

# Technical Annexes to the Agreed Record of Consultations on Fisheries between the United Kingdom of Great Britain and Northern Ireland and the Kingdom of Norway

## Introduction

Article 6 of the Framework Agreement on Fisheries between the Government of the United Kingdom of Great Britain and Northern Ireland and the Kingdom of Norway of 30 September 2020 [(referred to in the Technical Annexes as “the Framework Agreement”)] provides that:

*2. The Contracting Parties may agree on arrangements for operational cooperation necessary for the proper functioning or implementation of this Agreement, dealing in particular with:*

*(a) the licensing of vessels flying the flag of one Contracting Party when fishing in the other Contracting Party’s area of fisheries jurisdiction, including the exchange of data relating to such vessels;*

*(b) monitoring, control and surveillance of fisheries to ensure compliance with conservation and management measures.*

*3. Arrangements agreed pursuant to this Article may take the form of protocols and guidance documents.*

Accordingly, the Technical Annexes to the Agreed Record of Consultations on Fisheries between the United Kingdom of Great Britain and Northern Ireland and the Kingdom of Norway for 2022 (referred to in the Technical Annexes as “the Agreed Record”) record the understanding reached between the Parties on the following matters for 2022:

Annex 1: Licensing arrangements

Annex 2: Arrangements for the electronic exchange of licensing data

Annex 3: Arrangements for the exchange of fleet registers

Annex 4: Arrangements in respect of electronic exchange of catch and activity data (Electronic Reporting Systems)

Annex 5: Satellite tracking of fishing vessels (Vessel Monitoring Systems)

Annex 6: Catch statistics

Annex 7: Bilateral arrangements for enhanced fisheries cooperation between Norway and the United Kingdom on monitoring, control and surveillance of fisheries

In the Technical Annexes:

references to a “Party” are references to a Contracting Party to the Framework Agreement;

references to the waters of a Party, however expressed, are references to the Party’s area of jurisdiction read in accordance with Article 2 of the Framework Agreement.

In dealing with information in connection with these Annexes, each Party will comply with their own applicable rules and regulations concerning the protection of data.

These Annexes will have effect from 1 January to 31 December 2022, unless the intention that any provision will have effect before 1 January 2022 is specifically indicated.

## **Annex 1: Licensing arrangements**

This annex sets out the types of activity that will be licensed and any licence limitations.

### **1. GENERAL RULES**

- 1.1. All UK vessels fishing in Norwegian waters will be licensed by the appropriate licensing authority, the Directorate of Fisheries in Bergen, Norway who will send this list to the UK Single Issuing Authority.
- 1.2. All Norwegian vessels fishing in UK waters will possess a licence issued by the appropriate licensing authority, The UK Single Issuing Authority (UKSIA), acting on behalf of the Marine Management Organisation, Scottish Ministers, Welsh Ministers and the Northern Ireland Executive.
- 1.3. When fishing in UK waters, Norwegian vessels will be able to provide a licence and associated conditions to an enforcement officer on demand. Electronic versions will be sufficient. UK vessels fishing in Norwegian waters are not required to keep a licence on board, but must be on the authorised vessel list referenced at 1.1. Masters must make themselves aware of any licence variation.

### **2. PROCEDURE FOR THE LICENSING OF FISHING VESSELS**

- 2.1. The arrangements for the application, notification and exchange of licensing data is set out in annex 2 to this Agreed Record.

### **3. PUBLICATION OF UK LICENCE CONDITIONS**

- 3.1. The UK will publish the conditions that apply to Norwegian vessels licensed to fish in UK waters at <https://www.gov.uk/guidance/united-kingdom-single-issuing-authority-uksia>

## **Annex 2: Arrangements for the electronic exchange of licensing data**

An interim solution for licensing data exchange for the period covered by the Agreed Record is set out in this Annex. During this period, the Parties will continue to develop exchange procedures.

### **1. LICENSING AUTHORITIES**

1.1. For the purposes of this Annex:

The “licensing authority” will be:

- The Directorate of Fisheries in Bergen, Norway for vessels flying the flag of the United Kingdom;
- The UK Single Issuing Authority (UK SIA), the Marine Management Organization acting on behalf of the Scottish Ministers, the Welsh Ministers and the Northern Ireland Executive, for vessels flying the flag of Norway.

The "flag authority" will be:

- The Directorate of Fisheries in Bergen, Norway for vessels flying the flag of Norway;
- The UK SIA for vessels flying the flag of the United Kingdom.

### **2. PROCEDURE FOR LICENSING OF FISHING VESSELS**

- 2.1. The flag authority will submit an application to the licensing authority for each individual vessel wanting to be licensed. The application will contain the information set out in Appendix I.
- 2.2. The application will specify which of the licence type(s) at Appendix II is being applied for.
- 2.3. The licensing authority will respond as soon as reasonably practicable to a licence application, indicating whether a licence has been granted or rejected. If a licence application is rejected, the reason for rejection will be provided.
- 2.4. If the flag authority becomes aware that a vessel is not or is no longer eligible to fish under a licence that has been applied for or granted, the flag authority will notify the licensing authority without delay.
- 2.5. If there are any changes to a vessel’s characteristics and the details provided at point 2.1, the existing licence will be withdrawn and without delay the flag authority will send a new application to the licensing authority, if the conditions for eligibility are still met.
- 2.6. The licensing authority may refuse, suspend or withdraw a licence where a fundamental change of circumstances has occurred (e.g. vessel ownership or characteristics) or in cases of a serious threat to the sustainable exploitation, management and conservation of marine biological resources, or where it is essential in order to prevent or suppress illegal, unreported or unregulated (“IUU”) fishing, including serious non-compliance with the rules in their waters.

2.7. Unless otherwise withdrawn, a licence issued in accordance with this Annex will expire when the UK-Norway Agreed Record ceases to have effect on 31<sup>st</sup> December 2022, unless otherwise indicated in the annual record.

2.8. The licence applications and decisions will be communicated in accordance with paragraph 4.

### 3. ADDITIONAL PROCEDURES FOR THE LICENSING OF FISHING VESSELS FLYING THE FLAG OF NORWAY

3.1. In addition to the exchange and communication of data between the licensing authorities at paragraph 1, the UK SIA will issue an electronic licence directly to a vessel owner by email using the email address provided.

3.2. Licences issued electronically by the UK SIA will come into effect no sooner than 24 hours after they have been communicated to the vessel owner.

3.3. Licence variations will be issued electronically by the UK SIA and will come into effect no sooner than 24 hours after publication on the UK SIA website.

### 4. COMMUNICATION OF LICENCE DATA

4.1. Communication of the data between the licensing authorities at paragraph 2 will be contained in a Microsoft Excel/CSV file or similar.

4.2. The file will be exchanged via email communication between the addresses below:

For the UK: [uksia@marinemanagement.org.uk](mailto:uksia@marinemanagement.org.uk)

For Norway: [postmottak@fiskeridir.no](mailto:postmottak@fiskeridir.no)

4.3. The licensing authority will confirm receipt of the licensing data.

### 5. CONTACTS

United Kingdom	Kingdom of Norway
UK Single Issuing Authority Marine Management Organisation (MMO) Lancaster House Newcastle England NE4 5PE Tel: 0044 208 026 5062 Email: <a href="mailto:uksia@marinemanagement.org.uk">uksia@marinemanagement.org.uk</a>	Directorate of Fisheries Directorate of Fisheries Strandgaten 229 Bergen Norway Tel: 0047 552 38 000 Email: <a href="mailto:postmottak@fiskeridir.no">postmottak@fiskeridir.no</a>
	Specific contacts to be copied into relevant correspondence:  Contact for UK vessel licensing issues in Norwegian waters: <a href="mailto:hilde@fiskeridir.no">Hilde Marie Jensen</a> <a href="mailto:hijen@fiskeridir.no">hijen@fiskeridir.no</a> (tel +47 908 12 044)

	Contact for Norwegian vessel licensing issues in UK waters: Elin Winsents <a href="mailto:elwin@fiskeridir.no">elwin@fiskeridir.no</a> (tel. + 47 468 04 156)
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## APPENDIX I

### A: Format to be used for licence application data exchange for Norwegian Vessels

Data Element	Mandatory / Optional (M/O)	Comments
<b>Owner details</b>		
Name of the Owners (up to 5)	M	
E-mail of owners	M	Free text standard format <i>name@domain.com</i>
Address	M	6 address field occurrences, 5 for address and 1 for Postcode
Telephone number	M	
<b>Vessel details</b>		
Vessel e-mail	M	Free text standard format <i>name@domain.com</i>
Vessel telephone number	M	
Flag State	M	ISO alpha-3 country code
Vessel name	M	
IMO Number	M	Mandatory for vessels 12m and over.
External markings	M	
IRCS	M	
Length (Overall length)	M	LOA
Tonnage	M	GT
Power	M	kW
Gear type 1	M	For information, other gears may also be used
Gear type 2	M / O if no Gear 2	For information, other gears may also be used
<b>Licence details</b>		
Licence Code 1	M	Licence Code from Appendix II, B
Licence Code 2	O	Licence Code from Appendix II, B
Licence Code 3	O	Licence Code from Appendix II, B
Licence Code 4	O	Licence Code from Appendix II, B
Licence Code 5	O	Licence Code from Appendix II, B
Licence Code 6	O	Licence Code from Appendix II, B

**B: Format to be used for licence application data exchange for United Kingdom Vessels**

Data Element	Mandatory / Optional (M/O)	Comments
<b>Owner details</b>		
Name of the Owners (up to 5)	M	
E-mail of owners	M	Free text standard format <u><i>name@domain.com</i></u>
Address	M	6 address field occurrences, 5 for address and 1 for Postcode
Telephone number	M	
<b>Vessel details</b>		
Vessel e-mail	M	Free text standard format <u><i>name@domain.com</i></u>
Vessel telephone number	M	
Flag State	M	ISO alpha-3 country code
Vessel name	M	
RSS Number	M	
IMO Number	M	Mandatory for vessels 12m and over.
External markings	M	
IRCS	M	
Length	M	LOA
Tonnage	M	GT
Power	M	kW
Gear type 1	M	For information, other gears may also be used
Gear type 2	M / O if no Gear 2	For information, other gears may also be used
<b>Licence details</b>		
Licence Code 1	M	Licence Code from Appendix II, A
Licence Code 2	O	Licence Code from Appendix II, A
Licence Code 3	O	Licence Code from Appendix II, A
Licence Code 4	O	Licence Code from Appendix II, A
Licence Code 5	O	Licence Code from Appendix II, A
Licence Code 6	O	Licence Code from Appendix II, A

## APPENDIX II

### A: Licence codes to be used for licence application for fishing in Norwegian waters

Licence Code	Licence type
GBR_NOR_S62N	Vessels fishing for demersal species south of 62°N
GBR_NOR_S62N_IND	Vessels fishing for industrial species south of 62°N
GBR_NOR_S62N_MAC_SP	Purse seine vessels fishing for Mackerel south of 62°N
GBR_NOR_S62N_MAC_TO	Trawl vessels fishing for Mackerel south of 62°N
GBR_NOR_N62N_MAC_SP	Purse seine vessels fishing for Mackerel north of 62°N
GBR_NOR_N62N_MAC_TO	Trawl vessels fishing for Mackerel north of 62°N
GBR_NOR_S62N_HER	Vessels fishing for Herring south of 62°N
GBR_NOR_N62N	Vessels fishing for demersal species north of 62°N
GBR_NOR_N62N_WBH	Vessels fishing for Blue Whiting in NEZ north of 62°N and in the Fishery Zone around Jan Mayen
GBR_NOR_N62N_HER	Vessels fishing for Norwegian Spring Spawning Herring in NEZ north of 62°N and in the Fishery Zone around Jan Mayen
GBR_NOR_CARGO	Transport vessels (cargo) in NEZ and in the Fishery Zone around Jan Mayen

**B: Licence codes to be used for licence application for fishing in UK waters**

<b>Group Code</b>	<b>Vessel Group</b>
NOR_GBR_ICES_IND	Industrial group – vessels fishing for Sandeel, Sprat and Shrimp in ICES Zone IV, Blue whiting in ICES Zones II,IV,VIa (north of N56°30), VIb and VII (West of W12°), Norway Pout in ICES Zone IV and IVa (north of N56°30), Mackerel in ICES Zones IIIa and IV, Horse Mackerel in ICES Zone IV and Herring in ICES Zones IVa and IVb
NOR_GBR_ICES_LL	Longil group – vessels fishing with longline and gillnets for Cod, Haddock, Whiting and Plaice in ICES zone IV, Saithe in ICES zones IIIa and IV, Ling, Blueling and Tusk in ICES zones IIa, IV, Vb and VII
NOR_GBR_ICES_SP	Purse group – vessels fishing for Sandeel and Sprat in ICES Zone IV, Blue Whiting in ICES Zones II, IV, VIa (north of N56°30), VIb and VII (west of W12°), Herring in ICES zones IVa, IVb and VIa (north of N56°30), Mackerel in ICES zones IIa, IIIa, IV, VIa (north of N56°30), VIIId, VIIe, VIIf and VIIh, Horse Mackerel in ICES zone IV and Norway Pout in ICES zones IV and VIa (north of N56°30)
NOR_GBR_ICES_TO	Trawl group – vessels fishing for Cod, Haddock, Plaice and Whiting in ICES zone IV and Saithe in ICES zones IIIa and IV
NOR_GBR_N62N_HER	Vessels fishing for Norwegian Spring Spawning Herring in UK waters north of 62°N

## Annex 3: Arrangements for the exchange of fleet registers

The fleet register is important for the application of the ERS (see Annex 4) and VMS (see Annex 5) to the Agreed Record.

This Annex sets out the arrangements for the electronic exchange of fleet register data between Norway and the UK and replaces the North Atlantic Format (NAF) with a new format (API) described in Appendix 2 for data exchange in point 1.

### 1. APPLICATION

- 1.1. The fleet register will comprise data on Norwegian vessels 12 metres and above, and UK vessels 12 metres and above.

### 2. PROCEDURE FOR EXCHANGE OF FLEET REGISTERS

- 2.1. For the purposes of this Annex the authorities for the exchange of fleet registers will be:

**Norway:** The Directorate of Fisheries, Bergen.

**United Kingdom:** The Centre of Aquaculture, Fisheries and Aquaculture Science (CEFAS) on behalf of the United Kingdom fisheries administrations.

- 2.2. Norway will send to the UK a Notification report (NOT) as outlined in Appendix 1 for each of its individual vessels 12 metres and above.
- 2.3. The UK will send to Norway a Notification report (NOT) as outlined in Appendix 1 for each of its individual vessels 12 metres and above.
- 2.4. If there are changes to the characteristics of a Norwegian vessel which do not have any effect on the vessel's right to continue to fish, Norway will without undue delay send to the UK a new NOT report for each individual vessel replacing the previous NOT report.
- 2.5. If there are changes to the characteristics of a UK vessel which do not have any effect on the vessel's right to continue to fish, the UK will without undue delay send to Norway a new NOT report for each individual vessel replacing the previous NOT report.
- 2.6. If there are changes in the characteristics of a Norwegian vessel that in any way will change the vessel's right to fish, Norway will without undue delay send to the UK a Withdrawal report (WIT) as outlined in Appendix 1 to withdraw a vessel from the list of notified vessels. A new NOT report will be sent according to point 2.2 of this Annex.
- 2.7. If there are changes in the specific vessels characteristics of a UK vessel that in any way will change the vessels right to fish, the UK will without undue delay send to Norway a Withdrawal report (WIT) as outlined in Appendix 1 to withdraw a vessel from the list of notified vessels. A new NOT report will be sent according to point 2.3 of this Annex.
- 2.8. Changes which affect the vessel's licence will be notified to the licensing authority in accordance with Annex 2.

2.9. Regarding NOT and WIT reports sent using the agreed API, the acceptance of the report will only be as described in Appendix 2.

## APPENDIX 1

### A) NOTIFICATION (NOT) REPORT

Data elements used in the API data transmission. (See Appendix 2)

Data Element	Code	Mandatory / Optional (M/O)	Comments
Unique id for the reports	NOT_WIT_id	M	Sequence of unique number used to identify the report. Will never be reset to zero.
Last updated time	LAST_UPDATED	M	Date and time for last update of any M information in the report, in the UTC ISO standard for date and time as 2019-02-20T01:00:00.000Z
Type of Message	TM	M	Message detail; message type, "NOT" as Notification containing technical details about the vessel
Vessel Name	NA	M	Vessel registration detail; name of the vessel
Radio call sign	RC	M	Vessel registration detail; international radio call sign of the vessel
Flag State	FS	M	Vessel registration detail; State where the vessel is registered given as ISO-3 flag state code
External Registration Number	XR	M	Vessel registration detail; the side number of the vessel
<b>Vessel Owner</b>	<b>VO</b>	<b>M</b>	<b>Vessel registration detail; name and address of the owner</b>
Vessel capacity measurement method Tonnage	VT	O M	Vessel characteristic, vessel capacity in pairs as needed "OC" "Oslo" convention 1947, "LC" "London" convention ICTM-69 total capacity in tonnage (GT)
Vessel Length measurement method Length	VL	M O	Vessel characteristic; length in meters in pairs as needed "OA" overall; "PP" between perpendiculars length in meters
Vessel Power measurement method Power	VP	O M	Vessel characteristic, engine power in pairs as needed "KW" total installed engine power in vessel as kilowatts, "HP" total installed engine power as horsepower total installed engine power

## B) WITHDRAWAL (WIT) REPORT

Data elements used in the API data transmission. (See Appendix 2)

Data Element	Code	Mandatory / Optional (M/O)	Comments
Unique id for the reports	NOT_WIT_id	M	Sequence of unique number used to identify the report. Will never be reset to zero.
Type of Message	TM	M	Message detail; message type, "WIT" as Withdrawal of vessels from the list of notified vessels
Radio call sign	RC	M	Vessel registration detail; international radio call sign of the vessel
Vessel Name	NA	O	Vessel registration detail; name of the vessel
External Registration Number	XR	O	Vessel registration detail; the side number of the vessel
Start Date	SD	M	Message detail; The first date as from which the withdrawal takes effect. in the UTC ISO standard for date and time as 2019-02-20T01:00:00.000Z
Vessel capacity measurement method tonnage	VT	O O	Vessel characteristic, vessel capacity in pairs as needed "OC" "Oslo" convention 1947, "LC" "London" convention ICTM-69 total capacity in tonnage (GT)
Vessel Length measurement method length	VL	O O	Vessel characteristic; length in meters in pairs as needed "OA" overall; "PP" between perpendiculars length in meters
Vessel Power measurement method Power	VP	O O	Vessel characteristic, engine power in pairs as needed "KW" total installed engine power in vessel as kilowatts, "HP" total installed engine power as horsepower total installed engine power

## APPENDIX 2

### DATA TRANSMISSION FORMAT AND EXCHANGE OF FLEET REGISTER DATA

Appendix 1 contains all elements in the new fleet register API data exchanges.

#### 1. Exchange data transmission is structured as follows:

- 1.1. Characters in accordance with UTF-8
- 1.2. Each data transmission is a push of data generated by agreed events in the Flag State fleet register of the sending party since last data transmission.
- 1.3. The new data exchange uses JSON (JavaScript Object Notation) format and a REST API (Restful Application programming interface).
- 1.4. The data included in the fleet register transmissions are listed in Appendix 1.
- 1.5. The API data exchange structure:

- a) **The GBR API used for NOR -> GBR** allow a list.

GBR accepts one or more reports in one sending. NOR will only send one report each time.

- b) **The API used for GBR -> NOR** do not allow a list.

NOR accepts only one report in each sending, so GBR must send only one report each time.

#### 2. Receiving reports

- 2.1. The receiving Party will send a synchronous HTTP response to indicate that the report is received.

#### 3. Response format for correct received reports:

- 3.1. 201 Created or 200 OK

#### 4. Upon failure:

- 4.1. HTTP codes might be sent synchronously:

HTTP code	HTTP message	Reason
400	Bad request	Client error, Validation error
404	Not found	The receiver is not configured for the other party's system
500	Internal server error	Unexpected internal error
503	Service unavailable	The service is temporarily down

#### 5. Use of asynchronous return messages

- 5.1. In the current Licensing agreement between Norway and EU and in ERS data exchange, proof of receipt is via the asynchronous return message (RET). And will also probably be that in future systems.

5.2. But in this Fleet Register data exchange using the agreed REST API the solution is implemented with only a synchronous response as the confirmation of the report sent and received. The reason is that when this data exchange is ready tested the complexity is very small, and the exchange does not involve vessels or any other parties, only Norway and UK (Cefas). If one report should be missing it is possible to send the information once more.

5.3. If it is decided at a later stage that an asynchronous return message is needed it can be implemented in the API.

## **6. Secure data exchange is the same as for ERS**

## **7. Required client/server machine information from the FMCs exchanging data:**

7.1. The following information is required for test and production from all IP addresses and endpoints used for data exchange.

- a) IP address and hostname of the client machine and/or server machine (if *an FMC* uses NAT or something similar, this should be the IP address we should open our firewall for)
- b) The endpoint locations used by *the FMC* implementation
- c) The public part of the SSL-certificate the client and/or server machine will be using (please include the entire certificate chain). The SSL certificate should be a domain-validated server/client certificate with revocation checking options (CRL or OCSP); self-signed certificates will not be accepted.

## **Annex 4: Arrangements in respect of electronic exchange of catch and activity data (Electronic Reporting Systems)**

This Annex sets out the technical arrangements relating to the electronic reporting systems (ERS) for 2021.

### **1. COMMON PRINCIPLES WHEN EXCHANGING DATA BETWEEN FISHERIES MONITORING CENTRES (FMCs)**

- 1.1. Reports will be forwarded in accordance with the flag State principle, meaning that catch and activity data will be submitted by the master to the flag State of the vessel.
- 1.2. All reports outlined in Appendix 1 of this Annex will be forwarded by the flag State FMC to the other Party without undue delay (pushed).
- 1.3. Additional catch and activity data will be made available to the Parties by using the pull principle. Procedures for pulling data will be further elaborated.
- 1.4. The International radio call sign (RC) will be the main identification of the vessel in the reports exchanged between FMCs.
- 1.5. All recorded date and time elements in the reports should be given in UTC time.
- 1.6. The flag State FMC will add Header data elements to the ones already sent by the vessel as specified in Appendix 1 to all reports before forwarding them.
- 1.7. Coastal State FMCs will automatically issue a RET (Return) message as defined in Appendix 1 for every report received. An electronic report sent in accordance with this Annex is considered not to be received if the originator does not receive a RET message from the coastal State FMC, or the RET message from the coastal State FMC has the return status not acknowledged. The RN field of a return message will be copied from the report checked. If the SQ field is used in the report this SQ will also be copied from the report checked to the RET message. Similarly, the RX field should be copied from the report into the RET message for cancellations or corrections.
- 1.8. Only acknowledged reports may be corrected or cancelled. If an FMC receives a correction for a report from the other FMC this correction will have a new RN (Record number). In addition, the report should include the RN of the report to be corrected (RX). The report with the most recent RN is the valid report.
- 1.9. The flag State will monitor the reporting of vessels carrying its flag when in the waters of the other Party.
- 1.10. Responsibility of the Master of fishing vessels regarding use of ERS. The Master will:
  - a) Ensure that the Reporting System is fulfilling all demands required by this agreement, and is functioning when entering the zone.
  - b) Ensure that all Reports are submitted within given time limits.
  - c) Make sure that Reports are received at final receiver. For each Report two return messages

(RET) will be returned to the vessel. One from the Flag State FMC, and one from the Coastal State FMC.

- d) In case RET is not received from the Coastal State FMC, or the RET has the status NAK, either contact Flag State FMC if they have received a RET from the Coastal State, or send a new Report to be forwarded to the Coastal State.
- e) Not enter a zone intending to fish without having received a RET message from the Coastal State with status ACK on Catch on Entry (COE) Report or Departure from Port Report (DEP).

## 2. ROUTING OF ELECTRONIC REPORTS

2.1. Norwegian vessels will send their electronic reports to the Norwegian FMC, which will forward the reports to the UK FMC. The UK FMC will prepare and send the correct RET message back to the Norwegian FMC. Thereafter the Norwegian FMC will forward the RET message from the UK FMC to the Norwegian vessel without undue delay.

NOR vessel <==> NOR FMC <==> UK FMC
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2.2. UK vessels will send their electronic reports via their FMC to the Norwegian FMC. The Norwegian FMC will prepare and send the correct RET message back to the UK FMC. Thereafter the UK FMC will forward the RET message from the Norwegian FMC to the UK vessel without undue delay.

UK vessel <==> UK FMC <==> NOR FMC
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2.3. Where prior authorisation is required, this will be handled within existing regulations. However, electronic submission of CON reports will be exchanged among Parties.

## 3. CATCH AND ACTIVITY REPORTS:

3.1. All electronic reports required under this reporting scheme (DEP, DCA, COE, TRA, POR, CON, COX, LAN and AUD) will be sent using the formats specified in Appendix 1. The master of a vessel going to fish in the other Party's waters will send the electronic reports one by one in accordance with time limits given in this Annex.

3.2. The master of a vessel intending to fish in the other Party's waters will send a Catch on Entry (COE) report at the earliest 12 hours and at the latest 1 hour before crossing the border. This report may be cancelled.

3.3. The master of any vessel that has been granted a licence for fishing in the Norwegian Economic Zone north of 62°N will send a COE report, at the earliest 24 hours and at the latest 12 hours prior to starting fishing operations in the zone.

3.4. After a Catch on Entry (COE) report has been acknowledged by RET message the Detailed Catch and Activity (DCA) report will be sent every day before 23.59 UTC. Block B of the DCA report will only be included for finalized fishing activities. The DCA report can be corrected. When fishing in the Norwegian Economic Zone the DCA report may only be corrected by the master of vessel until 12.00 UTC the day after. The DCA report will also be sent prior to a:

- a) Catch on Exit (COX) report
  - b) Control Point/Area (CON) report
  - c) Inspection at sea (if requested by the coastal State authorities)
  - d) Port report (POR)
- 3.5. When entering a port within the UK the master of a vessel will send a Port report (POR) at the latest 4 hours before entering the port. When entering a port in Norway the master of a vessel will send a Port report (POR) 2 hours before entering the port. This report may be corrected or cancelled. When leaving a port of the other Party a vessel will send a Departure report (DEP) before departing the port. This report may be cancelled.
- 3.6. When taking part in transshipment at sea in Norwegian waters the master of a vessel will send a Transshipment report (TRA). The master of a donor vessel will send a TRA report no later than 24 hours before the transshipment takes place. The master of a receiving vessel will send this report no later than 1 hour after the transshipment is completed. This report may be cancelled or corrected.
- 3.7. Transshipment at sea is prohibited in UK waters and may be performed only in ports designated for that purpose. The master of a donor vessel will send a Transshipment report (TRA) no later than 4 hours before the transshipment takes place. The master of a receiving vessel will send this report no later than 24 hours after the transshipment is completed. This report may be cancelled or corrected.
- 3.8. Before the vessel exits from the waters of the other Party the master of a vessel will send a Catch on Exit (COX) report. This report may be cancelled.
- 3.9. The master of any vessel engaged in trawling for fish for human consumption in the Economic Zone of Norway south of 62° N with a minimum mesh size of 120 mm will send a catch on exit (COX) report when fishing in the zone is discontinued and at the latest 1 hour before leaving the Economic Zone.
- 3.10. Where applicable the master of a vessel will send a Control point/area report (CON) in accordance with time limits given by the other Party. This report may be cancelled.
- 3.11. When landing catch into a UK port the master of the vessel will complete and submit a Landing declaration (LAN) report within 24 hours following completion of landing.
- 3.12. The Parties may after consultations decide on different time-limits than the above mentioned if this is found appropriate for management or control purposes for specific fisheries.
- 3.13. If a report is marked by using the FM (FMC marking) data element in the header fields set out in Appendix 6 and the data content is correct the reports should not be rejected due to time limits set out in paragraph 3.

#### **4. FORMATS FOR DATA EXCHANGE BETWEEN FMCS**

- 4.1. Data exchange between the FMCs will be conducted by using the reports with names and data elements as described in Appendix 1. Data exchange format between the vessel and the flag State will be established by the flag State authorities.

4.2. Pushing of these reports between the FMCs will be done using XML and Web Services. Any changes to the format laid down in Appendix 1 to 9 of this Annex will be discussed between Parties and will be subject to a determined implementation period.

#### 4.3. REQUIREMENTS FOR XML REPORTS

4.3.1. The data exchange will be done using Web Services and HTTPS data exchange protocol.

4.3.2. The common agreed WSDL defines the contract for the operations to be used when exchanging data. The WSDL will adhere to WS-I Basic Profile 1.1 to enforce interoperability.

4.3.3. The common agreed XSD will be used for partially validating the data.

4.3.4. The mandatory fields for fish quantities (OB, CA and KG) will be given as empty elements if there is nothing to declare (for example <element/>). These fields require a list of pair items (species, quantity), which would translate to an element/sub-element XML structure.

4.3.5. The RN (Record number) will be crewsRN (CREWS - Common Regional ERS Web Services) and be the unique identifier of a report. The format will be:

4.3.5.1. XXXYYYYMMDDHHmmSSsss (sss – milliseconds) where the XXX will be the ISO-Alpha 3 country code. Each Party ensures that the RN they produce is unique.

4.3.6. TM will not be used as a code for message type. The message type will instead be given as an XML element instead of an XML attribute.

4.3.7. If the report is sent to correct a previous report the updatErs(ERS) will be used and if the report is sent to cancel a previous sent report the deleteErs(DEL) will be used. Return messages for corrections and deletions will include RE/512 and RE/522, respectively. It is the chosen WSDL operation that indicates that the report is a cancellation or correction report.

4.3.8. All RE (return error number) values will be included within the return message. The RS field (ACK/NAK) will reflect the final decision taken during the report validation. Note that RE values may be given and the message may still contain ACK, in such cases the RE values may be considered ‘warnings’ or information.

4.3.9. The system will validate incoming and outgoing reports against the crews XSD schema. If the incoming report does not validate, a SOAP fault should be returned within the session indicating that the report has not been handled.

#### 5. PRINCIPLES USED WITH CORRECTIONS AND CANCELLATIONS

5.1. The flag State FMC will decide whether the correction or cancellation of a report from its vessel is accepted or not. Messages sent between FMCs to correct or cancel reports should not be rejected due to time limits (if a correction or cancellation is received it should be accepted if the data content is correct).

5.2. If the correction or cancellation is registered, altered or accepted by the flag State FMC the report should be marked by using the FM (FMC marking) data element in the header fields set out in Appendix 6.

5.3. If a report has been cancelled using the formats specified in Appendix 1 to 9, a new report will be sent within the time limits given under paragraph 3.

## **6. TESTING**

6.1. The Parties will perform the tests of the implementation of the electronic reporting system before the real data exchange starts. Testing will only be done in the acceptance environment.

6.2. The AUD report as described in Appendix 1 can be used to test the connection between vessel, flag State and the other Party. The AUD report is also meant to verify the connection between the FMCs if there are indications of transmission failure between the Parties. The RET message is issued for each AUD.

6.3. The HEADER part of any report contains a test TE field. If the field is set, the report should be considered a test report. TE field should only be used in the acceptance environment. The RETURN (RET) message replied to a received test report will also have the TE (test) field set to indicate that the message is a test response. Furthermore, the Return message should have the RN number set, referencing the received test report. If the received test report is not acknowledged the RS should be set to NAK and a reason RE should be indicated.

## **7. FALLBACK PROCEDURES**

### **7.1. EQUIPMENT FAILURE ON BOARD VESSEL AND/OR TRANSMISSION FAILURE BETWEEN VESSEL AND ITS AUTHORITY**

7.1.1. The flag State authority will notify the coastal State authority about problems influencing the data exchange with a vessel and confirm that appropriate action has been taken to correct the problem.

7.1.2. Furthermore, the flag State authority will forward all required reports in the agreed digital form (Appendix 1 to 9) with high priority, but the normal time limits for fully electronic reporting might not be met. If required by the coastal State, data for specific vessels should be made available without undue delay. The reports should be marked by using the FM (FMC marking) data element in the header fields set out in Appendix 6.

7.1.3. A fishing vessel will not leave a port following a technical failure or non-functioning of its electronic recording and reporting system before it is functioning to the satisfaction of the competent authorities of the flag State or before it is otherwise authorized to leave by the competent authorities of the flag State. In these cases, the flag State will notify the coastal State before it authorizes a vessel flying its flag to leave a port in the coastal State.

### **7.2. TRANSMISSION FAILURES BETWEEN PARTIES OR SYSTEM FAILURES AT ONE OF THE PARTIES**

7.2.1. When a Party cannot send or receive electronic reports, it will as soon as possible contact the single ERS contact points of the other Party to inform about the problem and, if necessary, cooperate on solving it.

7.2.2. On request of the coastal State FMC, data could as soon as possible be forwarded by some other agreed electronic means (e.g. emailed zip file, etc.).

7.2.3. The coastal State will inform their patrol vessels/Coast Guard about transmission failures between the Parties or system failures in one of the Parties.

7.2.4. Once the system comes back to an operational mode, the missing messages (even when these have been sent to the coastal State by other means) will be sent to the appropriate Party in the agreed digital format (Appendix 1 to 9). In such cases the reports should be marked by using the FM data element in the header fields.

7.2.5. Contacts and back up contacts (if different from those in Appendix 10) should be established for a certain period of time, including full contact details in case of non-response.

### **7.3. MAINTENANCE AT ONE OF THE FMCS**

7.3.1. All maintenance operations that may affect data exchange will be notified, preferably at least 72 hours in advance and, if possible, the date and time period of the maintenance should be specified and communicated between the FMCS.

7.3.2. During maintenance, transmission operations may be put on hold until the system is back online. Once the system is back online, all held data should be transmitted immediately in the agreed digital format (Appendix 1 to 9).

7.3.3. During maintenance periods the fallback procedures for system failure apply.

## **8. CONTACT POINT FOR ERS AT THE FMCS**

8.1. The single ERS contact point list is given in Appendix 10. If the single contact point is changed this will be notified to the other FMC without delay.

## APPENDIX 1

### DESCRIPTION OF DATA AND DATA FORMAT USED IN COMMUNICATION BETWEEN FMCs

#### Header data elements

Data Element	Code	Mandatory / Optional (M/O)	Comments
Header fields provided by the FMC when forwarding the report.			
Test indicator	TE	O	The master can send test reports, but it is the FMC that should decide if such a report will be forwarded. The presence of this field indicates that the message is a test report. Only to be used in the acceptance environment.
From	FR	M	The transmitting Party: Alpha-3 ISO country code and user assigned codes (Appendix 7)
Record Number	RN	M	Format as defined in point 4.3.5 of this Annex
Record Date	RD	M	UTC date of transmission from the FMC (YYYYMMDD)
Record Time	RT	M	UTC time of transmission from the FMC (HHMM)
Previous record number	RX	M <sup>1</sup>	In the case of a correction or cancellation, this field value will be the previous record number which will be corrected or cancelled as defined in point 4.3.5 of this Annex
FMC marking	FM	M <sup>2</sup>	FMC marking as defined in Appendix 6
Header fields provided by the master and forwarded by the FMC			
Address	AD	M	Destination code GBR or NOR
Radio Call sign	RC	M	International radio call sign of the vessel
Internal Registration Number	IR	O	Internal registration number for United Kingdom vessels (The identification for Norwegian vessels should only be the RC.)
Date	DA	M	UTC date of transmission from the vessel (YYYYMMDD)
Time	TI	M	UTC time of transmission from the vessel (HHMM)
Name of Master	MA	M	Name of master
Sequence number	SQ	O	Serial number of the report from the vessel to the coastal State in the relevant year
Type of Message	TM	M	3 letter code message type

<sup>1</sup> Mandatory if a correction or cancellation to a previous message. Limitations for correcting or cancelling reports are listed in point 5 of this Annex

<sup>2</sup> Mandatory only in the situations described in Appendix 6

## DEPARTURE FROM PORT REPORT – DEP

Format used in communication between FMCs

Data Element	Code	Mandatory / Optional (M/O)	Comments
Header fields provided by the FMC when forwarding the report.			
Header fields provided by the master and forwarded by the FMC			
Type of Message	TM	M	message type, “DEP”
Elements below are specific for this report type, provided by the master and forwarded by the FMC			
Port	PO	M	Code of port (ISO alpha-2 country code + 3 letter port code) based on the UN/LOCODE (the United Nations code for Trade and Transport Locations) <a href="http://www.unece.org/cefact/codesfortrade/codes_index.htm">http://www.unece.org/cefact/codesfortrade/codes_index.htm</a>
Departure Date	ZD	M	UTC date of the departure from port (YYYYMMDD)
Departure Time	ZT	M	UTC time of the departure from port (HHMM)
Catch on board	OB	M	Quantity of species on board when departing, in pairs as needed, FAO species code (SN). Live weight in kilograms (WT)
Vessel activity	AC	M	Predicted anticipated vessel activity as defined in the ‘Main vessel activity’ code set in Appendix 3
Gear definition	GE	M <sup>3</sup>	Gear definition list given as a FAO gear code

<sup>3</sup> Mandatory only if exiting a UK port and activity is Fishing

## CATCH ON ENTRY REPORT - COE

Format used in communication between FMCs

<b>Data Element</b>	<b>Code</b>	<b>Mandatory / Optional (M/O)</b>	<b>Comments</b>
Header fields provided by the FMC when forwarding the report.			
Header fields provided by the master and forwarded by the FMC			
Type of Message	TM	M	message type, "COE"
Elements below are specific for this report type, prepared by the master and forwarded by the FMC			
Quantity On Board species live weight	OB	M	quantity by species on board, in pairs as needed, FAO species code (SN) Live weight in kilograms (WT)
Latitude	LT	M	estimated latitude where the master intends to commence fishing in decimal format (WGS84)
Longitude	LG	M	estimated longitude where the master intends to commence fishing in decimal format (WGS84)
Predicted date	PD	M	estimated date UTC when the master intends to commence fishing (YYYYMMDD)
Predicted time	PT	M	estimated time UTC when the master intends to commence fishing (HHMM)
Directed species	DS	M <sup>4</sup>	Planned directed species FAO species code (only one)
Relevant area	RA	M	The ICES Division where the master intends to commence fishing.

<sup>4</sup> Mandatory only when starting to fish in Norwegian waters

## DETAILED CATCH ACTIVITY REPORT – DCA

With possibilities to report on each fishing operation  
Format used in communication between FMCs

Data Element	Code	Mandatory / Optional (M/O)	Comments
<b>Block A</b> - This part has data for one day			
Header fields provided by the FMC when forwarding the report.			
Header fields provided by the master and forwarded by the FMC			
Type of Message	TM	M	Message type, “DCA”
Elements below are specific for this report type, prepared by the master and forwarded by the FMC			
Activity	AC	M	Activity of the fishing vessel (See Appendix 3).
Partner vessel	PA	M <sup>5</sup>	The radio call sign of the partner fishing vessel if fishing in pair with another vessel

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<sup>5</sup> Mandatory if fishing in pair with another vessel

<b>Block B - This part will be one for each fishing operation</b>			
Block Date	BD	M	Date for start of fishing operation (YYYYMMDD) in UTC
Block time	BT	M	Time for start of fishing operation (HHMM) in UTC
Start Latitude	LT	M	Latitude for start of fishing operation , decimal degrees (WGS84)
Start Longitude	LG	M	Longitude for start of fishing operation , decimal degrees (WGS84)
Start Zone	ZO	M	Zone where fishing started see Appendix 7: Alpha-3 ISO country code and user assigned codes and of LT /LG
Gear specification	GS	M <sup>6</sup>	1 = single trawl 2 = twin trawl 3 = triple trawl 4 = more than a triple trawl
Fishing gear	GE	M	FAO gear code
Mesh size	ME	M <sup>7</sup>	Mesh size of the fishing gear in millimetres (mm)
Gear problems	GP	M <sup>8</sup>	1 = empty set 2 = net burst 3 = split 4 = broken meshes in the cod end (tear in cod end) 5 = lost gear 6 = other
End Latitude	XT	M	Latitude for end of fishing operation, decimal degrees (WGS84)
End Longitude	XG	M	Longitude for end of fishing operation, decimal degrees (WGS84)
Duration	DU	M	Duration of the fishing operation in minutes
Fishing operation (quantity of deployed gear)	FO	M <sup>9</sup>	Total number of hooks, total length of gillnets deployed.
Stock specification	SS	M <sup>10</sup>	Stock value as listed in Appendix 4. Ex NOR01
Catch species live weight	CA	M <sup>11</sup>	Total quantity by species from this fishing operation (including undersized catch), in pairs as needed, FAO species code (SN), Live weight in kilograms (WT).

<sup>6</sup> Mandatory only when trawling

<sup>7</sup> Mandatory only when fishing with gears with meshes (trawls, gill net and purse seine)

<sup>8</sup> Mandatory only if there are problems

<sup>9</sup> Mandatory only for long line, or gillnets

<sup>10</sup> Mandatory only if the data element AC is FIS and the catch (CA) contains any of the stocks listed in appendix 4

<sup>11</sup> Mandatory only if any catch was taken

Pumping from	TF	M <sup>12</sup>	Radio call sign of the vessel that is pumped from
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<sup>12</sup> Mandatory only if pumping from another vessels gear.

## CATCH ON EXIT REPORT (COX)

Format used in communication between FMCs

Data Element	Code	Mandatory / Optional (M/O)	Comments
Header fields provided by the FMC when forwarding the report.			
Header fields provided by the master and forwarded by the FMC			
Type of Message	TM	M	Message type, "COX"
Elements below are specific for this report type, prepared by the master and forwarded by the FMC			
Port	PO	O	Code of port (ISO alpha-2 country code + 3 letter port code) based on the UN/LOCODE (the United Nations code for Trade and Transport Locations) <a href="http://www.unece.org/cefact/codesfortrade/codes_index.htm">http://www.unece.org/cefact/codesfortrade/codes_index.htm</a>

## CONTROL POINT/AREA REPORT (CON)

Format used in communication between FMCs

Data Element	Code	Mandatory / Optional (M/O)	Comments
Header fields provided by the FMC when forwarding the report.			
Header fields provided by the master and forwarded by the FMC			
Type of Message	TM	M	Message type, "CON"
Elements below are specific for this report type, provided by the master and forwarded by the FMC			
Name of Control point/area	CP	M	Name of Control point/area (codes see Appendix 5)
Latitude	LT	M <sup>13</sup>	estimated control area latitude in decimal format (WGS84)
Longitude	LG	M <sup>14</sup> Error! Reference source not found.	estimated control area longitude in decimal format (WGS84)
Predicted date	PD	M	date UTC when the master intends to arrive at the control point/area (YYYYMMDD)
Predicted time	PT	M	time UTC when the master intends to arrive at the control point/area (HHMM)

<sup>13</sup> Mandatory if the element CP is a control area

<sup>14</sup> Mandatory if the element CP is a control area

## LANDING DECLARATION (LAN)<sup>15</sup>

Format used in communication between FMCs

Data Element	Code	Mandatory / Optional (M/O)	Comments
Header fields provided by the FMC when forwarding the report.			
Header fields provided by the master and forwarded by the FMC			
Type of Message	TM	M	Message type, "LAN"
Elements below are specific for this report type, provided by the master and forwarded by the FMC			
Date of Landing	DL	M	UTC date when the landing starts (YYYYMMDD)
Time of Landing	HL	M	UTC time when the landing starts (HHMM)
Landing Port	PO	M	Code of port (ISO alpha-2 country code + 3 letter port code) based on the UN/LOCODE (the United Nations code for Trade and Transport Locations) <a href="http://www.unece.org/cefact/codesfortrade/codes_index.htm">http://www.unece.org/cefact/codesfortrade/codes_index.htm</a>
Landed Catch	LC	M	Species (FAO code) (SN) Catch Area (ICES division) (RA) Economic Zone (EZ)(Alpha-3 ISO country code and user assigned codes (Appendix 7) State of preservation (PS) and Presentation (PR) (Appendix 8) Landed quantity (Product weight in kilograms) (NE) Type of packaging (TY) (Appendix 8) Number of packaging units (NU) Average weight per unit of packing (AW)

<sup>15</sup> Mandatory if landing in UK port

## PORT REPORT (POR)

Format used in communication between FMCs

Data Element	Code	Mandatory / Optional (M/O)	Comments
Header fields provided by the FMC when forwarding the report.			
Header fields provided by the master and forwarded by the FMC			
Type of Message	TM	M	Message type, "POR"
Elements below are specific for this report type, prepared by the master and forwarded by the FMC			
Quantity On Board species live weight	OB	M	Quantity by species on board before landing, in pairs as needed, FAO species code (SN) Live weight in kilograms (WT)
Quantity on-loaded or off-loaded species live weight	KG	M	Quantity by species to be landed in pairs as needed (including undersized catch), FAO species code (SN) Live weight in kilograms (WT)
Port	PO	M	Code of port (ISO alpha-2 country code + 3 letter port code) based on the UN/LOCODE (the United Nations code for Trade and Transport Locations) <a href="http://www.unece.org/cefact/codesfortrade/codes_index.htm">http://www.unece.org/cefact/codesfortrade/codes_index.htm</a>
Landsite	LS	M <sup>16</sup>	Name of buyer or other specifications describing exactly where in the Port the landing will take place, given in free text (max 100 characters)
Predicted date	PD	M	estimated date UTC for coming to port (YYYYMMDD)
Predicted time	PT	M	estimated time UTC for coming to port (HHMM)

<sup>16</sup> Mandatory if landing

## TRANSHIPMENT REPORT (TRA)

Format used in communication between FMCs

Data Element	Code	Mandatory / Optional (M/O)	Comments
Header fields provided by the FMC when forwarding the report.			
Header fields provided by the master and forwarded by the FMC			
Type of Message	TM	M	Message type, "TRA"
Elements below are specific for this report type, prepared by the master and forwarded by the FMC			
Quantity On Board species live weight	OB	M	Quantity by species on board before the transshipment, in pairs as needed, FAO species code (SN) Live weight in kilograms (WT)
Quantity on-loaded or off-loaded species live weight	KG	M	Quantity by species on-loaded or off-loaded within waters under the jurisdiction of relevant coastal State, in pairs as needed (included undersized catch), FAO species code (SN) Live weight in kilograms (WT)
Latitude	LT	M <sup>17</sup>	estimated latitude for the transshipment in decimal format (WGS84)
Longitude	LG	M <sup>18</sup> Error! Reference source not found.	estimated longitude for the transshipment in decimal format (WGS84)
Predicted date	PD	M <sup>19</sup> Error! Reference source not found.	estimated date UTC for the transshipment (YYYYMMDD)
Predicted time	PT	M <sup>20</sup> Error! Reference source not found.	estimated time UTC for the transshipment (HHMM)
Transhipped To	TT	M <sup>21</sup>	International radio call sign of the receiving vessel
Transhipped From	TF	M <sup>22</sup> Error! Reference source not found.	International radio call sign of the donor vessel
Port	PO	M <sup>23</sup>	Port code where the transshipment will take place. Code of port (ISO alpha-2 country code + 3 letter port code) based on the UN/LOCODE (the United Nations code for Trade and Transport Locations) <a href="http://www.unece.org/cefact/codesfortrade/codes_in dex.htm">http://www.unece.org/cefact/codesfortrade/codes_in dex.htm</a>

<sup>17</sup> Optional for reports sent by the receiving vessel after the transshipment

<sup>18</sup> Optional for reports sent by the receiving vessel after the transshipment

<sup>19</sup> Optional for reports sent by the receiving vessel after the transshipment

<sup>20</sup> Optional for reports sent by the receiving vessel after the transshipment

<sup>21</sup> Whichever one is appropriate, all vessels taking part in the transshipment operation have to send TRA report.

<sup>22</sup> Whichever one is appropriate, all vessels taking part in the transshipment operation have to send TRA report.

<sup>23</sup> Mandatory for the donor vessel if the transshipment occurs at a UK port

## AUDIT REPORT USED FOR TESTING – AUD

Format used in communication between FMCs

<b>Data Element</b>	<b>Code</b>	<b>Mandatory / Optional (M/O)</b>	<b>Comments</b>
Header fields provided by the FMC when forwarding the report.			
Header fields provided by the master and forwarded by the FMC			
Type of Message	TM	M	message type, “AUD”
Elements below are specific for this report type, prepared by the master and forwarded by the FMC			
Free text	MS	M <sup>24</sup>	Free text string

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<sup>24</sup> Note that a FMC has no obligation to check this element unless this has been specially agreed before sending the report.

## RETURN MESSAGE FORMAT USED BETWEEN FMCS (RET)

Data Element	Code	Mandatory / Optional (M/O)	Comments
Address	AD	M	Destination Party Alpha-3 ISO country code.
From	FR	M	Alpha-3 ISO country code of the Party sending the return message. See Appendix 7: Alpha-3 ISO country code and user assigned codes
Radio Call sign	RC	M	International radio call sign of the vessel , copied from the report which is received
Sequence number	SQ	M <sup>25</sup>	Serial number of the report from the vessel in the relevant year, copied from the report which is received
Type of Message	TM	M	Message type “RET” for return message
Return Status	RS	M	Code showing whether the message is acknowledged or not (ACK or NAK)
Return error code	RE	O	Number showing the type of error see appendix 2
Previous record number	RX	M <sup>26</sup>	Previous record number copied from the report which is received
Record Number	RN	M	Record number copied from the report which is received
Test indicator	TE	M <sup>27</sup>	Test indicator copied from the report which is received
Date	DA	M	UTC date of transmission of the RET message (YYYYMMDD)
Time	TI	M	UTC time of transmission of the RET message (HHMM)
Comment	MS	O	Optional free text

<sup>25</sup> Mandatory only if SQ is given in the report from the vessel

<sup>26</sup> Mandatory only if RX is given in the report received

<sup>27</sup> Mandatory only if TE is given in the report received.

**DELETE MESSAGE FORMAT USED BETWEEN FMCS (DEL)**

<b>Data Element</b>	<b>Code</b>	<b>Mandatory / Optional (M/O)</b>	<b>Comments</b>
Header fields provided by the FMC when forwarding the report.			
Test indicator	TE	O	The master can send test reports, but it is the FMC that should decide if such report will be forwarded. The presence of this field indicates that the message is a test report. Only to be used in the acceptance environment.
From	FR	M	The transmitting Party Alpha-3 ISO country code
Record Number	RN	M	Format as defined in point 4.3.5 of this Annex
Record Date	RD	M	UTC date of transmission from the FMC (YYYYMMDD)
Record Time	RT	M	UTC time of transmission from the FMC (HHMM)
Previous record number	RX	M	In the case of a correction or cancellation, this field value will be the previous record number which will be corrected or cancelled as defined in point 4.3.5 of this Annex
FMC marking	FM	M <sup>28</sup>	FMC marking as defined in Appendix 6
Header fields provided by the master and forwarded by the FMC			
Address	AD	M	Destination code GBR or NOR
Radio Call sign	RC	M	International radio call sign of the vessel
Date	DA	O	UTC date of transmission from the vessel (YYYYMMDD)
Time	TI	O	UTC time of transmission from the vessel (HHMM)
Sequence number	SQ	O	Serial number of the report from the vessel to the coastal State in the relevant year

<sup>28</sup> Mandatory only in the situations described in Appendix 6.

## APPENDIX 2

Error code		
Acknowledgement		Cause
No, further investigation is needed	Yes, with warning	
100	100	Unspecified error (the RS field will indicate whether the report has been acknowledged or not acknowledged)
101		Message unreadable
102		Data value or size is wrong
104		Mandatory data missing
106		Unauthorised data source
	150	Sequence error
151		Date forward in time
152		Data is too old.
	301	DCA prior to COE
	302	TRA received before COE
	303	COX received before COE
501		No matching report to cancel/correct
502		This report is a duplicate and has got the status Not Acknowledged (NAK), because this was the status given when received earlier.
	503	This report is a duplicate and has got the status Acknowledged (ACK) because that was the status given when received earlier.
504		The first DCA report for this day was generated after the deadline for generating DCA reports.
505		The cancellation or correction could not be completed due to exceeding the deadline for generating such report.
506		The record number is received earlier, but the report differs and is not sent as a correction or cancellation.
	507	The report was Acknowledged (ACK) after manual handling at the FMC.
511		This report will be corrected. (This code will be sent together with a new version of a DCA report to show that the DCA report with this RN will be corrected). This code is not needed when using XML as the exchange format.
	512	The previous report is corrected
513		The previous report cannot be corrected due to error
	514	This report has a lower version number than a previously accepted report (Used only when version numbers are given).
521		This report will be cancelled (This code will be given for the cancellation of a report with this RN) This code is not needed when using XML as the exchange format.

	<b>522</b>	The previous report is cancelled
<b>523</b>		The previous report cannot be cancelled due to error
<b>530</b>		Not implemented (for example, a test report is received , but an advanced test system is not implemented, or a query was received, but the PULL mechanism is not yet implemented)

1. Bold error codes indicate possible error codes which may be exchanged between FMCs.
2. The RE coded with numbers less than 500 except 100 and 152 are from the NEAFC system and is also used between UK and NOR in the ERS system. The list of RE codes may increase during the implementation period.

### APPENDIX 3

#### Main vessel activities

<b>Code</b>	<b>Definition</b>
ANC	Anchoring
DRI	Drifting
FIS	Fishing
GUD	Guard ship
HAU	Hauling
PRO	Processing
REL	Catch relocation
SET	Setting gear
SCR	Scientific research
STE	Cruising/Steaming
TRX	Transshipping
OTH	Other

#### APPENDIX 4

List of stock codes used in the SS field in the DCA report:

<b>Stock code</b>	<b>Norwegian species code</b>	<b>Name English</b>	<b>Name Scientific</b>
NOR01	061101	Norwegian spring spawning herring	<i>Clupea harengus</i>
NOR02	061104	North Sea herring	<i>Clupea harengus</i>

## APPENDIX 5

List of Norwegian Control points/areas:

Name of Control point	Code
ALPHA	A
BRAVO	B
CHARLIE	C
DELTA	D
ECHO	E
FOXTROT	F
GOLF	G
HOTEL	H
Name of Control area	Code
Area 1	1
Area 2	2
Area 3	3

List of UK Control areas:

Name of Control area	Code
<b>Entry</b>	
Blue Whiting (48 E2 VIA)	WHBA
Blue Whiting (50 F1 IVA)	WHBC
Blue Whiting (46 F1 IVA)	WHBD
Blue Whiting (41 E2 VIA)	WHBF
<b>Exit</b>	
Blue Whiting (48 E2 VIA)	WHBA
Blue Whiting (46 E6 IVA)	WHBE
Blue Whiting (41 E2 VIA)	WHBF
Blue Whiting (48 E8, 49 E8 or 50 E8 IVA)	WHBG
<b>Entry and Exit</b>	
Mackerel (48 E2 VIA)	MACA
Mackerel (53 F0 IIA)	MACB
Mackerel (50 F1 IVA)	MACC
Mackerel (46 F1 IVA)	MACD
Mackerel (41 E2 VIA)	MACF

## APPENDIX 6

### FMC marking (FM)

<b>Code</b>	<b>Description</b>
D	Reports sent delayed and without changes from the FMC. Example: D
C	Reports corrected or cancelled by the FMC. Example: C
M	Reports manually registered by the FMC. Example: M

## APPENDIX 7

### Alpha-3 ISO country code and user assigned codes

<b>Zone</b>	<b>ISO-3 code</b>
UK Economic Zone	GBR
Norwegian Economic Zone	NOR
Fisheries Protection Zone around Svalbard	XSV
Fisheries Protection zone inner Svalbard	XSI
Fisheries zone around Jan Mayen	XJM
Skagerrak	XSK

## APPENDIX 8

### Fish Presentation Codes

<b>Code</b>	<b>Presentation</b>	<b>Description</b>
CBF	Cod butterfly (escalado)	HEA with skin on, spine on, tail on
CLA	Claws	Claws only
CUT	Cut in pieces	GHT + cut in pieces/portions
DWT	ICCAT code	Gilled, gutted, part of head off, fins off
FIL	Filleted	HEA + GUT + TLD + bones off Each fish originates two fillets not joined by any par
FIN	Fins	Fins
FIS	Filleted and skinned fillets	FIL+SKI Each fish originates two fillets not joined by any par
FSB	Filleted with skin and bones	Filleted with skin and bones on
FSP	Filleted skinned with pinbone on	Filleted with skin removed and pinbone on
GHT	Gutted headed and tailed	GUH + TLD
GTA	Gutted and tailed	GUT + TLD
GTF	Gutted, tailed and finned	GTA +finned
GUG	Gutted and gilled	Guts and gills removed
GUH	Gutted and headed	Guts and head removed
GUL	Gutted liver in	GUT without removing liver parts
GUS	Gutted headed and skinned	GUH + SKI
GUT	Gutted	All guts removed
HEA	Headed	Heads off
HET	Headed/tailed	Heads and tail off
JAP	Japanese cut	Transversal cut removing all parts from head to belly
JAT	Tailed Japanese cut	Japanese cut with tail removed
LAP	Lappen	Double fillet, HEA, skin + tails + fins ON
LIV	Liver	Liver
LVR	Liver	Liver
LVR-C	Liver-C	Liver - collective presentation*
OTH	Other	Any other presentation
PEL	Peeled	Removal of exo-skeleton
ROE	Roe (s)	Roe(s)
ROE-C	Roe (s) - C	Roe(s) - collective presentation*
SAD	Salted dry	Headed with skin on, spine on, tail on and salted dry
SAL	Salted wet light	CBF + salted
SGH	Salted, gutted and headed	GUH + salted
SGT	Salted gutted	GUT + salted
SKI	Skinned	Skin off
SUR	Surimi	Surimi
TAL	Tail	Tails only
TLD	Tailed	Tail off

TNG	Tongue	Tongue
TNG-C	Tongue-C	Tongue - collective presentation*
TUB	Tube only	Tube only (Squid)
WHL	Whole	No processing
WNG	Wings	Wings only
Version1.0		
Updated: 29-03-2019		
Validity Start Date: 29-03-2019		
*Collective presentation means that two or more parts presentations (therefore products) are extracted from the same fish, the conversion of a secondary product of a collective presentation will be zero.		

#### Fish Preservation State Codes

Code	Description
ALI	Alive
BOI	Boiled
DRI	Dried
FRE	Fresh
FRO	Frozen
SAL	Salted
SMO	Smoked
Version 1.0	
Updated 29.03.2019	
Validity Start Date: 29.03.2019	

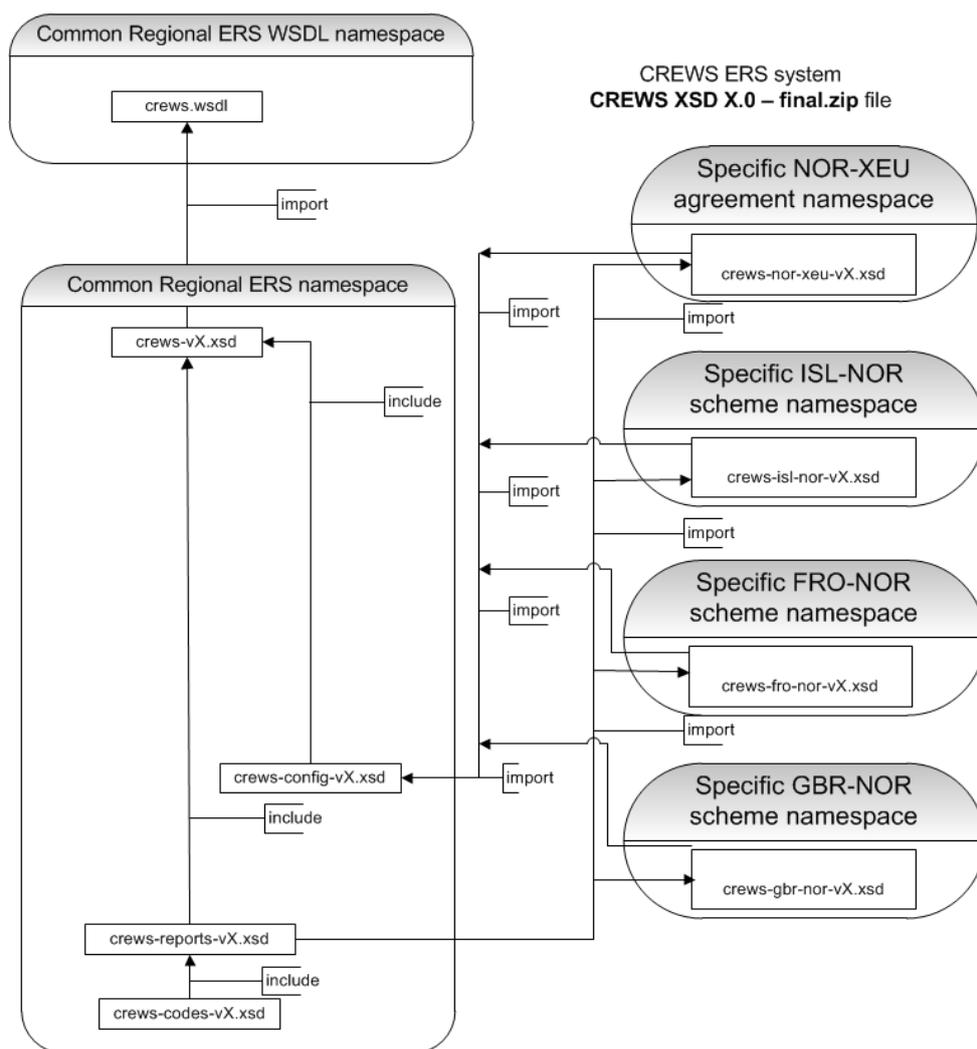
#### Type of Packaging Codes

Code	Description
BGS	Bags
BLC	Blocks
BOX	Boxes
CNT	Containers
CRT	Cartons
Version 1.0	
Updated 29.03.2019	
Validity Start Date: 29.03.2019	

## APPENDIX 9

### Data exchange using XML and Web Service

1. XML format for data reports in Appendix 1 to 7 and an *HTTPS* Web Service for data exchange should be used. Official certificates, including client certificates, should be used for mutual authentication.
2. The Common Regional ERS Web Service (CREWS), as described below and in Figure 1, should be used for implementation of the ERS data exchange between the Parties.
3. As many codes as possible will be put in a common code.xsd to simplify the verification of data. International codes should be used when possible.
4. The system will allow for creating, correcting, and cancelling reports.
5. Return messages with appropriate error codes will be generated using both XSD validation and more logical testing done in the FMC's own systems.
6. In order to guarantee interoperability between system implementations, a Basic Profile will be chosen from the WS-I deliverables to ensure minimal compliance (for example, Basic Profile 1.0 or 1.1)
7. The XSDs will use the normal `xs:dateTime` data type (for example `RDRT="2010-01-17T09:30Z"`) instead of the `YYYYMMDD` and `HHMM` formats described in Annex I for all date and time fields.
8. One web service, defined in the WSDL, with the following methods should be used:
  - `createERS(ERS)`
  - `updateERS(ERS)`
  - `deleteERS(DEL)`
  - `createRET(RET)`
  - `queryERS(QUE)`
  - `putQueryResults(RSP)`
9. All of the above methods will return the time the message or report was received. Furthermore, `createERS`, `updateERS`, `deleteERS` and `queryERS` will all throw a SOAP fault (based on SOAP version 1.1 as defined by the Basic Profile, see section 4.3.2) if the asynchronous response at the application level is not possible (missing FR, CRN, etc.). The correlation id for the asynchronous nature will be defined as the CREWS record number (for the CREWS record number definition please refer to CRN section 4.3.5).
10. ERS used both in `createERS` and `updateERS` is the header elements plus the different reports defined in Appendix 1 sent one by one with the TM field
11. DEL used for `deleteERS` is defined in Appendix 1 using some of the header data elements.
12. RET used for `createRET` is defined in Appendix 1 (The TM field is not entered).
13. For more details look into the WSDL and XSDs



**In order to add a new agreement into CREWS:**

1. Define an XSD for the new agreement with a new namespace
2. Import the `crews-reports-vX.xsd` into the new XSD from step 1
3. All reports within the new XSD should be of type common: TOM in order to be valid in the CREWS schema, all types defined within `crews-reports-vX.xsd` may be used to help build the new reports
4. Add the new namespace to the `xs:schema` of the `crews-config-vX.xsd`, for example `xmlns:xne="urn:crews:xne:v0"`
5. Add a new `xs:import` in `crews-config-vX.xsd` to import the new message types for the new agreement.

Figure 1: Web Service to be used in the new UK NOR Electronic Reporting System (v.X will be a version number).

14. Figure 1 shows how the use of different namespaces can allow for a system where the common reports and all the codes are placed in a common namespace. All reports only occurring in a smaller context can be placed in their own namespaces. This makes it possible to have a flexible system where different needs for different Parties can be met in the same environment.
15. Namespace changes will occur when updating a schema to a new major version (for example when updating version 1.x to version 2.0). No namespace changes will occur for minor version updates (for example version 1.1 updated to 1.2).

## APPENDIX 10

### FMC CONTACT POINTS IN THE UNITED KINGDOM AND NORWAY

#### NORWAY

1. **Name of the authority:** Directorate of Fisheries
2. **Address of the authority:** Strandgaten 229, Po 5804 Bergen, Norway
3. **Name and position of the ERS contact person (and substitute):**
  - 3.1. **Main:** Anders Østreim, Head of Section
  - 3.2. **Substitute:** Jens Wathne, Senior Adviser
4. **Phone Number of the ERS contact person (and substitute):**
  - 4.1. **Main:** +47 970 78 812
  - 4.2. **Substitute:** +47 995 68 688
5. **E-mail of the ERS contact person (and substitute):**
  - 5.1. **Main:** [anders.ostreim@fiskeridir.no](mailto:anders.ostreim@fiskeridir.no)
  - 5.2. **Substitute:** [jens.wathne@fiskeridir.no](mailto:jens.wathne@fiskeridir.no)
6. **24/7 contacts:**
  - 6.1. **Phone:** +47 55 23 83 36
  - 6.2. **E-mail:** [fmc@fiskeridir.no](mailto:fmc@fiskeridir.no)

#### UNITED KINGDOM

1. **Name of the authority:** Marine Management Organisation
2. **Address of the authority:** Lancaster House, Hampshire Court, Newcastle, NE4 7YH, United Kingdom
3. **Email for authority:**
  - 3.1. **E-mail for Marine Technology Services Management:** [MTSM@marinemanagement.org.uk](mailto:MTSM@marinemanagement.org.uk)
  - 3.2. **General e-mail:** [ops@marinemanagement.org.uk](mailto:ops@marinemanagement.org.uk)

1. **Name of the authority:** Marine Scotland (Compliance)
2. **Address of the authority:** Area 1b North, Victoria Quay, Leith, Edinburgh, EH6 6 QQ, United Kingdom
3. **Name of contact person:**
  - 3.1. Ronnie Simpson
4. **Phone Number of the contact person:**
  - 4.1. Phone: +44 (0) 131 244 6206
5. **E-mail of the contact person:**
  - 5.1. E-mail: [Ronnie.Simpson@gov.scot](mailto:Ronnie.Simpson@gov.scot)

## **UK ERS CONTACTS**

1. **E-mail of general ERS contact:**
  - 1.1. E-mail: [ers@gov.scot](mailto:ers@gov.scot)
2. **24/7 contacts:**
  - 2.1. Phone: +44 (0) 131 244 6077
  - 2.2. E-mail: [ukfmc@gov.scot](mailto:ukfmc@gov.scot)
3. **Name and position of the ERS data exchange contact person:**
  - 3.1. Gareth Norman, Software and Data Exchange Programme Manager
4. **Phone Number of the ERS data exchange contact person:**
  - 4.1. Phone: +44 (0) 1502 521324
5. **E-mail of the ERS data contact person:**
  - 5.1. Email: [gareth.norman@cefas.co.uk](mailto:gareth.norman@cefas.co.uk)

## Annex 5: Satellite tracking of fishing vessels (Vessel Monitoring Systems)

1. All fishing vessels of 12m and over in length will have an operational satellite tracking device installed on board and be tracked by their flag state Fisheries Monitoring Centre (FMC) when in waters of the other party.
2. For the purpose of the satellite tracking, the Parties will exchange consistent latitude and longitude co-ordinates of their waters. Such co-ordinates will be for operational purposes only. The data will be communicated in computer readable form, as decimal degrees in the WGS-84 datum.
3. The Vessel Monitoring System hardware and software components will be tamper proof i.e. will not permit the input or output of false positions and must not be capable of being manually over-ridden. The system will be fully automatic at all times regardless of environmental conditions. Each Party will ensure that it is prohibited to destroy, damage, render inoperative or otherwise interfere with the satellite tracking device. In particular, the masters will ensure that:
  - a) the satellite tracking devices are fully operational;
  - b) data are not altered in any way;
  - c) the antenna or the antennas connected to the satellite tracking devices are not obstructed in any way;
  - d) the power supply of the satellite tracking devices is not interrupted in any way; and
  - e) the satellite tracking devices are not removed from the vessel.
4. The satellite tracking device will ensure the automatic transmission at all times of the following data:
  - a) The fishing vessel identification;
  - b) The most recent geographical position of the fishing vessel, with a position error which will be less than 500 metres, with a confidence interval of 99%;
  - c) The date and time expressed in UTC of the fixing of the position of the fishing vessel; and
  - d) The speed and course of the fishing vessel.
5. When a vessel of one Party subject to satellite tracking (of 12m or over in length) enters or exits the waters of the other Party, the flag State will forward to the relevant Fisheries Monitoring Centre (FMC) of the other Party an Entry or Exit message as described in the Appendix I. These messages will be transmitted without delay. The tracking frequency by the flag State FMC of a vessel being in the waters under the jurisdiction of the other Party will be on an hourly basis, or more frequent if the Party requests.
6. When a vessel has moved into waters of the other Party, the latest position message from the vessel will be communicated from the flag state FMC to the relevant FMC of the other Party

without delay at least every hour. These messages will be identified as Position Messages as described in Appendix I.

7. It is prohibited for a vessel to switch off its satellite tracking devices when in waters under the jurisdiction of the other Party.
8. Messages according to paragraphs 5, 6 and 9 will be in computer readable form, utilising HTTPS or other secure protocols, subject to prior agreement between relevant FMCs.
9. In the event of technical failure or non-function of the satellite tracking device fitted on board a vessel, the master of the vessel or the owner or their representative will communicate to their flag State FMC the up-to-date current geographical position and information contained in paragraph 5. These messages will be Manual Position Messages as described in Appendix I 2) footnote 1. At least one position report per 4 hours will be sufficient under such circumstances, as long as the vessel stays within the waters of the other Party. The flag State FMC or the vessels will forward such messages to the FMC of the other Party without undue delay.
10. Such faulty equipment will be repaired or replaced before the vessel commences a new fishing trip.
11. The flag State FMC will monitor the tracking of its vessels when in the waters of the other Party. Information will be forwarded to the FMC of the other Party without delay in the event that it is discovered that the tracking of vessels does not function as approved in this Annex.
12. In the event that a FMC of either Party discovers that information is not being communicated by the other Party in accordance with paragraphs 6, 7 and 10 the other Party will be notified without delay.
13. The stored messages will be transmitted as soon as electronic communication is re-established between the relevant FMCs.
14. Communication failures between FMCs will not affect the operation of the vessels.
15. The Parties will exchange information concerning addresses and specifications that will be used for electronic communication between their FMCs in accordance with paragraphs 6, 7 and 10. Such information will, to the extent available, also include names, telephone numbers and e-mail addresses that can be useful for general communication between the FMCs.
16. The Parties will exchange, upon request, information on the equipment used for the operation of the satellite tracking system in order to confirm that such equipment is fully compatible with the requirements of the other Party.
17. The Parties may review this Annex, as appropriate.

## APPENDIX I

Communication of VMS messages to the FMC of the other Party.

### 1) “ENTRY” message

Data Element	Field Code	Mandatory / Optional (M/O)	Comments
Start Record	SR	M	System detail; indicates start of record
Address	AD	M	Message detail; destination Party Alpha-3 ISO country code
From	FR	M	Message detail; the transmitting Party Alpha-3 ISO country code
Record Number	RN	O	Message detail; serial number of the record in the relevant year
Record Date	RD	O	Message detail; date of transmission
Record Time	RT	O	Message detail; time of transmission
Type of Message	TM	M	Message detail; message type, “ENT”
Radio Call Sign	RC	M	Vessel detail; international radio call sign of the vessel
Internal Reference Number	IR	O	Vessel detail. Unique Party vessel number as Alpha-3 ISO flag country code followed by number
External Registration Number	XR	O	Vessel detail; the side number of the vessel
Latitude	LT	M	Position detail; position $\pm 99.999$ (WGS-84)
Longitude	LG	M	Position detail; position $\pm 999.999$ (WGS-84)
Speed	SP	M	Position detail; Vessel speed in tenths of knots
Course	CO	M	Position detail; Vessel course 360 ° scale
Date	DA	M	Position detail; UTC date of position (YYYYMMDD)
Time	TI	M	Position detail; UTC time of position (HHMM)
End of Record	ER	M	System detail; indicates end of the record

## 2) “POSITION” message/report

Data Element	Field Code	Mandatory / Optional (M/O)	Comments
Start Record	SR	M	System detail; indicates start of record
Address	AD	M	Message detail; destination Party Alpha-3 ISO country code
From	FR	M	Message detail; the transmitting Party Alpha-3 ISO country code
Record Number	RN	O	Message detail; serial number of the record in the relevant year
Record Date	RD	O	Message detail; date of transmission
Record Time	RT	O	Message detail; time of transmission
Type of Message	TM	M	Message detail; message type, “POS” <sup>1</sup>
Radio Call Sign	RC	M	Vessel detail; international radio call sign of the vessel
Internal Reference Number	IR	O	Vessel detail. Unique Party vessel number as Alpha-3 ISO flag country code followed by number
External Registration Number	XR	O	Vessel detail; the side number of the vessel
Latitude	LT	M	Position detail; position $\pm 99.999$ (WGS-84)
Longitude	LG	M	Position detail; position $\pm 999.999$ (WGS-84)
Speed	SP	M	Position detail; Vessel speed in tenths of knots
Course	CO	M	Position detail; Vessel course 360 ° scale
Date	DA	M	Position detail; UTC date of position (YYYYMMDD)
Time	TI	M	Position detail; UTC time of position (HHMM)
End of Record	ER	M	System detail; indicates end of the record

<sup>1</sup> Type of message will be “MAN” for reports communicated by vessels with a defective satellite tracking device.

### 3) “EXIT” message

Data Element	Field Code	Mandatory / Optional (M/O)	Comments
Start Record	SR	M	System detail; indicates start of record
Address	AD	M	Message detail; destination Party Alpha-3 ISO country code
From	FR	M	Message detail; the transmitting Party Alpha-3 ISO country code
Record Number	RN	O	Message detail; serial number of the record in the relevant year
Record Date	RD	O	Message detail; date of transmission
Record Time	RT	O	Message detail; time of transmission
Type of Message	TM	M	Message detail; message type, “EXI”
Radio Call Sign	RC	M	Vessel detail; international radio call sign of the vessel
Internal Reference Number	IR	O	Vessel detail. Unique Party vessel number as Alpha-3 ISO flag country code followed by number
External Registration Number	XR	O	Vessel detail; the side number of the vessel
Date	DA	M	Position detail; UTC date of position (YYYYMMDD)
Time	TI	M	Position detail; UTC time of position (HHMM)
End of Record	ER	M	System detail; indicates end of the record

#### 4) Format details

1. Each message in a data transmission is structured as follows:
  - Double slash (//) and the character “SR” indicates the start of a message,
  - Double slash (//) and field code indicates the start of a data element,
  - Single slash (/) separates the field code and the data,
  - Pairs of data are separated by space
  - Field code followed by three slashes (///) indicates a mandatory data element with no value. The first slash is the separate slash of the actual data element, the double slash is the start of the following element.
  - The character ER and a double slash (//) indicates the end of the record.
2. All field codes in this Annex are in The North Atlantic Format as described in The NEAFC Scheme of Control and Enforcement.

## Annex 6: Catch statistics

### 1. THE DELEGATIONS AGREE THAT:

- 1.1. Each Party will supply the other Party with monthly catch statistics of fishing by its vessels in the other Party's waters.
- 1.2. Each Party will submit to the other Party monthly catch reports by species, area and EEZ by the end of the month following the month which the statistics relate to. Once 85% of the quota for a species has been reached by the vessels of a Party, that Party will submit daily catch reports for that species by the end of the following workday. Parties will use this to ensure quota uptake does not exceed 100%.
  - 1.2.1. The Norwegian authorities will submit this information to [statistics@marinemanagement.org.uk](mailto:statistics@marinemanagement.org.uk) . The UK authorities will submit this information to [postmottak@fiskeridir.no](mailto:postmottak@fiskeridir.no) .
- 1.3. In case one Party suspects that erroneous catch data has been , the relevant FMC will inform the other Party's FMC. The FMCs will cooperate on identifying the error in correct relevant registers.

### 2. FUTURE DEVELOPMENT OF CATCH STATISTICS

- 2.1. A semi-automated process will be developed in the future to diverge away from emails and an end of year summary of data will be established in the future to reduce erroneous data.

**Annex 7: Bilateral arrangements for enhanced fisheries cooperation between Norway and the United Kingdom on monitoring, control and surveillance of fisheries**

With a view to enhancing the management of fisheries resources, the fisheries authorities of the Parties decide to co-operate in the monitoring, control and surveillance of fisheries.

The Parties share the view that the practice of illegal, unreported and unregulated fishing (IUU fishing) represents major problems not only for the flag states, but also for the coastal states responsible for the management of the relevant stocks. Fishing and trade in fish and fish products is an extensive international business. Many vessels operate in the waters of multiple states or international waters. Fish and fish products are landed either in the ports of a coastal state, at the flag state or a third country (port) state. In that context, the Parties recognize that the existing framework for monitoring, control and surveillance must be improved to prevent and eliminate IUU fishing and associated activities.

It is noted that there are significant benefits for both sides in sharing relevant information and intelligence and in enhancing co-operation in areas of mutual interest.

In that respect the Parties consider that the protocol on “Bi-lateral arrangement for enhancing fisheries co-operation between the United Kingdom and Norway on Monitoring, Control and Surveillance of fisheries” between the fisheries authorities of the United Kingdom and Norway, dated 12 May 2015, has worked well and has been of mutual benefit to both parties.