAFO Regulatory Area shall be divided equally among all other Contracting Parties.
- 4. All fishing shall take place in depths greater than 200 meters. The NAFO Regulatory Area fishery shall be restricted to an area east of a line bound by the following co-ordinates: 46°00'N/47° 53'W, 46° 40'N/47° 20'W, 47° 19'N/47° 43'W.
- 5. Vessels fishing for shrimp in Division 3L in 2003 shall use nets with a minimum mesh size of 40 mm.
- 6. Vessels fishing for shrimp in Division 3L in 2003 shall use sorting grids or grates with a maximum bar spacing of 22 mm and the nets shall be equipped with toggle chains of a minimum 72 cm in length.
- 7. In the event that total by-catches of all regulated groundfish species in any haul exceed 2.5 percent by weight of the catch of shrimp, the vessel shall immediately change fishing area (minimum of 5 nautical miles) in order to seek to avoid further by-catches of regulated groundfish.
- 8. Every vessel fishing shrimp in Division 3L in the NAFO Regulatory Area are required to carry observers at all times while fishing.
- 9. In the NAFO Regulatory Area, each Contracting Party shall limit in 2003 the number of vessels fishing for shrimp in Division 3L at any time to one vessel per each Contracting Party's allocation.
- 10. For vessels that fish shrimp in Division 3L each entry and exit from Division 3L shall require 24-hour prior notification to the Executive Secretary. All shrimp on board shall be reported to the Executive Secretary on entry and exit.
- 11. To minimize gear conflicts with other fisheries during the conduct of the 3L shrimp fishery in the NRA, shrimp fishing shall be permitted during the following periods: January 1 March 31, July 1 September 14, December 1 December 31.
- 12. All shrimp harvested in Division 3L shall be packaged and labeled as harvested in this Division.
- 13. Each Contracting Party shall notify the Executive Secretary daily of catches taken by its vessels from this stock. The Executive Secretary will forward this information to Contracting Parties with an inspection presence.

Objections recorded by the NAFO Secretariat (under Article XII of the NAFO Convention):

<sup>-</sup> Denmark (in respect of Faroe Islands and Greenland) is not bound by provisions I.K.2 & 3 pursuant to its objection (GF/02-665 of November 28, 2002) to the quota of 3L shrimp allocated to Denmark (in respect of the Faroe Islands and Greenland).

#### PART III - VESSEL REQUIREMENTS

#### D. <u>Notification of Fishing and Processing Vessels</u>

- 1. Each Flag Contracting Party shall notify the Executive Secretary of all vessels of more than 50 gross tons engaged in fishing or in processing fish in the Regulatory Area:
  - (a) **prior to 1 January** of each year, if possible; or
  - (b) in a timely manner following departure of the vessel from its home port; or in the case of bare boat charters, one month prior to the departure of the vessel from its home port.
  - (c) by message within **30 days of any changes** in the terms of notification.
- 2. Vessels registered in a Contracting Party:

Such notification shall include for each vessel:

- (a) name of vessel in both native and Latin alphabet;
- (b) official numbers;
- (c) home port and nationality;
- (d) owner and charterer, if any;
- (e) certification that its master has been provided with the extant Commission's measures;
- (f) principle directed species while engaged in fishing in the Regulatory Area.
- 3. Vessels temporarily flying the flag of a Contracting Party (bare boat charter)

Such notification shall include for each vessel:

- (a) date as from which the vessel has been authorized to fly its flag
- (b) date as from which the vessel has been authorized by the Contracting Party to engage fishing in the NAFO Regulatory Area
- (c) the name of the State where the vessel is registered or was previously registered and the date as from which it ceased flying the flag of that State;
- (d) name of vessel in both native and Latin alphabet;
- (e) official numbers;
- (f) home port and nationality after the transfer;
- (g) owner and charterer, if any;
- (h) certification that its master has been provided with the extant Commission's measures;
- (i) principle directed species while engaged in fishing in the Regulatory Area.
- 4. These messages may be sent to the NAFO Secretariat using the automated VMS system using the formats as shown in Part III, Annex III Notification of Authorized Vessels.
- 5. The Executive Secretary shall provide all Contracting Parties with a listing of all vessels which he has been notified for fishing in the Regulatory Area.

#### E. <u>Hail System</u>

- 1. A Contracting Party shall ensure that vessels of that Party to which the Scheme of Joint International Inspection and Surveillance applies shall automatically communicate reports required by the Conservation and Enforcement Measures via the Flag State Monitoring Centre (FMC) to the NAFO Secretariat (automatically routed to the Secretariat):
  - (a) catch on entry into the Regulatory Area. This report shall be made from the vessel's first VMS position report when a vessel enters the Regulatory Area and shall include the date, the time, geographical position of the vessel, total round weight by species (3 alpha codes) on board in kilograms (rounded to the nearest 100 kilograms) and directed species.

The total quantity of species for which the total round weight by species is less than one tonne may be reported under the 3 alpha code "MZZ" (marine fish not specified).

(b) **catch on exit** from the Regulatory Area. This report shall be made from the vessel's last VMS position report when a vessel leaves the Regulatory Area and shall include the date, time, geographical position of the vessel and catch in round weight taken and retained in the Regulatory Area by species (3 alpha codes) in kilograms (rounded to the nearest 100 kilograms).

The total quantity of species for which the total round weight by species is less than one tonne may be reported under the 3 alpha code "MZZ" (marine fish not specified).

(c) each offloading for transhipment of fish while the vessel is operating in the Regulatory Area. This report shall be made at least twenty-four (24) hours in advance and shall include the date, the time, the geographical position of the vessel, total round weight by species (3 alpha codes) to be transhipped in kilograms (rounded to the nearest 100 kilograms) and the call signs of vessels transhipped to and from.

Without prejudice to Schedule II of Part V of the NAFO Conservation and Enforcement Measures, after each radio or fax transmission of information to the competent authorities of Contracting Parties the following details are to be immediately **entered in the logbook**:

- Date and time of transmission

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- In cases of radio transmission, name of radio station through which the transmission is made
- 2. Within **24 hours** of receipt of these reports, whenever possible, competent authorities of each Contracting Party shall transmit the information contained therein to the NAFO Executive Secretary. The NAFO Executive Secretary shall transmit the information to other Contracting Parties with an inspection presence in the Regulatory Area as soon as possible and shall ensure that all such transmissions to a Contracting Party are numbered sequentially.
- 3. Contracting Parties will ensure all hail **reports** transmitted by them will be **sequentially numbered**. The Executive Secretary will verify that all hail reports have been received by checking sequential numbering and verify any discrepancies with the Contracting Party concerned. The hail reports are to be treated in **a confidential manner**.

### PART III - ANNEX I - HAIL SYSTEM MESSAGE FORMAT

- 1. The communications described below shall be entitled "NAFO REPORT". The information to be transmitted, which shall be presented in the form specified, is as follows:
- 1.1 **Catch on entry** of the vessel into the Regulatory Area. The first VMS position report automatically generated and communicated when a vessel enters the Regulatory Area should be identified as entry into the area and shall contain the following particulars in the following order:
  - A. Name of vessel,
  - B. Call sign,
  - C. External identification letters and numbers,
  - D. The date, the time and geographical position,
  - E. Indication of the message code: "CATCH ON ENTRY",
  - F. The NAFO division into which the vessel is about to enter,
  - G. The total round weight of fish by species (3 alpha codes) on board in kilograms rounded to the nearest 100 kilograms,
  - H. The name of the master,
  - I. Directed species.
- 1.2 **Catch on exit** from the Regulatory Area. The last automatically generated VMS position report transmitted leaving the Regulatory Area should be identified as the vessel's exit from the Regulatory Area and shall contain the following particulars in the following order:
  - A. Name of vessel,
  - B. Call sign,
  - C. External identification letters and numbers,
  - D. The date, the time and geographical position,
  - E. Indication of the message code: "CATCH ON EXIT",
  - F. The NAFO division from which the vessel is about to leave,
  - G. The catch in round weight taken in the Regulatory Area by species (3 alpha codes) in kilograms (rounded to the nearest 100 kilograms).
  - H. The name of the master.
- 1.3 **Transhipment** in the Regulatory Area. This report shall be made at least **twenty-four hours** in advance and shall contain the following particulars in the following order:
  - A. Name of vessel,
  - B. Call sign,
  - C. External identification letters and numbers,
  - D. The date, the time and geographical position,
  - E. Indication of the message code: "TRANSFER",
  - F. The total round weight by species (3 alpha code) to be transhipped in kilograms (rounded to the nearest 100 kilograms),
  - G. The name of the master,
  - H. Call signs of vessels catches transferred to and from.

#### Example 1

#### Formats for the Electronic Transmission of NAFO Hails from Contracting Parties to the NAFO Secretariat

#### EXPLANATORY NOTES

- a) The formats herein conform with the requirements for the NAFO Hails System as set out in FC Document 00/1, the NAFO Conservation and Enforcement Measures Part III and Part III Annex I Hail System Message Format.
- b) The formats consist of variable length delimited records, and are based on systems currently in use in NEAFC.
- c) The variable length record is preferred over a fixed length record as some Contracting Parties collect more information from their vessels than is required by NAFO, and are forwarding the entire record to NAFO. The format is conducive to extraction of the required data fields by the receiving parties.
- d) The following convention is used in this paper: //FIELD NAME/field value//, where the field name is shown in uppercase, followed by the character "/", followed by the field value in uppercase. Fields are separated by "//".
- e) Each record begins with the string //SR// to indicate the Start of the Record.
- f) Each record ends with the string //ER// to indicate the End of the Record.
- g) Character fields (CHAR) shall conform with the ISO 8859.1 character set standard.
- h) Country codes used for addressee (AD) and sender (FR) shall conform with the ISO 3166 (1993) standard. E/F 7.3 states that user-assigned country codes shall start with the character "X", therefore it is proposed that the code XNW be used to designate the NAFO Secretariat, the addressee for hail messages.

#### NAFO HAILS SYSTEM - Part III Annex I Hail System Message Format

#### 1.1 CATCH ON ENTRY

//SR

//FR/Name of transmitting party

//AD/Destination "XNW" for NAFO

//SQ/sequence number

//NA/name of vessel

//RC/International radio call sign

//XR/external identification letters and numbers

//DA/date of transmission

//TI/time of transmission

//LT/latitude at time of transmission

//LG/longitude at time of transmission

//TM/indication of type of message "COE"

//RA/NAFO Division into which the vessel is about to enter.

//OB/total round weight of fish by species (3 alpha codes) on board upon entry into the Regulatory Area, in kilograms rounded to the nearest 100 kilograms. Allow several pairs of fields, consisting of species + weight, with each field separated by a space. e.g. //OB/species weight species weight species weight//

//MA/name of the Master

//DS/directed species

Allow several species to be entered, with the values separated by spaces,

e.g. //DS/species species species//

//ER//

Note: In order to facilitate system operation, the data elements Record Number (RN), Record Date (RD) and Record Time (RT) should be included also in the Entry, Exit and Transhipment reports.

The fields XR and NA should be made optional in the automatic reports.

Example 1 (continued)

#### NAFO HAILS SYSTEM - Part III Annex I Hail System Message Format

#### 1.2 CATCH ON EXIT

//SR

//FR/Name of transmitting party

//AD/Destination "XNW" for NAFO

//SQ/sequence number

//NA/name of vessel

//RC/International radio call sign

//XR/external identification letters and numbers

//DA/date of transmission

//TI/timeof transmission

//LT/latitude at time of transmission

//LG/longitude at\_time of transmission

//TM/indication of type of message "COX"

//RA/NAFO Division from which the vessel is about to exit

//CA/catch in round weight taken in the Regulatory Area by species (3 alpha codes) in kilograms (rounded to the nearest 100 kilograms). Allow several pairs of fields, consisting of species + weight, with each field separated by a space. e.g. //CA/species weight species weight species weight//

//MA/name of the Master

//ER//

<u>Note</u>: In order to facilitate system operation, the data elements Record Number (RN), Record Date (RD) and Record Time (RT) should be included also in the Entry, Exit and Transhipment reports.

The fields XR and NA should be made optional in the automatic reports.

#### NAFO HAILS SYSTEM - Part III Annex I Hail System Message Format

#### 1.3 TRANSHIPMENT HAIL

//SR

//FR/Name of transmitting party

//AD/Destination "XNW" for NAFO

//SQ/sequence number

//NA/name of vessel

//RC/International radio call sign

//XR/external identification letters and numbers

//DA/date of transmission

//TI/time of transmission

//LT/latitude at time of transmission

//LG/longitude at time of transmission

//TM/indication of type of message "TRA"

//KG/total round weight by species (3 alpha codes) to be transhipped in kilograms (rounded to the nearest 100 kilograms). Allow several pairs of fields, consisting of species + weight, with each field separated by a space. e.g. //KG/species weight species weight species weight//

//TT/call sign of vessel catches transferred to

//TF/call sign of vessel catches transferred from

//MA/name of the Master

//ER//

Note: In order to facilitate system operation, the data elements Record Number (RN), Record Date (RD) and Record Time (RT) should be included also in the Entry, Exit and Transhipment reports.

The fields XR and NA should be made optional in the automatic reports.

Data Element	Field Code	Туре	Mandatory/Optional	Definition/Remarks
Start of Record	SR		М	Indicates start of the record
From	FR	Char*3	М	ISO-3166 Address. Address of the transmitting Contracting Party
Addressee	AD	Char*4	М	ISO-3166 Address. Address of the party receiving the message, "XNW" for NAFO
Sequence Number	SQ	Num*6	<u>0</u>	Message serial number
Name	NA	Char*30	М	ISO 8859.1. Name of vessel
International radio call sign	RC	Char*7	М	IRCS Code. International Radio Call sign of the vessel
External identification	XR	Char*14	М	ISO 8859.1. Side number of the vessel
Date	DA	Num*8	М	YYYYMMDD, Year, month and day
Time	TI	Num*4	М	HHMM, Hours and minutes in UTC
Latitude	LT	Char*5	М	decimal degrees (WGS-84) e.g. //LA/N4600 = 46°00' North
Longitude	LG	Char*6	М	decimal degrees (WGS-84) e.g. $//LO/W04631 = 46^{\circ}31$ ' West
Type of Message	ТМ	Char*3	М	Indication of type of message COE/TRA/COX
Relevant Area	RA	Char*2	М	Relevant area (NAFO division)
Name of Master	MA	Char*30	М	Name of the master of the fishing vessel
Quantity	OB	Char*3 Num*7	М	FAO Code. Total round weight of fish by species (3 alpha codes) on board upon entry into the Regulatory Area, in kilograms rounded to the nearest 100 kilograms. Allow several pairs of fields, consisting of species + weight, with each field separated by a space.
Catch	CA	Char*3 Num*7	М	FAO Code. Total catch in round weight taken in the Regulatory Area by species (3 alpha codes) in kilograms (rounded to the nearest 100 kilograms). Allow several pairs of fields, consisting of species + weight, with each field separated by a space.
Transhipped	KG	Char*3 Num*7	М	FAO Code. Total round weight by species (3 alpha codes) to be transhipped in kilograms (rounded to the nearest 100 kilograms). Allow several pairs of fields, consisting of species + weight, with each field separated by a space
Directed Species	DS	Char*3	М	FAO Code; allowance for multiple main species
Transhipped To	TT	Char*30	М	IRCS Code. International Radio Call Sign of the receiving vessel
Transshipped From	TF	Char*30	М	IRCS Code. International Radio Call sign of the donor vessel
End Record	ER		М	End of record

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Definition of data elements

# PART III - ANNEX II - VMS REPORT FORMAT

Data Element:	Code:	Mandatory / Optional	Remarks:
Start record	SR	М	System detail; indicates start of record
From	FR	М	Address of the transmitting party (Contracting Party)
Address	AD	М	Message detail; destination; "XNW" for NAFO Secretariat
Sequence Number	SQ	0	Message detail; message serial number in current year
Type of Message	ТМ	М	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	М	Vessel registration detail; international radio call sign of the vessel
Trip Number	TN	0	Activity detail; fishing trip serial number in current year
Vessel Name	NA	М	Vessel registration detail; name of the vessel
External Registration Number	XR	М	Vessel registration detail; the side number of the vessel
Latitude	LT	М	Activity detail; position at time of transmission
Longitude	LG	М	Activity detail; position at time of transmission
Date	DA	М	Message detail; date of transmission
Time	TI	М	Message detail; time of transmission
Record Date	RD	М	Year, month and date
Record Time	RT	М	Hours and minutes in UTC
Record Number	RN	М	Serial number of the record in the relevant year
End of record	ER	М	System detail; indicates end of the record

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 ("//")indicate the end of a record."

Data Element:	Code:	Mandatory /Optional	Remarks:
Start record	SR	М	System detail; indicates start of record
Address	AD	М	Message detail; destination, "XNW" for NAFO Secretariat
From	FR	М	Message detail; ISO-3 code of the transmitting Contracting Party
Record Number	RN	М	Message detail; message serial number in current year
Record Date	RD	М	Message detail; date of transmission
Record Time	RT	М	Message detail; time of transmission
Type of Message	TM	М	Message detail; message type, "NOT" as Notification of authorized vessels
Vessel Name	NA	М	Vessel registration detail; name of the vessel
Radio Call Sign	RC	М	Vessel registration detail; international radio call sign of the vessel
Flag State	FS	М	Vessel registration detail; State where the vessel is registered
Internal Reference Number	IR	$O^1$	Vessel registration detail; Unique Contracting Party vessel number as ISO-3 flag state code followed by number
External Registration Number	XR	М	Vessel registration detail; the side number of the vessel
Port Name	PO	0	Vessel registration detail; port of registration or home port
Vessel Owner	VO	M <sup>2</sup>	Vessel registration detail; responsible for using the vessel
Vessel Charterer	VC	M <sup>2</sup>	Vessel registration detail; responsible for using the vessel
Vessel Type	TP	0	Vessel characteristic, FAO vessel code (Attachment 1V A)
Vessel Gear	GE	0	Vessel characteristic, FAO statistical classification of fishing gear (Attachment 1)
Vessel capacity measurement method	VT	М	Vessel characteristic; vessel capacity in pairs as needed "OC" "OSLO" convention 1947, "LC" "London" convention ICTM-69
tonnage	5.77	М	total capacity in tonnage
Vessel length measurement method	VL	М	Vessel characteristic; length in meters in pairs as needed
length		M	"OA" overall; "PP" between perpendiculars length in meters
Vessel Power	VP	191	Vessel characteristic; engine power in pairs as needed
measurement method	VI	М	"KW" total installed engine power in vessel as kilowatts, "HP" total installed engine power as horsepower
Power		М	total installed engine power
Limited Authorization	LU	0	License detail; authorization subject to specific restrictions on operation in the R.A., "Yes" or "No"
End of record	ER	М	System detail; indicates end of the record

# PART III - ANNEX III - NOTIFICATION OF AUTHORIZED VESSELS

<sup>1</sup> Mandatory when used as single identification in other messages. <sup>2</sup> Whichever one is appropriate.

	Co	d	Re	edfish	Amer	ican plaice	Yellowtail	Witch	Capelin	G. halibut	Squid ( <i>Illex</i> ) <sup>2,3</sup>	Shrimp
Contracting Party	Div. 3M	Div. 3NO	Div. 3M	Div. 3LN	Div. 3M	Div. 3LNO	Div. 3LNO	Div. 3NO	Div. 3NO	Div. 3LMNO	Subareas 3+4	Div. 3L
1. Canada	0	0	500	0	0	0	14137 <sup>7</sup>	0	0	4 668	N.S. <sup>4</sup>	10 833
2. Cuba	0	-	1750	0	-	-	-	-	0	-	510	144
3. Denmark (Faroe Is	lands											
and Greenland)	0	-	69	-	-	-	-	-	-	-	-	144
4. European Union	0	0	3100	0	0	0	$290^{7}$	-	0	17 226	N.S. <sup>4</sup>	144
5. France (St. Pierre e	et											
Miquelon)	-	-	69	-	-	-	-	-	-	-	453	144
6. Iceland	-	-	-	-	-	-	-	-	-	-	-	144
7. Japan	-	-	400	-	-	-	-	-	0	3 189	510	144
8. Korea	-	-	69	-	-	-	-	-	-	-	453	144
9. Norway	0	-	-	-	-	-	-	-	0	-	-	144
10. Poland	0	-	-	-	-	-	-	-	0	-	227	144
11. Estonia												144
12. Latvia	0	0	12 0501	0	0			0	0		1 122	144
13. Lithuania $\uparrow^1$	0	0	13 850 <sup>1</sup>	0	0	-	-	0	0	-	1 133 <sup>1</sup>	144
14. Russia										3 969		144
15. Ukraine												144
16. United States of												
America	-	-	69	-	-	-	-	-	-	-	453	144
17. Others	0	0	124	0	0	0	73 <sup>7</sup>	0	-	2 070 <sup>5</sup>		0
Total Allowable Catch	*9	*	$5\ 000^{6}$	*	*9	*	14 500 <sup>8</sup>	*	*	31 122	34 000	13 000

QUOTA TABLE. Total allowable catches (TACs) and quotas (metric tons) for 2003 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.

<sup>1</sup> Quotas to be fished by vessels from Estonia, Latvia, Lithuania and the Russian Federation. The provisions of Part I, Section A.3 of the NAFO Conservation and Enforcement Measures shall apply. <sup>2</sup> The opening date for the Squid (Illex) fishery is 1 July.

<sup>3</sup> Any quota listed for squid may be increased by a transfer from any "coastal state" as defined in Article 1, paragraph 3 of the NAFO Convention, provided that the TAC for squid is not exceeded. Transfers made to Contracting Parties conducting fisheries for squid in the Regulatory Area shall be reported to the Executive Secretary, and the report shall be made as promptly as possible. <sup>4</sup> Not specified because 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.

<sup>5</sup> Of which no more than 60% (1242 t) may be fished before 1 May 2003.

<sup>6</sup> Each Contracting Party shall notify the Executive Secretary bi-weekly of catches taken by its vessels from this stock. Not more than 2500 tons may be fished before July 1, 2003. The Executive Secretary shall notify without delay all Contracting Parties of the date on which, for this stock, accumulated reported catch taken by vessels of the Contracting Parties is estimated to equal 50 and then 100 percent of the TAC for that stock.

<sup>7</sup> Contracting Parties shall inform the NAFO Executive Secretary before (1 December 2002) of the measures to be taken to meet the advice of the NAFO Scientific Council, i.e. to ensure that total catches do not exceed the levels indicated.

<sup>8</sup> The provisions of Part I, Section A.5c) of NAFO Conservation and Enforcement Measures shall apply.

<sup>9</sup> Applicable to 2003 and 2004.

\*No directed fishing – The provisions of Part I, Section A.5a and c of NAFO Conservation and Enforcement Measures shall apply.



<sup>1)</sup> The Contracting Parties shall notify the Executive Secretary bi-weekly of catches taken by its vessels from this allocation. The Executive Secretary shall notify without delay all Contracting Parties the dates on which accumulated reported catch taken by vessels of Contracting Parties estimated equal to 50% and then 100% of that allocation.

<sup>2)</sup> As acceptance of this decision the quantities taken from that allocation in the NAFO Convention Area by respective Contracting Parties shall be deducted from the quotas allocated to these Contracting Parties in the NEAFC Convention Area.

<sup>3)</sup> This arrangement applies to 2003 and is without prejudice to sharing arrangements for this stock in future years.

#### PART VI - PROGRAM FOR OBSERVERS AND SATELLITE TRACKING

In order to improve and maintain compliance with the Conservation and Enforcement Measures for their vessels fishing in the Regulatory Area, Contracting Parties agree to a program of 100 percent observer coverage and to require all vessels fishing in the Regulatory Area to be equipped with satellite tracking devices as soon as possible and not later than January 1, 2001. The elements of this program are subject to review and revision, as appropriate, for application in 2003 and subsequent years.

#### A. <u>Observers</u>

- 1. Each Contracting Party shall require all its vessels fishing in the Regulatory Area to accept observers on the basis of the following:
  - a) each Contracting Party shall have the primary responsibility to obtain, for placement on its vessels, independent and impartial observers. (Observers are not to perform duties, other than those described in Sections 3, 4 and 5 below.)
  - b) in cases where a Contracting Party has not placed an observer on a vessel, any other Contracting Party may, subject to the consent of the Contracting Party of the vessel, place an observer on board until that Contracting Party provides a replacement in accordance with paragraph a);
  - c) no vessel shall be required to carry more than one observer pursuant to this Program at any time.
- 2. Each Contracting Party shall provide to the Executive Secretary a list of the observers they will be placing on vessels in the Regulatory Area.
- 3. Observers shall:
  - a) monitor a vessel's compliance with the relevant Conservation and Enforcement Measures. In particular they shall:
    - i) record and report upon the fishing activities of the vessel and verify the position of the vessel when engaged in fishing;
    - ii) observe and estimate catches with a view to identifying catch composition and monitoring discards, by-catches and the taking of undersized fish;
    - iii) record the gear type, mesh size and attachments employed by the master;
    - iv) verify entries made to the logbooks (species composition and quantities, round and processed weight and hail reports).
  - b) collect catch and effort data on a set-by-set basis. This data shall include location (latitude/longitude), depth, time of net on the bottom, catch composition and dis cards; in particular the observer shall collect the data on discards and retained undersized fish as outlined in the protocol developed by the Scientific Council.
  - c) carry out such scientific work (for example, collecting samples) as requested by the Fisheries Commission based on the advice of the Scientific Council;
  - d) within 30 days following completion of an assignment on a vessel, provide a report to the Contracting Party of the vessel and to the Executive Secretary, who shall make the report, available to any Contracting Party that requests it. Copies of reports sent to other Contracting Parties shall not include location of catch in latitude and longitude as required under 3 b), but will include daily totals of catch by species and division.

- 4. The observer shall monitor the functioning of, and report upon any interference with, the satellite system. In order to better distinguish fishing operations from steaming and to contribute to an *a posteriori* calibration of the signals registered by the receiving station, the observer shall maintain detailed reports on the daily activity of the vessel.
- 5. When an apparent infringement of the Conservation and Enforcement Measures is identified by an observer, the observer shall, within 24 hours, report it to a NAFO inspection vessel using an established code, which shall report it to the Executive Secretary.
- 6. Contracting Parties shall take all necessary measures to ensure that observers are able to carry out their duties. Subject to any other arrangements between the relevant Contracting Parties, the salary of an observer shall be covered by the sending Contracting Party.
- 7. The vessel on which an observer is placed shall provide suitable food and lodging during the observer's deployment. Vessel masters shall ensure that all necessary cooperation is extended to observers in order for them to carry out their duties including providing access, as required, to the retained catch, and catch which is intended to be discarded.
- B. <u>Satellite Tracking/ Vessel Monitoring System "VMS"</u>
  - 1. Each Contracting Party shall ensure that each of its vessels operating in the Regulatory Area is equipped with a satellite tracking device allowing the continuous tracking of its position by the Contracting Party.

To that end the satellite tracking device shall ensure the automatic communication at least once every six hours when operating in the Regulatory Area to a land-based fisheries monitoring centre (hereafter referred to as FMC) of data relating to:

- the vessel identification;
- the most recent geographical position of the vessel (longitude, latitude) with a position error which shall be less than 500 metres, with a confidence interval of 99%;
- the date and time of the fixing of the said position of the vessel.

Each Contracting Party shall take the necessary measures to ensure that its FMC receives these data.

- 2. The FMC of each Contracting Party shall be equipped with computer hardware and software enabling automatic data processing and electronic data transmission. Each Contracting Party shall provide for back-up and recovery procedures in case of system failures.
- 3. Each Contracting Party shall take the necessary measures to ensure that the VMS data received from its fishing vessels are recorded in computer readable form for a period of three years.
- 4. The masters of fishing vessels shall ensure that the satellite tracking devices are at all times fully operational and that the information in paragraph 1. is transmitted. In the event of a technical failure or non-operation of the satellite tracking device fitted on board a fishing vessel, the device shall be repaired or replaced within one month. After this period, the master of a fishing vessel shall not be authorized to commence a fishing trip with a defective satellite tracking device. Where a device stops functioning and a fishing trip lasts more than one month, the repair or the replacement has to take place as soon as the vessel enters a port; the fishing vessel shall not be authorized to continue or commence a fishing trip without the satellite tracking device having been repaired or replaced.
- 5. Each Contracting Party shall ensure that a fishing vessel with a technical failure or nonoperation of a defective satellite tracking device shall communicate manual Position reports at

least every 6 hours, containing the information in paragraph 1. to the FMC by other means of communication (radio, facsimile or telex). These messages should be submitted in computer readable form if possible and should be identified as MAN.

- 6. Each Contracting Party shall communicate reports and messages pursuant to paragraph 1. and paragraph 5. to the Executive Secretary as soon as possible, but not later than 24 hours after receipt of those reports and messages. If the Contracting Party so desires, it shall ensure that each of its fishing vessels shall communicate reports (by satellite, radio, facsimile or telex) to the Executive Secretary.
- 7. Each Contracting Party shall ensure that the reports and messages transmitted between the Contracting Party and the Executive Secretary or if the Contracting Party so desires, between its fishing vessels and the Executive Secretary, shall be in accordance with the data exchange format set out in Annex II. (Part III "VMS position report format")
- 8. The Executive Secretary shall make available as soon as possible the information received under paragraph 7. to other Contracting Parties with an active inspection presence in the Regulatory Area. All reports and messages shall be treated in a confidential manner.
- 9. Each Contracting Party shall notify the name, address, telephone, telex and facsimile numbers as well as the addresses for electronic communication of their relevant authorities to the Executive Secretary before 1 July 2001 and thereafter any changes without delay.
- 10. Subject to any other arrangements between Contracting Parties, each Contracting Party shall pay all costs associated with this system."

Objections recorded by the NAFO Secretariat:

<sup>-</sup> Iceland is not bound by this measure in accordance with its objection (GF/00-714, 27 Nov 00) regarding "observers in the shrimp fisheries Div. 3M and Div. 3L..." and (GF/02-658, 22 Nov 02) regarding "..100% observer coverage in the NAFO Regulatory Area".

#### PART VIII – PROVISIONS ON SECURE AND CONFIDENTIAL TREATMENT OF ELECTRONIC REPORTS AND MESSAGES TRANSMITTED PURSUANT TO PART IILE, VI AND VII OF THE CONSERVATON 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 Part III. E and to annex I, Part VI.A.3 and B of the Conservation and Enforcement Measures, hereinafter referred to as "reports and messages".

#### 2. <u>General Provisions</u>

- 2.1. The NAFO 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 NAFO 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 NAFO 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 NAFO 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 NAFO Conservation and Enforcement Measures.
- 2.5. Notwithstanding the provisions of Part III .E.2 and Part VI.B., the Fisheries Commission may instruct the NAFO Executive Secretary not to make available the reports and messages received under Part III and VI 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 NAFO Executive Secretary shall delete all the original reports and messages referred to in section 1 from the database at the NAFO 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 NAFO Executive Secretary, after measures have been taken to ensure that the identity of the individual vessels can no longer be established.
- 3.4. The NAFO Executive Secretary shall not make available reports and messages to other parties than those specified explicitly in Part III.E.2 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. <u>Provisions on security</u>

#### 4.1 Overview

Inspecting Contracting Parties and the NAFO 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 NAFO Secretariat must implement appropriate technical and organisational measures to protect reports and messages against accidental or unlawful destruction or accidental loss, alteration, unauthorised 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 unauthorised persons.
- Authenticity and data access control:
- The system has to be able to limit the access of authorised 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

Communication between the Contracting Parties and the NAFO Secretariat for the purpose of the Conservation and Enforcement Measures shall use the X.25 Protocol. Where Email is used for general communication and reports outside the scope of provision 1. between the NAFO Secretariat and the Contracting Parties the X.400 Protocol or Internet shall be used.

#### 4.4 Communication Security

If Contracting Parties and the NAFO Secretariat agree, the X.400 Protocol or the Internet can be used for communication of data under the Scheme, but then appropriate encryption protocols like "Pretty Good Privacy" (PGP) or "Digital Encryption Standard" (DES) shall be applied to ensure confidentiality and authenticity.

#### 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 NAFO 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.