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EXPERT CONSULTATION ON DATA FORMATS AND PROCEDURES FOR MONITORING, CONTROL AND SURVEILLANCE

BERGEN, NORWAY
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DRAFT -- NEAFC Monitoring, Inspection and Surveillance Communication System (NEMISCOS)

D R A F T

N E A F C

Monitoring, Inspection and Surveillance Communication System

(N E M I S C O S)

BACKGROUND AND DESCRIPTION

Reports and messages, North Atlantic format, Communication protocols

N E A F C

Convention on Future Multilateral Co-operation in North-East Atlantic Fisheries

The aim of the Convention is to promote the conservation and optimum utilisation of the fishery resources of North-East Atlantic area and accordingly to encourage international co-operation and consultation with respect to these resources.

The Convention applies to all fishery resources in the Convention area with the exception of sea mamals, sedentary species and, in so far as they are dealt with by other international agreements, highly migratory species and anadromous stocks.

The North-East Atlantic Fisheries Commission (The Commission) established under the Convention ensures the functioning of and implementation of the Convention.

The Commission appoints its Secretary and other staff.

The Commission may make recommendations concerning measures of control relating to fisheries conducted beyond areas under the fisheries jurisdiction of Contracting Parties (Regulatory Area) for the purpose of ensuring the application of the convention and any recommendations adopted thereunder.

The Commission may also under certain conditions make recommendations concerning measures of control relating to fisheries in the convention area

Contracting Parties (CP):

Denmark (Greenland, Faeroes Islands)

European Union

Iceland

Norway

Poland

Russia

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1. INTRODUCTION

(to be completed; should explain also the non-legal and informative character of this document)

2. INTERNATIONAL SCHEME FOR MUTUAL INSPECTION AND SURVEILLANCE

The NEAFC Commission has adopted the following recommendations in the area of control :

- Recommendation for a Scheme to Promote Compliance by non-Contracting Party Vessels with Recommendations established by NEAFC (entered into force on ……..)

- Recommendation on a Scheme of Control and Enforcement in respect of Fishing Vessels Fishing in Areas beyond the Limits of National Fisheries Jurisdiction in the Convention Area ("The Scheme") (entered into force on 1July 1999)

The Scheme provides for joint mutual inspection and surveillance in the Regulatory Area which distinguishes between the responsibility, on the one hand, for management and monitoring access and activities by fishing vessels in the R. A. which lies with the flag Contracting Party and, on the other hand, for inspection and surveillance in the R. A.[1] which may lie with another Contracting Party. Each Contracting Party may engage or, where more than 10 of its vessels operate simultaneously in the Regulatory Area, shall engage in inspection and surveillance activities in this area. The implementation of the Scheme requires, therefore, co-operation between the Inspecting Party [2] and the Flag State [3] both in the field of exchange of information on fishing activities in the R .A. as well exchange of information on the results of inspection and surveillance.

Inspection and surveillance under the Scheme extends in principle to Non Contracting Party vessels [4] operating in the NEAFC R.A. The NEAFC Commission adopts so called co-operative annual catch quota for regulated resources which may be fished by NCP vessels provided that the Flag States of these vessels subscribe to NEAFC Recommendations including the Scheme.

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1 <<R.A. >> means the waters of the Convention areas as defined in Article 1(1) of the Convention, which lie beyond the waters under the fisheries jurisdiction of Contracting Parties.

2 <<Inspecting Party>> means any public authority of a State or an authority mandated in accordance with the procedures established by the Contracting Party to assign inspectors and means of inspection and surveillance to the Scheme in accordance with its Article 14.

3 <<Flag State>> means the state where the fishing vessel is registered and whose flag it is flying

4 <<NCP vessel>> means a vessel flying the flag of a State which is not a Party to the NEAFC Convention.

Inspectors assigned to the Scheme by Contracting Parties on board of inspection and surveillance platforms the identity of which has been notified to the NEAFC Secretary, may carry out inspections on board of all Contracting Party's fishing vessels operating in the R. A.

The Scheme shall ensure notably through monitoring of access and fishing activities in the R.A., joint international inspection and surveillance, and follow-up of infringements that fishing activities by vessels operating in the R. A. comply with the applicable conservation measures. To this end, Contracting Parties shall exchange information between them on access of fishing vessels to waters and resources in the R. A. as well as information on fishing activities carried out in this area. Where appropriate, this information shall be transmitted in real time, for the benefit of the inspectors present in the R. A.

The information in the prescribed reports and messages (including data concerning individual fishing vessels) is intended for monitoring access to and activities in the R.A. and mutual inspection and surveillance by Contracting Parties in the R. A. The transmission and treatment of this information is subject to rules on confidentiality to be respected by each of the authorities as well as the secretariat to which such information is made available. Indeed, this type of information is to be considered as private or industrial information which is only accessible for the purpose of monitoring, inspection and surveillance.

The end product of exchange of information may be displayed in real time on a computer screen to inspectors of the Inspecting Party. The position of fishing vessels operating in the R.A. are displayed as points in a mapping (GIS) showing the geographical area where the fishing takes place. Computer systems on board of surveillance vessels integrate VMS positions together with other geographical information such as radar targets. Inspectors have thus a clear picture of the activities in their area of surveillance. Inspectors can also consult information on the identity, characteristics, authorisations and the activities of the vessels available in the system. On the basis of all this information, inspectors programme boardings of fishing vessels in the area concerned. In the communication centres of the Flag State the relevant fishing activities in the NEAFC R.A. are also monitored on this basis. Furthermore, computer systems may be programmed with automatic monitoring functions triggering alarms in the case where irregular activities occur. Inspectors can thus intervene at source in the R.A. In this manner, the system offers a large degree of efficiency and transparency in real time.

Since the software tracks fishing vessels on the basis of their positions [5], as communicated several times per day through VMS messages, the NEAFC communication systems must offer sufficient capacity notably for the tracking of some hundreds of fishing vessels in the busiest season (May, June, July). As an example of its functioning, it may be stated that the NEAFC Secretariat [6] has received in June 2001 more than 20.000 reports and messages per month.

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[5] <<position>> geographical position of vessel as expressed in longitude and latitude (WGS 84 format).

[6] <<NEAFC Secretariat>> means the NEAFC Secretariat person. The secretary appointed by the Commission is in charge of the daily operation of the NEAFC secretariat.

3. ELECTRONIC COMMUNICATION

In order to ensure adequate exchange of information between Contracting Parties for the purpose of monitoring, inspection and surveillance, each Contracting Party and the NEAFC Secretariat shall operate communication centres which are equipped with computerised communication facilities. These systems should allow automatic communication of information between communication centres for Contracting Parties. The communication centres form thus a network through which automatically information is channelled, in real time, from the source to the destination thereof.

In order to make automatic communication between Communication centres functioning, the Monitoring, Inspection and Surveillance Communication System established under the Scheme by the NEAFC Contracting Parties provides for compulsory formats and communication protocols for transmission of standardised information. The information exchanged between Contracting Parties is contained in reports[7] and messages[8].

VMS[9] messages are autonomously generated by equipment installed on board of fishing vessels and transmitted via the FMC[10] of the Flag State. Reports are manually generated by masters of fishing vessels or officials of a Contracting Party and transmitted via an FMC under the authority of the flag State or the inspection State. Contracting Parties may authorise their vessels to transmit reports directly to the NEAFC Secretariat.

The main pillars of the NEAFC Communication concept consist of predefined reports and messages structured in the North Atlantic Format and the use of compulsory communication protocols for secure transmission of records.

3.1. Predefined reports and messages

The Scheme defines the reports and messages containing information to be exchanged between Contracting Parties. Each report and message consists of a series of data elements field codes and data codes, characters, and/or numbers, defining the information to be exchanged. The information may be mandatory or optional. The field code always indicates the information attached to it.

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7 <<report>>electronic records which require manual intervention for compiling and transmission.

8 <<message>> automaticly generated electronic records which are communicated to the FMC of the flag State of the vessel without requiring any manual intervention.

9 <<VMS>> means a vessel monitoring system in accordance with Article 8 of the Scheme.

10 <<FMC>> means a land-based fisheries monitoring centre operating under the authority of the flag State of the fishing vessels monitored by this centre.

The difference in terminology between reports and messages refers rather to the way of compilation. It is assumed that messages are automatically generated by computer systems whilst report are manually compiled. The meaning of certain data elements may be dependent on the type of report or message whilst the meaning of other data elements is the same in each type of report or message.

3.2. North Atlantic Format [11]

The North Atlantic Format facilitates electronic communication. Computer systems are programmed to recognise and interpret automatically this format without manual interference. In accordance with its instructions, the computer systems will automatically relay the information received to its destination.

All messages and reports are compiled as electronic records (RECORD). The characters, of which the record is composed shall correspond to the character set ISO 8859.I.

Each record shall always commence with a double slash followed by the field code < SR > and a double slash (< // SR // > start of record).

Each record shall always end with a double slash followed by the field code < ER > and a double slash (< // ER //> end of record).

Field codes are followed by a single slash when a data element follows the field code (// SR // field code / data element // field code / data element // ER //).

3.3. Communication protocols

The FMCs or other communication centres established by Contracting Parties allow automatic communication without manual interference. Against this background, the Scheme defines the communication protocols which may be used for electronic communication of reports and messages. The main criteria used by NEAFC for defining communication protocols are confidentiality, communication costs, availability of services in their Contracting Parties, reliability, and facility of communication. Currently, the Scheme defines X 25 and X 400 as communication protocols.

[11] The structure of the North Atlantic Format was developed by the Danish authorities for the purpose of the implementation of the EU pilot project on VMS. As it was at that stage amended on the basis of suggestions from the Spanish authorities, it was originally known as the Danish / Spanish format.

4. ADOPTION AND ADMINISTRATION

The Commission may adopt, as appropriate, reports and messages or amend existing ones in accordance with the rules of procedure under the Convention. To this end, the Commission will be assisted by PECCOE [12] which will elaborate the draft amendments to the Scheme. After a recommendation, adopted by the NEAFC Commission, has been notified to Contracting Parties, sufficient time must be reserved for the programming of Computer Systems. The Commission will also adapt and amend the format and structure of reports and messages and define data elements, fields and data codes.

The NEAFC Secretariat and the authorities of Contracting Parties are responsible for the implementation of the Recommendations adopted by the NEAFC Commission. Each report and message will be subject to programming of computer systems which are part of the Monitoring, Inspection and Surveillance communication System. Computer systems of the Secretariat and Contracting Parties cannot be reprogrammed all at the same date. A transition period must, therefore, be specified. Obviously, it will be dependant on the type of amendments how much time must be reserved for implementation and transition period. The ad hoc Working Group on computerisation of the NEAFC Secretariat assists the NEAFC Secretary and ensures that the implementation of the amendments to the NEAFC Communication system is well co-ordinated. The group will meet as necessary and is composed of the experts of the Contracting Parties responsible for the functioning of the system.

For the reasons explained in the introduction of this document the communication of information in real time between Contracting Parties using several languages needed to be based on simple electronic records based on coded information. Therefore, a simple format was agreed in which the information is indicated by field codes and displayed in the form of codes, characters and numbers. To the extent possible, the NEAFC Communication system is based on internationally recognised codes such as ISO and FAO codes. Where such codes are not available, codes have been defined by NEAFC.

Each report and message is compiled as an electronic record which contains system details and message details as well as the information on the substance of activities regulated under the Scheme. System details and message details are only necessary for channelling the information automatically through the network.

Taking into account the communication features of the North Atlantic format, certain Contracting Parties have defined reports, messages or data elements on a national level. In order to avoid confusion on the level of codes, Contracting Parties are invited to inform NEAFC of such codes. Furthermore, other RFO's [13] using the so-called North Atlantic format may define or use codes for specific data elements relevant for their schemes. The NEAFC will take account of these field codes and information codes.

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[12] Permanent Committee on Control and Enforcement.

[13] <<RFO>> Regional Fisheries Organisation (such as NEAFC, NAFO, ICCAT, CAMLR, etc.)

The types of reports and messages are listed in Annex 8.1. The data elements, field codes as well as information codes are set out in Appendix 9.

4.1. Reports and messages

On the basis of the need for exchange of information between Contracting Parties, the Commission adopts predefined reports and messages as necessary. The frequency with which information must be exchanged between CPs depends from the type of information. Information on, for example, vessel characteristics will not change frequently whilst positions of the vessel will change all the time when the vessel operates in the R.A. Therefore, the criteria for the definition of reports and messages are based on the frequency with which the information must be exchanged between Contracting Parties. Furthermore, information should not be exchanged more often than necessary. Each report and message should contain only information compatible with the frequency with which the report or message must be communicated. Beyond the expenditure for hardware and software, the communication costs are determined by the frequency of communication and the quantity of bytes transmitted. The type of predefined reports and messages are listed in Annex 8.1.

4.2. System details and message details

Secure and reliable transmission of reports and messages is a prerequisite for the success of the NEAFC communication system. Several features to the system are designed for meeting this challenge.

On the basis of the structure of the record (slashes) and the codes << SR >> and <<ER >>, computer systems of the party who receives the record can automatically positively identify NEAFC reports and messages from any other electronic traffic. The structure of the record and the codes must, therefore, be carefully maintained.

It appears in electronic traffic that certain records or a string of records is sent but is not received by the addressee. In order to keep track on the records dispatched, the NEAFC communication system provides for return messages, return error numbers, return status, sequence number and record number as well as the message data and message time. These parameters allow computer systems to ascertain whether all records dispatched have been received by the addressee. Furthermore, the computer systems of the receiving party can ascertain on this basis that the same record is not processed twice.

System details and message details may be inserted in the records, as appropriate, by the communication centres. Indeed, these data elements do not contain information on substance of activities regulated under the scheme as they serve only for the automatic communication between communication centres and the processing of records by the computer systems of these centres.

Several Contracting Parties operate more than one communication centre. Each Communication centre has its own electronic address. Computer systems will, therefore, analyse the content of each record. On the basis of the type or report/message and the address code, the system is programmed to transmit the electronic record to the proper electronic address of the authority for which it is intended.

4.3. Substantive data elements

4.3.1. Vessel registration details

The NEAFC Control Scheme requires the authorities of the Flag State to provide certain information on the identity of the vessels authorised to operate in the R.A. Contracting Parties provide this information in principle once per year. The Secretariat makes this information available to Inspecting Parties. Inspectors can verify on this basis the identity of the vessel and its ownership.

Other messages or reports concerning vessel authorisations or activities are linked to the identity of the vessel, in principle by, the International Radio Call Sign (IRCS) or a registration number attributed by the authorities of the Flag State. On this basis, frequently communicated records may be kept as short as possible.

4.3.2. Vessel characteristics details

The annual notification of authorised fishing vessels also provides information on the characteristics of fishing vessels (size tonnage, length), type of vessel and type of gear used by the vessel). This information is considered useful for inspectors. Before planning boardings, the inspectors verify information on the vessel and its likely activities.

4.3.3. Licence details

The NEAFC Control scheme requires the authorities of the Flag State to authorise their vessels before they may engage in fishing activities in the R.A. Furthermore, vessels exploiting regulated resources must have a specific authorisation to do so. The flag Contracting Parties communicate the NEAFC Secretariat information on licences. This information is made available to (inspecting) Contracting Parties. On this basis inspectors may verify the legality of fishing activities in the R.A.

4.3.4. Activity details

The NEAFC Control scheme requires fishing vessels to provide information on their activities in the R.A. This information is, therefore, not generated by the authorities but by masters themselves or under their responsibility.

The information on positions of fishing vessels contained in VMS messages are generated in so-called blue boxes on board of the vessel (electronic equipment determining and transmitting GPS positions of the vessel). The records (identity vessel and GPS positions) are automatically generated and communicated. In this case, there is no manual intervention of the master or its crew. The master is, however, responsible for the functioning of the blue box.

Entry, Exit, Catch and Transhipment reports as well as manual position reports require intervention by the master (compilation and transmission). Provision will be made to provide master with software which automatically formats electronic records. Through the transmission of these reports, the master declares an activity of the vessel. The master can be held responsible for such declarations. Therefore, data elements concerning activity details must be authentic.

In order to guarantee the authenticity of the activity details, Communication centres cannot interfere in these data elements of the record. Computer systems should be programmed in such a way that the continuity and security of this information is guaranteed as from transmission by the master up to the destination.

If, in the course of an inspection on board, the inspectors conclude that the information in a report transmitted by the master is false, this may have legal consequences for the master in question. The Flag State authorities are obliged to initiate legal pursuit of an infringement based on a false declaration by the master if the infringement and the supporting facts are cited in an inspection report.

For its part, the master may contest the findings of inspectors in the framework of the proceedings initiated by the Flag State. When challenged in a Court of Justice, the authorities responsible for the follow-up of infringements have to demonstrate the responsibility of the master on the basis the authenticity of the report.

The data elements concerning activity details must be clearly defined in relation to the provisions of the control scheme. Indeed, the inspectors need to verify on the basis of the master's declarations whether they respect the provisions of the scheme.

It is notably important to verify the quantities caught and retained on board. During its fishing trip, a vessel may have been engaged in fishing activities in coastal state waters or in another R.A. such as NAFO. The same species as caught in the NEAFC R.A. may have been caught in those areas and retained on board. Such quantities have to be declared by the master before entry in the NEAFC R.A. in the ENTRY REPORT. This report contains a data element which requires inclusion of all quantities retained on board by species.

During the time that the vessel operates in the NEAFC R.A., the master must declare periodically its catch through the transmission of CATCH REPORTS. The quantities so declared must correspond with the information recorded in the logbook.

The information recorded in the logbook may be checked by inspectors. An inspection on board of a vessel operating in the NEAFC R.A. includes an assessment of the total catch on board. This assessment takes into account the quantities retained on board upon entry in the R.A. as well as the catches taken in the R.A.

Upon exiting the NEAFC R.A., the master has to declare his catches through an EXIT REPORT. Furthermore, in the case where vessels are engaged in transhipment operations, both vessels have to transmit a transhipment report containing information on the quantities and species transhipped.

4.3.5. Catch Reporting details

The compilation of statistics on catches is within the remit of the Flag State. Each Flag State shall monitor catches, landings and transhipments and compile on this basis statistics on catches by the vessels flying its flag. All quantities of regulated species retained on board in the R.A. must be accounted for the quota available to the Flag State in this area. Statistics on catches may, therefore, include unrecorded and not reported quantities by master detected through inspections or monitoring of landings.

For reasons of transparency, the NEAFC Control Scheme requires Contracting Parties to notify, on a monthly basis, catch statistics to the NEAFC Secretariat, both for areas under the jurisdiction of Contracting Parties in respect of regulated resources as the R.A. concerning species listed in the Scheme. The features of the NEAFC Communication System facilitate the communication of these statistics. Reports are defined in the Scheme for this purpose.

Catch Reporting details relate to the data elements defining the field codes and the global statistical data to be transmitted. The statistics thus provided may be compared with the data obtained from the ENTRY, EXIT, CATCH and TRANSSHIPMENT REPORTS transmitted by individual vessels. The NEAFC Secretariat makes catch reporting details available to Contracting Parties.

4.3.6. Surveillance inspection details

The inspectors operating on the spot in the NEAFC R.A. will sight (visual recognition of external registration marks) fishing vessels and make inspections on board. The information on the position and the activity of the vessel so obtained is important for the flag State as well as other inspecting States. The scheme provides for an electronic surveillance / inspection report in the North Atlantic Format.

Surveillance inspection details refer to the data elements defining field codes and information concerning sightings and vessels inspected. The exchange of this information prevents also incidental consecutive boardings of the same vessels by different inspectors from several Contracting Parties at the same day or consecutive days.

5. ELECTRONIC COMMUNICATION NETWORK

5.1. Communication centres

Each Contracting Party organises its authorities in accordance with it traditions. Therefore, the NEAFC communication system offers a large degree of flexibility in order to adapt to these traditions.

Certain Contracting Parties have one communication centre whilst other Contracting Parties operate many different communication centres; each of which is responsible for the communication and / or reception of certain reports or messages.

Each Contracting Party has to keep a list of communication centres as well as their area of responsibility. In fact, several of these centres communicate and receive also reports and messages internally and in a bilateral context. The network established through the NEAFC communication system has, therefore, a variable geometry. All communication centres capable of processing automatically reports and messages in the North Atlantic Format are part of that network. Contracting Parties decide the scope of the participation of each Communication centre.

As regards the electronic transmission of messages and reports from fishing vessels, each Contracting Party is required, on the basis of the NEAFC Control Scheme, to establish one or more FMC's. A FMC receives reports and messages from fishing vessels linked to it and is mostly capable of transmitting electronic records back to these vessels. The FMC should automatically track, monitor, validate and check authenticity of the reports and messages received from vessels. Each FMC is responsible for the communication of reports and messages from the vessels linked to it under the NEAFC communication system.

The details of the FMC's and other communication centres assigned by the Contracting Parties are listed in Annex 8.2. as well as the reports and messages which these centres shall transmit and may receive.

5.2. Secure transmission

Since computer systems in communication centres automatically receive, process and relay electronic records containing confidential information to other communication centres, the NEAFC Control Scheme lays down certain requirements aiming at secure transmission. The experience has shown that systems should be sufficiently robust in order to fulfil this requirement. Beyond communication protocols and access procedures, the communication software on both sides of a communication line needs to be compatible. In most cases a pilot phase is necessary in order to ensure smooth transmission and reception of records. Indeed, the systems have to come to speaking terms first by understanding each others language.

Furthermore, against the background of the frequency of communication and quantity of bites transmitted, the communication expenditure must be taken into account. Against this background, the NEAFC reviews alternatives to the options currently provided in the Scheme.

New alternatives to existing communication protocols may incur expenditure in several or all communication centres operating within the network. The choice of such alternative options offers another challenge to the co-operation between Contracting Parties in a NEAFC context as all parts in the communication chain must be connectable.

As regards the communication between centres and surveillance vessels, the experience has shown that the transmission capacity on board of these vessels is limited. Indeed, communication facilities on board may be blocked for long periods by the reception of voluminous communications. As computer systems in communication centres automatically receive, process and relay batches of records, the quantity of information loaded in the system, for the purpose of inspectors on board of surveillance vessels, should be regulated at source.

6. CONFIDENTIALITY

Several reports and messages defined by the NEAFC Control Scheme contain information on the precise location where fishing activities are carried out and catches taken which is linked to the identity of a fishing vessel and indirectly to legal or natural persons. Furthermore, surveillance / inspection reports may describe illegal activities committed by legal of natural persons which may be identifiable in such context.

In accordance with domestic legislation in most Contracting Parties, the above information may be categorised as professional and private information. The exchange of such information between the authorities is only permitted for the purpose of inspection and surveillance and on the condition that the authorities and the inspectors bound to confidentiality rules.

The NEAFC Control Scheme sets out the rules on confidentiality in detail. The information will be made available to the NEAFC Secretariat as required. The NEAFC will only make confidential information available to Contracting Parties which have an inspection presence in the area. In fact, the information on fishing activities carried out in the NEAFC R.A. is intended notably for the inspectors on board of a surveillance vessel operating in the NEAFC R.A. The inspectors receive information which is relevant to the area in which they operate.

The Flag State has an obligation to keep the electronic records concerning fishing activities in its data base. The NEAFC Secretariat may keep these records for a limited period (one year). All other communication centres are obliged to delete the electronic records concerning fishing activities when the fishing vessel in question has left the R.A.

Furthermore, computer systems of communication centres must be protected against unauthorised access both by system access control and other means including physical access. Contracting Parties and the 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 forms of unauthorised processing.

7. DATA BASES

7.1. Data base

Each authority operates its own data base. The hardware and software used may be very different from one authority to another. Furthermore, these data base may be part of larger internal informatic structures. Therefore, the NEAFC Communication system does not interfere with domestic data base structures.

As long as the national data base supports the North Atlantic Format, the hardware, software and structure thereof can be defined as appropriate by the authority in question. These questions are within the remit of each authority and do not affect the NEAFC Communication system.

The reception features of the data base should, however, be sufficiently robust and flexible in order to cope with electronic imperfection, for example records with small formatting errors. In fact, slashes and field codes define both the structure of the North Atlantic format. The programming of double checks on the format may add flexibility. Frequent rejection of records may block computer systems and thus impede on the secure communication of electronic records within the network.

7.2. Queries

The NEAFC reviews the utility of predefined queries for inspectors on board of surveillance vessels. When, for example, inspectors are not informed in accordance with the NEAFC Scheme whether an inspected fishing vessel is authorised to operate in the NEAFC R.A., they should be able to consult the data base in the NEAFC Secretariat. The data base could, in response, transmit an electronic record confirming the authorisation or the non-availability of the information.

The last information would trigger the citation of an infringement. Since any hard copies of licences on board on vessels are drawn up in different languages and formats, inspectors from other Contracting Parties are normally not capable of verifying hard copies. Other examples of queries may be considered useful too.

In fact, the possibility of queries should not necessarily stop at the level of the data base in the NEAFC Secretariat. Links to data bases kept by Contracting Parties or the data base kept by FAO concerning fishing vessels authorised to operate beyond coastal state waters could technically be realised and would respond, in practice, accurately to the concrete questions from the inspectors in the fishing area patrolled.

7.3. www.neafc.org

NEAFC reviews the possibility to display non-confidential aggregated information, based on the information received under the Scheme, on the NEAFC web side. The information to be displayed on the wed side would provide for example an indication of the number of vessels operating in the relevant fishing areas, global statistics on catches, surveillance vessels operating in the area, etc. NEAFC will determine whether certain information displayed may publicly accessible or protected for exclusive use by authorities.

Both, in the case of queries and the display of information on a web side, the NEAFC control Scheme must be amended accordingly. The NEAFC Commission has first to adopt the corresponding recommendation before the technical solutions may be implemented.

8. ANNEXES

8.1. Types of messages / reports

Code	Description	Source	Frequency
NOT	Notification of the fishing vessel (FV)	CP [14]	yearly or more
WIT	Withdrawal of the FV	CP	occasional
LIM	Limitation of access to areas and/or species	CP	occasional
AUT	Authorisation to target Regulated Resources (RR)	CP	yearly or more
SUS	Suspension of the Authorisation	CP	occasional
REP	Report - monthly catch Att. II species in RA	CP	monthly
JUR	Jurisdiction - monthly catch RR in CP EEZs	CP	monthly
ENT	Entry of FV in RA	FV [15]	each entry
CAT	Catch – weekly of RR by FV	FV	weekly
TRA	Transhipment of RR by FV	FV	occasional
EXI	Exit of FV in RA	FV	each entry
POS	Position of FV in RA	FV	6 hourly or more
SEN	Surveillance craft entry	Insp.Party	each entry
SEX	Surveillance craft exit	Insp.Party	each exit
OBS	Observation of FV in RA	Insp.Party	daily
RET	Return	Com.Centre	upon reception of communication

[14] Competent authority of the flag Contracting Party.

[15] Fishing vessel in principle via FMC of the Flag State.

8.2. List of Communication Centres

Communications Centre (Contact)	COMMUNICATION DETAILS		REPORTS / MESSAGE (Transmission / Reception)							
	Phone Fax E-mail	X - 25 (Source / Call) X – 400	T R	NOT WIT	LIM AUT SUS	REP JUR	ENT CAT TRA EXI	POS	SEM SEX OBS	RET
D E N M A R K										
FAROES ISLANDS **Fiskiveidieftirlitid** C : Martin Kruse	P: + F: +298 313981 P: +298 353030 F: +298 353035 E: mk@vb.fo	 S: 274 011 32 4040 C: 274 011 32 404 001	 T R	 X X	 X X	 X X	 X (X) [16]	 X (X)	 X X	 X X
GREENLAND **Greenland Fisheries Licence Control Authority**	 P: +299 345000 F: +299 323235 / 6 E: gflk@gh.gl	 S: 29010901051600 C: 29010901051600	 T R	 X X	 X X	 X X	 X (X)	 X (X)	 X X	 X X

[16] (X) Only where inspection and surveillance activities are carried out by the Inspection Party in certain areas of the R.A.

Communications Centre (Contact)	COMMUNICATION DETAILS		REPORTS / MESSAGE (Transmission / Reception)							
	Phone Fax E-mail	X - 25 (Source / Call) X – 400	T R	NOT WIT	LIM AUT SUS	REP JUR	ENT CAT TRA EXI	POS	SEM SEX OBS	RET
C : Mads Nedergaard	mads@gh.gl									
EUROPEAN UNION										
DENMARK **Fiskeridirektoratet** **Stormgade 2** **DK-1470** **KOBENHAVEN K** C **:** Jørgen Eliasen	 P: +45 33 963 803 F: +45 33 963 900 E : pje@fd.dk	 S: 238 301 023 853 C: 238 301 023 853 6	 T R	 X	 X	 X	 X (X)	 X (X)	 X X	 X X
EUROPEAN COMMISSION **1049 BRUSSELS** **Belgium** C : Jacques Verborgh and vacancy	 P: +32 2 295 1597 F: +32 2 296 2338 E: telecom@cec.eu.int telecom@cec.eu.int	 s=telecom o=dg14 p=cec a=rtt c=be	 T R	 X X	 X X	 X X	 (X)	 (X)	 X X	 X X

Communications Centre (Contact)	COMMUNICATION DETAILS		REPORTS / MESSAGE (Transmission / Reception)							
	Phone **Fax** **E-mail**	**X - 25 (Source / Call)** **X – 400**	**T** **R**	**NOT WIT**	**LIM AUT SUS**	**REP** **JUR**	**ENT CAT TRA EXI**	**POS**	**SEM SEX OBS**	**RET**
FRANCE **CROSS ATLANTIQUE** **Chateau de la Garenne** **Ave. Louis Bougo** **F-56410 –** **ETEL** C: Jean Luc Lejeune	P: +33 2 9755 3535 F: +33 2 9755 2375 E: cross-etel@equipment.gouv.fr	S: 020 805 601 047 8 C: 020 805 601 047 8	T R	 X	 X	 X	X (X)	X (X)	X X	X X

Communications Centre (Contact)	COMMUNICATION DETAILS		REPORTS / MESSAGE (Transmission / Reception)							
	Phone Fax E-mail	X - 25 (Source / Call) X – 400	T R	NOT WIT	LIM AUT SUS	REP JUR	ENT CAT TRA EXI	POS	SEM SEX OBS	RET
GERMANY **Bundesanstalt fur Landwirtschaft und Ernahrung (BLE)** **Pallaille 9** **D-22767** **HAMBURG** C: Bettina Gromke (VMS), Imanuel Jeske (catch rep) and Joachim Assman (control – enforcement)	P: +49 40 3890 5171 F: +49 40 3890 5128 E: Bettina.Gromke@ffm.ble.bund400.de Imanuel.jeske@ffm.ble.bund400.de Joachim.Assman@ffm.ble.bund400.de	S: 026 245 400 120 221 C: 026 245 400 120 221	T R	X	X	X	X (X)	X (X)	X X	X X
IRELAND **National Supervisory Centre** **Naval Base** **Haulboxline**	P: +353 214864 830 F: +353 21 437 8096 E: nscstaff@eircom.net	S: 272 440 520 023 C: 272 440 520 023	T				X	X	X	X

Communications Centre (Contact)	COMMUNICATION DETAILS		REPORTS / MESSAGE (Transmission / Reception)							
	Phone Fax E-mail	X - 25 (Source / Call) X – 400	T R	NOT WIT	LIM AUT SUS	REP JUR	ENT CAT TRA EXI	POS	SEM SEX OBS	RET
CO CORK C: Hugh Tully and Séamus Gallagher			R	X	X	X	(X)	(X)	X	X
NETHERLANDS **Algemene Inspectiedienst (AID)** **Poststraat 15** **Postbus 234** **NL-6461** **AN KERKRADE** **H. Vonk** C: Darco Erkens and Ger Klein	P: +31 45 546 6287 F: +31 45 546 1011 E: vms@aid.agro.nl h.a.vonk@minlnv.nl M: +31 651850776	S: 020 414 444 605 C: 020 414 444 605	T R	 X	 X	 X	X (X)	X (X)	X X	X X
PORTUGAL **IGP** **Ave de Brasilia** **PT-1400-038 – LISBOA** C: Joaquim Antunes	P: +351 21 302 5174 F: +351 21 302 5188 E: jantunes@igp.pt	S: 268 096 110 345 C: 268 096 110 344	T R	 X	 X	 X	X (X)	X (X)	X X	X X

Communications Centre (Contact)	COMMUNICATION DETAILS		REPORTS / MESSAGE (Transmission / Reception)							
	Phone Fax E-mail	X - 25 (Source / Call) X – 400	T R	NOT WIT	LIM AUT SUS	REP JUR	ENT CAT TRA EXI	POS	SEM SEX OBS	RET
SPAIN **Secretaria General de Pesca Maritima (MAPA)** **Corazon de Maria 8** **E-28002** **MADRID** C: Jose Navarro	P: +34 91 347 1769 F: +34 91 347 1544 E: jnavarro@mapya.es	S: 214 531 503 158 01 C: 214 531 503 158 02	T R	 X	 X	 X	X (X)	X (X)	X X	X X
SWEDEN **Fiskeriverket** **Box 423** **S-401-26** **GOTEBORG** C: Mats Börje	P: +46 31 743 0312 F: +46 31 743 0444 E: mats.borje@fiskeriverket.se	S: 024 037 201 034 C: 024 037 201 034 5	T R	 X	 X	 X	X (X)	X (X)	X X	X X
UNITED KINGDOM (ENGLAND/WALES) **DEFRA** **Sea Fisheries Inspectorate**	P: +44 20 7238 5692 F: +44 20 7238 6474	S: 237 859 010 201	T				X	X		X

Communications Centre (Contact)	COMMUNICATION DETAILS		REPORTS / MESSAGE (Transmission / Reception)							
	Phone Fax E-mail	X - 25 (Source / Call) X – 400	T R	NOT WIT	LIM AUT SUS	REP JUR	ENT CAT TRA EXI	POS	SEM SEX OBS	RET
Nobel house **17, Smith Sq.** **SW 19 3JR** **LONDON** C: Robert Crooks	E: R.Crooks@fish.maff.gsi.gov.uk	C: 237 859 010 201	R	X	X	X			X	X

Communications Centre (Contact)	COMMUNICATION DETAILS		REPORTS / MESSAGE (Transmission / Reception)							
	Phone Fax E-mail	X - 25 (Source / Call) X – 400	T R	NOT WIT	LIM AUT SUS	REP JUR	ENT CAT TRA EXI	POS	SEM SEX OBS	RET
UK (SCOTLAND)										
SFPA **Pentland House** **47, Robb's Loan** **EDINBURGH EH 14 ITY** C: Cephas Ralph	P: +44 131 244 6075 F: +44 131 244 6471 E: sfpaops@scotland.gsi.gov.uk	S: 237 859 010 201 C: 237 859 010 201	T R	 X	 X	 X	X (X)	X (X)	X X	X X
I C E L A N D										
FISKISTOFA C : Gylfi Geirsson	P: +354 569 7900 F: +354 569 7990 E: fiskistofa@fiskistofa.is P: +354 511 2222 F: +354 511 2244 E: gylfi@lhg.is	 S: 274 012 122 211 C: 274 012 122 211 01	T R	X X	X X	X X	X (X)	X (X)	X X	X X
N O R W A Y										
Directorate of Fisheries	T: +47 55 238000									

Communications Centre (Contact)	COMMUNICATION DETAILS		REPORTS / MESSAGE (Transmission / Reception)							
	Phone **Fax** **E-mail**	**X - 25 (Source / Call)** **X – 400**	**T** **R**	**NOT WIT**	**LIM AUT SUS**	**REP** **JUR**	**ENT CAT TRA EXI**	**POS**	**SEM SEX OBS**	**RET**
Legal Office C **:** Ove Davidsen	F: +47 55 238090 P: +47 5523 8024 F: +47.5523 8090 E: ove.davidsen@ fiskeridir.dep.telemax.no	S: 242 245 008 8 C: 242 245 008 82 g=ove s=davidsen o=fiskeridir p=dep a=telemax c=no	T R	X X	X X	X X	X (X)	X (X)	X X	X X
POLAND										
Regional Inspectorate of Sea Fisheries C: Paweł Sokołowski	P: +48 91 440 3522 F: +48 91 433 6238									
RUSSIAN FEDERATION										
	P: +7 81 5247 6080 F: +47 7891 0098 E: ntf@coms.ru agnat@coms.ru P: +7 81 5247 2532	S: 0311077200551 C: 031107720055100 g=valentin s=mishkin	T	X	X	X	X	X	X	X

Communications Centre (Contact)	COMMUNICATION DETAILS		REPORTS / MESSAGE (Transmission / Reception)							
	Phone **Fax** **E-mail**	**X - 25 (Source / Call)** **X – 400**	**T** **R**	**NOT WIT**	**LIM AUT SUS**	**REP** **JUR**	**ENT CAT TRA EXI**	**POS**	**SEM SEX OBS**	**RET**
C: Pinro Murmansk Valentin Mishkin Alexandre Orlov	F: +47 7891 0518 E: inter@pinro.murmansk.ru	o=murmansk.com a=sovmail c=ussr	R	X	X	X	(X)	(X)	X	X
S E C R E T A R I A T										
NEAFC **Bernerstreet 22** **London W1T 3DY** **United Kingdom** C **:** João Neves	P: +44 20 7631 0016 F: +44 20 7636 9225 E: info@neafc.org joao@neafc.org	S: 234 291 848 906 C: 234 291 848 906 01 s=neafc ou=om p=neafc a=bt c=gb	R T	X X	X X	X X	X X	X X	X X	X X

9. APPENDICES

9.1. Contracting Parties and RFOs

Code	Contracting Party
DNK	DENMARK
XEU	EUROPEAN UNION
ISL	ICELAND
NOR	NORWAY
POL	POLAND
RUS	RUSSIAN FEDERATION

Code	RFO's
XNE	NEAFC
XNW	NAFO

9.2. Countries and autonomous regions

Code [17]	Country or autonomous region
BEL	BELGIUM
BLZ	BELIZE
BGR	BULGARIA
CAN	CANADA
CYP	CYPRUS
DNK	DENMARK
EST	ESTONIA
FRO	FAROE ISLANDS
	FINLAND
FRA	FRANCE
DEU	GERMANY
	GREECE
GRL	GREENLAND
HND	HONDURAS
IRL	IRELAND
	ITALY
JPN	JAPAN
LVA	LATVIA
LTU	LITHUANIA
NLD	NETHERLANDS
PRT	PORTUGAL
VCT	SAINT VINCENT AND THE GRENADINES
STP	SAO TOME AND PRINCIPE
SLE	SIERRA LEONE
ESP	SPAIN
SJM	SVALBARD AND JAN MAYEN ISLANDS
SWE	SWEDEN
GBR	UNITED KINGDOM

[17] ISO 3160 codes

9.3. Areas

Code	Area	Delimitation (LA / LO)
XBS	BARENTS SEA	
XNS	NORWEGIAN SEA	
XRR	REYKJANES RIDGE	
XIS	IRMINGER SEA	

9.4. Types of fishing vessels

Code [18]	Type
BO	Protection vessel
CO	Fish training vessel
DB	Dredger non continuous
DM	Dredger continuous
DO	Beamer
DOX	Dredger NEI
FO	Fish carrier
FX	Fishing vessel NEI
GO	Gill netter
HOX	Mother ship NEI
HSF	Factory mother ship
KO	Hospital ship
LH	Hand liner
LL	Long liner
LO	Liner
LP	Pole and line vessel
LT	Troller
MO	Multipurpose vessels
MSN	Seiner hand liner
MTG	Trawler drifter
MTS	Trawler purse seiner
NB	Lift netter tender
NO	Lift netter
NOX	Lift netter NEI
PO	Vessel using pumps
SN	Seine netter
SO	Seiner
SOX	Seiner NEI
SP	Purse seiner
SPE	Purse seiner european
SPT	Tuna purse seiner
TO	Trawler
TOX	Trawlers NEI
TS	Side trawler
TSF	Side trawler freezer
TSW	Side trawler wetfish
TT	Stern trawler
TTF	Stern trawler freezer
TTP	Stern trawler factory
TU	Outrigger trawlers
WO	Trap setter
WOP	Pot vessels
WOX	Trap setters NEI
ZO	Fish research vessel
DRN	Drifnetter
NEI	Not Elsewhere Identified

[18] International Standard Statistical Classification of Fishery Vessels (ISSCFV), FAO ((1985) FIDI/FIIT/T 267)

9.5. Fishing vessel activity codes

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

9.6. Species codes

Code [19]	English common name	Binomial name
ALF	Alfonsinos	*Beryx spp.*
ALC	Baird's slickhead	*Alepolephalus bairdii*
ARG	Argentines	*Argentina spp.*
BLI	Blue ling	*Molva dypterygia*
BRF	Blackbelly rosefish	*Helicolenus dactylopterus*
BSF	Black scabbard	*Aphanopus carbo*
BSH	Blue shark	*Prionace glauca*
BSK	Basking shark	*Ceterhinus maximus*
BSS	Seabass	*Dicentrarchus labrax*
CAP	Capelin	*Mallotus villosus*
CAS	Spotted wolffish	*Anarhichas minor*
CAT	Wolffish	*Anarhichas spp.*
COD	Atlantic cod	*Gadus morhua*
COE	European conger	*Conger conger*
FOR	Forkbeard (Forkhead)	*Phycis phycis*
GHL	Greenland halibut	*Reinhardtius hippoglossoides*
GFB	Greater forkbeard	*Phycis blennoides*
GSK	Greenland shark	*Somniosus microcephalus*
HAD	Atlantic haddock	*Melanogrammus aeglefinus*
HAL	Atlantic halibut	*Hippoglossus hippoglossus*
HER	**Atlantic herring**	***Clupea harengus***
HOM	Atlantic horse mackerel	*Trachurus trachurus*
LIN	Ling	*Molva molva*
LUM	Lumpfish	*Cyclopterius lumpus*
MAC	**Atlantic mackerel**	***Scomber scombrus***
MOR	Moras	Moridae
ORY	Orange roughy	*Hoplosthethus atlanticus*
PLA	American plaice	*Hippoglossoides platessoides*
POC	Polar cod	*Boreogadus saida*
PRA	Northern prawn	*Pandalus borealis*
REB	**Beaked redfish**	***Sebastes mentella***
RED	Redfish (unspecified)	*Sebastes spp.*
REG	Golden redfish	*Sebastes marinus*
RHG	Roughhead grenadier	*Macrourus berglax*
RNG	Roundnose grenadier	*Coryphaenoides rupestris*
SBR	Red seabream	*Pagellus bogaraveo*
SFS	Silver scabbard	*Lepidopus caudatus*
SKA	Skates	*Raja spp*
SKH	Sharks	*Selachimorpha spp*
USK	Tusk	*Brosme brosme*
WHB	**Blue whiting**	***Micromesistius poutassou***
WRF	Wreckfish	*Polyprion americanus*

19 Inter–Agency 3-Alpha Identifier, Co-ordinating Working Party on Atlantic Fishery Statistic; Depositary FAO

9.7. Types of gear

Code [20]	Description
PS	With purse lines
PS1	1 vessel purse seine
PS2	2 vessels purse seine
SSC	Scottish seine
OTB	Bottom otter trawl
PTB	Bottom pair trawls
TBN	Bottom trawl *nephrops*
TBS	Bottom trawl shrimp
OTT	Otter twin trawl
OTM	Midwater otter trawl
PTM	Midwater trawls pair
GNS	Gillnet anchored
GND	Drift nets
GEN	Gill tangle net (not specified)
FPO	Pots
LHP	Hand lines
LHM	Hand line mechanical
LLS	Set line long line
LLD	Drifting long line
LL	Long line
LTL	Trolling long line
LX	Hook and lines
HMP	Pumps

20 International Standard Statistical Classification of Fishing Gear (ISSCFG) 20 July 1980; FAO (FIDI/FIIT/T 222)

9.8. Types of gear attachment

Code	Type
BSC	Bottom-side chafer
TSC	Top-side chafer
SBG	Strengthening bag
CPP	Chafing or protection piece
CDL	Cod line
LST	Lifting straps
RST	Round straps
FLP	Flapper
SNT	Sieve netting
SRP	Strengthening ropes
TQT	'Torquette'
MLT	Median lacing of a trouser codend
STL	Strengthening lacing
LAR	Lacing rope
FLT	Float
EMD	Electro-mechanical devices
KTE	Kite
SPG	Separation grids
SMP	Square mesh panel
CSS	Codend sensu stricto
OTH	Others to be specified

9.9. Types of fishery product presentation

Code	Type
A	Round – Frozen
B	Round – Frozen (Cooked)
C	Gutted Head on – Frozen
D	Gutted Head Off – Frozen
E	Gutted Head Off – Trimmed – Frozen
F	Skinless Fillets – Frozen
G	Skin on Fillets – Frozen
H	Salted Fish
I	Pickled Fish
J	Canned Products
K	Oil
L	Meal Produced from Round Fish
M	Meal Produced from Offal
N	Other (Specify)

TYPE OF PACKING

Code	Type
CRT	Cartons
BOX	Boxes
BGS	Bags
BLC	Blocks

9.10. Consolidated NEAFC data elements field codes and definitions

Category	Data Element	Field code	Type	Contents	Definitions
System Details	Start Record	SR			Indicates start of the record
	End Record	ER			Indicates end of the record
	Return Status	RS	Char*3	Codes	ACK / NAC = Acknowledged / Not Acknowledged
	Return Error Number	RE	Num*3	001 – 999	Codes indicating errors as received at operation centre, see Annex VIII D2
Message Details	Address destination	AD	Char*3	ISO-3166 Address	Address of the party receiving the message, "XNE" for NEAFC
	From	FR	Char*3	ISO-3166 Address	Address of the transmitting party, (Contracting Party)
	Type of Message	TM	Char*3	Code	First three letters of the message type as in Annex VIII E
	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
Vessel Registration Details	Radio Call Sign	RC	Char*7	IRCS Code	International Radio Call Sign of the vessel
	Vessel Name	NA	Char*30	ISO 8859.1	Name of the vessel
	Ext. Registration	XR	Char*14	ISO 8859.1	Side Number of the vessel
	Flag State	FS	Char*3	ISO–3166	State of registration
	Contracting Party internal reference 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	ISO 8859.1	Port of registration of the vessel / homeport
	Vessel Owner	VO	Char*60	ISO 8859.1	Name and address of the vessel owner
	Vessel Charterer	VC	Char*60	ISO 8859.1	Name and address of the vessel charterer

Category	Data Element	Field code	Type	Contents	Definitions
Vessel Charact. Details	Vessel capacity	VT	Char*2	"OC"/"LC"	According to: "OC" OSLO 1947 Convention /"LC" LONDON ICTM-69 Convention
			Num*4	Tonnage	Capacity of the vessel in metric tons
	Vessel Power	VP	Char*2 Num*5	ISO 8859.1	Indication of which measurement unit applies "HP" or "KW"
				0 – 99999	Total main engine power
	Vessel Length	VL	Char*2	"OA"/ "PP"	unit "OA" length overall, "PP" length between perpendiculars
			Num*3	Length in meters	Total length of the vessel in meters, rounded to the nearest whole meter
	Vessel Type	TP	Char*3	Code	As listed in Attachment IV A
	Fishing Gear	GE	Char*3	FAO Code	International Standard Statistical Classification of the Fishing Gear as (Attachment I)
Licence Details	Date of issuing	IS	Num*8	YYYYMMDD	Date of Authorisation to fish for one or more regulated species
	Regulated Resources	RR	Char*3	FAO Species Code	FAO Species Code for the regulated resource
	Start Date	SD	Num*8	YYYYMMDD	Date on which the validity of the authorisation / suspension commences
	End Date	ED	Num*8	YYYYMMDD	Expiry date of the validity of the authorisation to fish for the regulated resource
	Limited Authorisation	LU	Char*1	ISO 8859.1	"Y" or "N" to indicate whether a limited authorisation is valid or not
	Relevant Area	RA	Char*6	ICES code	Area(s) prohibited
	Directed Species	DS	Char*3	FAO Species Code	Prohibited species
Activity Details	Latitude	LA	Char*5	NDDMM (WGS-84)	e.g. //LA/N6235 = 65°35' North
	Longitude	LO	Char*6	E/WDDDMM (WGS-84)	e.g. //LA/W02134 = 21°34' West
	Trip Number	TN	Num*3	001 – 999	Number of the fishing trip in current year
	Days Fished	DF	Num*3	1 – 365	Number of days the vessel spent in the Regulatory Area during the trip
	Weekly catch	CA			the cumulative catch retained on board by species, in kilograms live weight rounded to the nearest 100 kg since the vessel entered the R.A. or, in the event a previous has been transmitted during the same trip, since the last "Catch" report, in pairs as needed.
	Species		Char*3	FAO species code	
	Quantity		Num*7	0 – 9999999	
	Quantity onboard	OB			Quantity onboard the vessel by species in kilograms live weight rounded

Category	Data Element	Field code	Type	Contents	Definitions
	Species		Char*3	FAO Codes	to the nearest 100 kg, in pairs as needed
	Quantity		Num*7	0 – 9999999	
	Transferred species	KG			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.
	Species		Char*3	FAO Codes in pairs	
	Quantity		Num*7	0 – 9999999	
	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
Reporting Details	Catch	CA			Aggregate catch, landed or transhipped, taken by fishing vessels of the Contracting Party, by species as listed in tonnes live weight, rounded to tonnes, in pairs as needed
	Species		Char*3	FAO Species code	
	Quantity		Num*6	0 – 999999999	
	Cumulative Catch	CC			Cumulative aggregate catch, landed or transhipped, taken by fishing vessels of the Contracting Party, by species as listed in tonnes live weight, rounded to tonnes, in pairs as needed
	Species		Char*3	FAO species code	
	Quantity		Num*6	0 – 999999	
	Relevant Area	RA	Char*6	ICES/NAFO Codes	Code for the relevant fishing area
	Zone	ZO	Char*3	ISO-3166	The code for a Contracting Party's zone
	Year and month	YM	Num*6	YYYYMM	The relevant year and month of reporting
Surveillance/ Observation Details	Latitude	LA	Char*5	NDDMM (WGS-84)	e.g. //LA/N6235 = 65°35' North
	Longitude	LO	Char*6	E/WDDDMM (WGS-84)	e.g. //LA/W02134 = 21°34' West
	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°
	Activity	AC	Char*3	Activity code	First 3 characters of the activity, see Attachment IV B
	Means of Surveillance	MI	Char*3	NEAFC Code	"VES" = surface vessel, "AIR" = fixed wing aircraft, "HEL" helicopter
	Assigned Inspector CP ID	AI	Char*7	NEAFC Code	ISO-3166 code for the Contracting Party followed by 4 digit number repeated as needed
	Observation Ser. N°	OS	Num*3	0 – 999	Serial number of the observation during relevant patrol in the RA
	Date of sighting	DA	Num*8	YYYYMMDD	Date when the vessel is sighted
	Time of sighting	TI	Num*4	HHMM	Time in UTC when the vessel is sighted

Category	Data Element	Field code	Type	Contents	Definitions
	Object Identification	OI	Char*7	IRCS Code	International Radio Call Sign of the sighted vessel
	Photograph	PH	Char*1	ISO 8859.1	Was there a photograph taken, “Y” or “N”
	Free Text string	MS	Char*255	ISO 8859.1	Free text area

9.11. Data elements, Field codes and definition used by other organisations or domestically by Contracting Parties

Category	Data Element	Field code	Type	Contents	Definitions
Additions	Fisheries Category	FC	Char*3	Code	Type of fishery (Iceland)
	Secondary Msg Type	ST	Char*3	Code	Indicator for processing of messages (Iceland)
	Control Point	CP	Char*10	Code	Control point for inspection
	Port	PO	Char*20	ISO 8859.1	Name of a port
	Name of Master	MA	Char*30	ISO 8859.2	Name of the master
	Route	RO	Char*6 + Num*3	Route Code	Planned route by code, ISO-3166 + number 001 - 999.
	Destination	DT	Char*20	ISO 8859.1	Name of the destination or its co-ordinates.
	ETA	ET	Num*12	YYYYMMDDHHMM	Estimated Time of Arrival
	Cargo	CR	Char*20	ISO 8859.1	Name of "Dangerous Cargo" and its hazard N°
	Authenticity Code	AU	Hex*8		Comparison security code for the message
	Date of Landing	LD	Num*8	YYYYMMDD	Estimated Date of Landing
	Prohibited Species	PS	Char*3	FAO Species Code	FAO Code; allowance for multiple prohibited species
	Count Group Species Quantity	CG	 Char*3 Num*7	 FAO species code 0 – 9999999	Detailed information regarding the catch
	Items in Hold Species Quantity	HO	 Char*3 Num*7	 FAO species code 0 – 9999999	Total items in hold
	National Zone	NZ	Char*3	ISO 3166	ISO Code for the National Zone
NAFO	Target Species	TS	Char*3	FAO Species Code	FAO Code; allowance for multiple main species
	Division	DI	Char*2	NAFO Code	Nafo Division

9.12. Alphabetical codes

Activity	AC	C*3[21]	FIS/STE/etc	Attachment IV.B of the Scheme
Address destination	AD	C*3	ISO 3166	
Assigned inspectors	AI	C*7		ISO 3166 and max.9999
Weekly catch / Catch	CA	C*3	FAO	Attachment II of the Scheme
		N*7	Max.9999999	Onboard - round to nearest 100 Kg
				Monthly - rounded to the nearest tonne
Cumulative catch	CC	C*3	FAO	Attachment II of the Scheme
		N*7	Max. 9999999	Monthly - rounded to the nearest tonne
Course	CO	N*3[22]	DDD	360º scale
Date	DA	N*8	YYYYMMDD	Date of event
Days fished	DF	N*3	Max. 365	Days in the RA during the current trip
Directed species	DS	C*3	FAO	Prohibited species
End date	ED	N*8	YYYYMMDD	Expiry date of authorisation
End record	ER			
From	FR	C*3	ISO 3166	Contracting Party
Flag State	FS	C*3	ISO3166	FV's State of registration
Fishing gear	GE	C*3	FAO/ISSC	Attachment I of the Scheme
Internal reg. number	IR	C*3	ISO3166	Flag State
		N*9	Max.999999999	Unique registration number
Date of issue	IS	N*8	YYYYMMDD	Authorisation issue date
Latitude	LA	C*5	NDDMM	Degrees and minutes – north (WGS-84)
Limited authorisation	LU	C*1	Y/N	Indicates if FV has limited authorisation
Longitude	LO	C*6	E/WDDDMM	Degrees and minutes – E/W (WGS-84)
Transferred species	KG	C*3	FAO	Annex I of the Scheme
		N*7	Max.9999999	Quantity - rounded to nearest 100 Kg
Means of surveillance	MI	C*3	AIR/HEL/VES	Aircraft, helicopter and vessel
Free text	MS	c*255	ISO 8859.1	Free text area for inspector comments
Name	NA	C*30	ISO 8859.1	FV's name
Quantity onboard	OB	C*3	C*3 FAO	Annex I of the Scheme
		N*7	Max.9999999	Upon entry - rounded to nearest 100 Kg
Object identification	OI	C*7		IRSC of observed FV
Observation series	OS	N*3	Max. 999	Serial number during surveillance patrol
Photography	PH	C*1	ISO 8859.1	Photograph taken – Y or N
Port name	PO	C*20	ISO 8859.1	Registration port/homeport
Relevant area	RA	C*6	ICES	Relevant or prohibited areas
Radio call sign	RC	C*7		IRCS unique to FV
Record date	RD	N*8	YYYYMMDD	Transmission date
Return error code	RE	N*3	101/102/103	Ann. VIII.D.2
Record number	RN	N*6	123456	Unique for FMC each year
Regulated resources	RR	C*3	FAO	Annex I of the Scheme
Return status	RS	C*3	ACK/NAC	Ann. VIII.D.2
Record time	RT	N*4	HHMM	Transmission time (UTC)
Start date	SD	N*8	YYYYMMDD	Effective date authorisation/suspension
Speed	SP	N*3	Knots x 10	FV speed – 4.5 = 45 / 11=110
Sequence number	SQ	N*6	123456	Unique / FV / year
Start record	SR			
Transhipped from	TF	C*7		IRSC of "selling" FV
Time	TI	N*4	HHMM	Time of event (UTC)
Type of message	TM	C*3	Code	Annex VIII E of the Scheme
Trip number	TN	N*3	Max. 999	Number of fishing trip in current year
Transhipped to	TT	C*7		IRSC of "buying" FV

21 Permitted maximum number of characters

22 Permitted maximum number of figures

Vessel charterer	VC	C*60	ISO 8859.1	FV's charterer's name and address
Vessel length		C*2	OA/PP	Length "overall" or "between perpend."
		N*3	Max. 999	In metres rounded to the next whole m
Vessel owner	VO	C*60	ISO 8859.1	FV's owner's name and address
Vessel power	VP	C*2	HP/KW	Measurement unit
		N*5	Max. 99999	Total main engine power
Vessel capacity	VT	C*2	OC/LC	Oslo Conv. 1947 / London ICTM 1969
		N*4	Tonnage	FV's capacity in metric tons
Vessel type	TP	C*3		Attachment IV.A of the Scheme
External reg. number	XR	C*14	ISO 8859.1	FV's side registration number
Year and month	YM	N*6	YYYMM	Relevant year and month
Zone	ZO	C*3	ISO 3166	CP with jurisdiction