

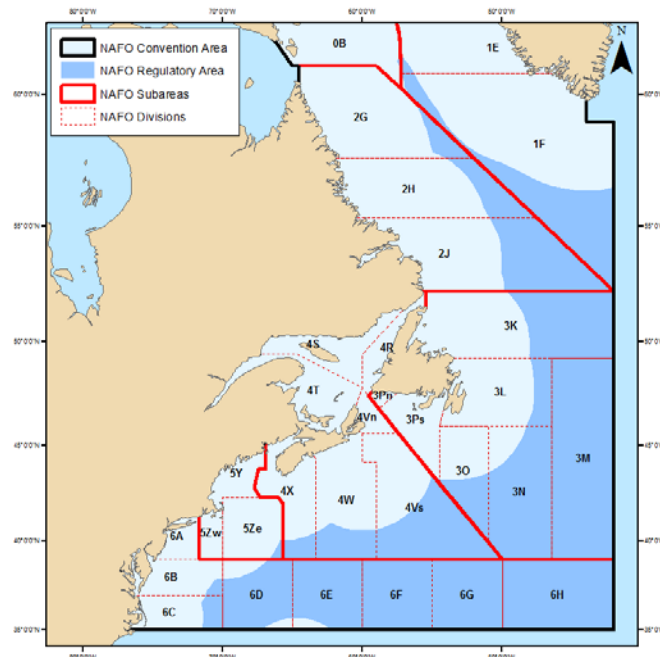


## 41<sup>st</sup> ANNUAL MEETING OF NAFO - SEPTEMBER 2019

### Annual Fisheries and Compliance Review 2019 (Compliance Report for Fishing Year 2018)

#### 1.0 Introduction

The scope of this review covers the fishing activities of NAFO-registered vessels which operated in the NAFO Regulatory Area in 2018<sup>1</sup> (see Figure 1.0).



**Figure 1.0.** Divisions of the NAFO Convention Area and the Regulatory Area (dark blue).

This review is being undertaken in accordance with NAFO Rules of Procedure 5.1 and 5.2. As part of the review process, the Secretariat compiled 2018 information from the following sources: vessel monitoring system (VMS) and hail messages delivered by the vessels (Vessel Transmitted Information – VTI), Port Inspection Reports, At-sea Inspection Reports and Reports on Dispositions of Infringements provided by the Contracting Parties, and Observer Reports sent to the Secretariat.

<sup>1</sup> In this report, only fishing trips which ended in 2018 were considered. According to Article 1.7 of the 2018 NAFO Conservation and Enforcement Measures (NCEM), a fishing trip includes “the time from its entry into until its departure from the Regulatory Area and continues until all catch on board from the Regulatory Area is unloaded or transhipped” (NAFO Conservation and Enforcement Measures Article 1.7). All article and annex numbers mentioned in this report have reference to the 2018 NCEM.



The report follows the general outline that the Standing Committee on International Control (STACTIC) developed during the 2017 NAFO Annual Meeting (STACTIC WP 17-42 Rev. 2). An additional section incorporated in this report is the chartering arrangements (Article 26).

## 2.0 Fisheries in the NAFO Regulatory Area

### 2.1 Fishing effort by gear type

NAFO traditionally identifies three main fisheries in its Regulatory Area: the groundfish (GRO - primarily in Div. 3LMNO), shrimp (PRA - primarily in Div. 3LM) and pelagic redfish fisheries (REB - primarily in Div. 1F and 2J). The PRA and the REB fisheries have been under moratoria. In 2018, fisheries in the NAFO Regulatory Area (NRA) was limited to groundfish and pelagic redfish. There were 105 trips by 45 fishing vessels spending a total of 4105 days in the NRA (Table 2.1.1). Additionally, a single vessel (class size 5) spent 10 fishing days, as part of its fishing trip, in Division 6G catching alfonosinos. According to the observer report, the fishing gear used was a mid-water trawl.

Smaller vessels (<500 MT) tend to fish in Divisions 3NO using mainly longlines. The vast majority of the effort comes from larger vessels (> 500 MT) which account for 95% of fishing effort in terms of fishing days. The larger vessels use bottom trawl and fish in Divisions 3LMNO. The major species caught by the bottom trawlers are cod, Greenland halibut, redfish, yellowtail flounder, and thorny skate (see Table 2.3.1).

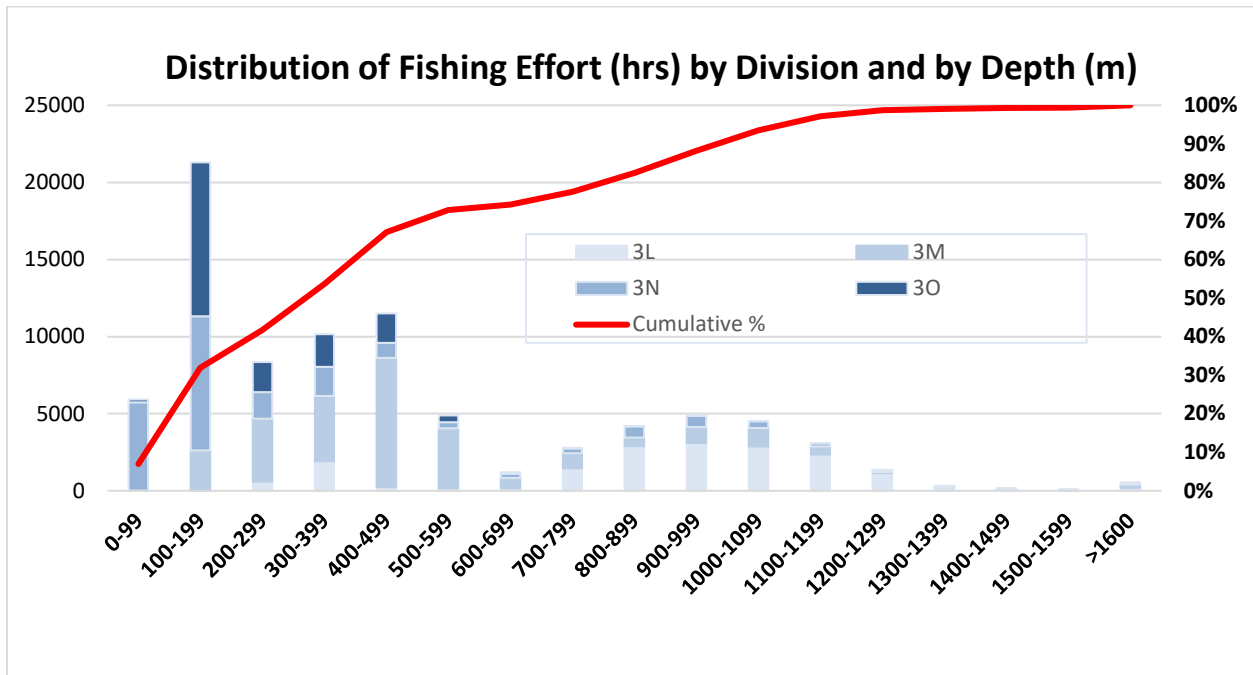
**Table 2.1.1.** *Fishing Effort in the NAFO Regulatory Area in 2018.*

Vessel Class	# of fishing vessels	# of fishing trips	Main Gear	f = Total Fishing Days	Fishing Trip Range (days)	Main Species	Fishing Area
Class 3-4 vessels (less than 500 MT)	5	10	Longline	211	12-49 days	Cod, Yellowtail flounder	Flemish Cap (for cod); Tail of the Grand Banks (for white hake)
Class 5 vessels (500-1000 MT)	11	32	Bottom Trawl	1147	13-68 days	Cod, Greenland halibut, redfish, skates	Flemish Cap; Tail and Nose of the Grand Banks
Class 6 vessels (1000-2000 MT)	25	58	Bottom Trawl	2572	6-94 days	Cod, Greenland halibut, redfish, skates	Flemish Cap; Tail and Nose of the Grand Banks
Class 7 vessels (> 2000 MT)	2	5	Bottom Trawl	175	11-53 days	Cod, Greenland halibut, redfish, skates	Flemish Cap; Tail and Nose of the Grand Banks
<b>Total</b>	<b>43</b>	<b>105</b>		<b>4105</b>			

### 2.2 Effort Distribution by depth of groundfish vessel

There is a requirement to provide the speed and course information in the position reports of Vessel Monitoring System (VMS). Hourly positions are required to be transmitted. However, activities,

whether steaming or fishing, are not indicated in the position reports. Speeds between 0.5 and 5 knots were assumed to be fishing speeds in this analysis. In Figure 2.2.1, the distribution of fishing effort in hours of groundfish vessels is presented. It shows that about half of all groundfish effort is at depths 400 meters and below (skates, redfish and cod). Figure 2.2.1 also shows a concentration of fishing effort around 1000 meters and this can be attributed to the Greenland halibut fishery.



**Figure 2.2.1.** Distribution of fishing effort (in hours) by depth (m) in the NRA in 2018. Vessels are assumed to be fishing at speed in the range of 0.5-5.0 knots.

### 2.3 Catch in the NAFO Regulatory Area

In the calendar year 2018, a grand total of 56 773 t of fish (55 475 t retained + 1 298 t rejected) were caught by NAFO-registered vessels authorized to fish in the Regulatory Area (Tables 2.3.1 and 2.3.2). In terms of quantities caught, the stocks 3M Cod, 3LMNO Greenland halibut, 3M Redfish, 3LN Redfish, 3O Redfish, 3LNO Yellowtail flounder and 3NO Skates constitute the major groundfish fishery in the NRA.

**Table 2.3.1** Total reported retained catches (in tonnes) of species (in FAO 3-alpha code) by Division in calendar 2018 (Source: CA field of CAT Reports)

Division	1F	3L	3M	3N	3O	6G	Total
<b>Species subject to catch limitations (as listed in the Quota table)</b>							
COD		67.3	11114.8	203.4	145.3		11530.8
GHL		7276.3	1808.2	840.2	3.4		9928.1
HKW		0.2	5.3	52.6	92.5		150.6
PLA		33.3	212.2	396.4	169.4		811.3
REB	2374.3						2374.3
RED		2895.5	10486.2	3694.9	5994.1		23070.7
SKA		49.8	61.9	1777.6	333.8		2223
SQI			0.1		147		147.1
WIT		41.9	197.1	53.6	141.9		434.5
YEL		0.1		2943.4	50.2		2993.6
<b>Sub-total</b>	<b>2374.3</b>	<b>10364.4</b>	<b>23885.8</b>	<b>9962.1</b>	<b>7077.6</b>	<b>0</b>	<b>53664</b>
<b>Selected species not listed in the Quota table</b>							
ALF						2	2
ANG				0.8	12.1		12.8
CAT		3.9	17.4	25.8	0.3		47.5
HAD			2.6	0.4	4.6		7.6
HAL		56.2	109.5	218.2	172.2		556.1
HKS				0.8	930.2		931
RHG		88.4	33.8	27.9			150.1
RNG		7.2	46	0.6			53.8
<b>Sub-total</b>	<b>0</b>	<b>155.7</b>	<b>209.3</b>	<b>274.5</b>	<b>1119.4</b>	<b>2</b>	<b>1760.9</b>
<b>Sharks</b>							
GSK		10.5					10.5
SHX			0.3				0.3
<i>Other species</i>	0	5.4	9.9	14.9	8.5	0.8	39.6
<b>Sub-total</b>	<b>0</b>	<b>15.9</b>	<b>10.2</b>	<b>14.9</b>	<b>8.5</b>	<b>0.8</b>	<b>50.4</b>
<b>Total</b>	<b>2374.3</b>	<b>10536</b>	<b>24105</b>	<b>10251</b>	<b>8205.5</b>	<b>2.8</b>	<b>55475</b>

**Table 2.3.2** Total reported rejected catches (in tonnes) of species (in FAO 3-alpha code) by Division in calendar year 2018 (Source: RJ field of CAT Reports)

Division	3L	3M	3N	3O	Total
<b>Species subject to catch limitations (as listed in the Quota Table)</b>					
CAP			2.1	0.4	2.4
COD		31.4	9.9	0	41.3
GHL		0	0		0
HKW			2.5	3.2	5.7
PLA	0.5	1.3	9.4	1.5	12.7
RED	0.6	2.6	0.5	6.5	10.2
SKA	1.6	2.6	86.6	1.4	92.2
SQI				0.1	0.1
WIT	0.7	1.9	1	3.2	6.9
YEL			10		10
Sub-total	3.4	39.8	122	16.3	181.5
<b>Selected species not listed in the Quota Table</b>					
CAT	15.7	26.6	14.6	8.6	65.5
HAD			0	1	1
HAL		0.1	6.2		6.3
HKS			0.3	16.1	16.4
RHG	158	96.9	23.5	0	278.4
RNG	89.7	75	4	0	168.7
Sub-total	263.4	198.6	48.6	25.7	536.3
<b>Sharks and other elasmobranch</b>					
BSK		1			1
DGS		0	0		0
DGX	3.3	3.7	0.7		7.6
GSK	137.7	76.3	81.1	15.2	310.3
POR			5.1	4.6	9.6
RJD		0			0
RJG			0.1		0.1
RJL			0		0
RJQ	0.1	3.9	4.7		8.7
RJR	0.2	2.7	16.3		19.1
RJS		0.1	0		0.1
SHX		1.6	1.2	1.5	4.3
SMA		0.1	1.3	7.1	8.5
<b>Other Species</b>	30.2	34.9	143.8	2.4	211.4
Sub-total	171.5	124.3	254.3	30.8	580.7
<b>Total</b>	<b>438.4</b>	<b>362.7</b>	<b>424.6</b>	<b>72.8</b>	<b>1298.4</b>

### 3.0 Inspection and Surveillance

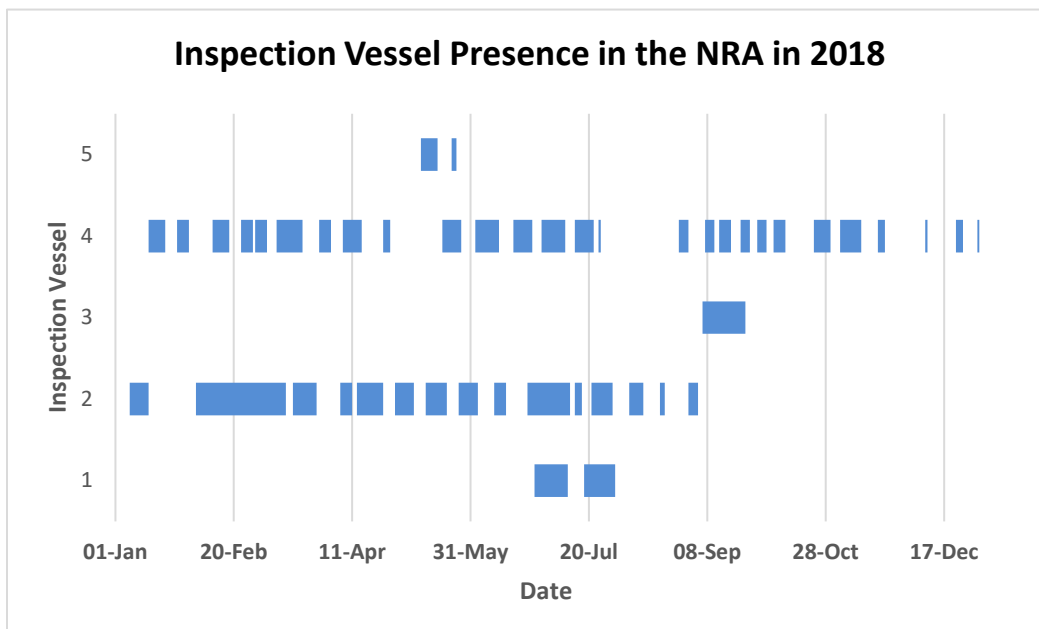
Chapter VI of the NCEM outlines the general provisions and protocol of the at-sea inspection and surveillance in the NRA. Inspectors are appointed by Contracting Parties participating in the at-sea inspection scheme in the NRA and assigned to fishery patrol vessels tasked to carry out NAFO inspection duties at sea. Currently, Canada and the European Union are the Contracting Parties with inspection presence. The United States of America has also partnered with Canada, posting inspectors on Canadian Patrol vessels.

Chapter VII of the NCEM – Port State Control Measure – outlines the procedure and protocol for landings and port inspection.

#### 3.1 Patrol Activity

In 2018, Canada deployed surveillance planes, collectively flying 242 hours with 753 vessel sightings in the NRA. No vessel from non-Contracting Party was spotted.

In addition, five (5) patrol vessels were deployed by the CPs with inspection presence. In all 398 patrol-days were spent in the NRA. The total length of time each patrol vessel exercised its patrol duties in 2018 varied between 11 days and 174 days. However, there were 87 days when no patrol vessel, 173 days when there was one patrol vessel, 105 days when there was more than one patrol vessel present in the NRA. Figure 3.1 shows the time of the year they were present in the NRA.



**Figure 3.1** *Inspection Vessel Presence in the NRA in 2018.*

#### 3.2 At-sea inspections

In all, 100 inspections-at-sea were conducted, out of which three (3) inspections detected Apparent Infringements (AI). Some AIs were considered serious (as per Article 38 definition), one could not be confirmed by the flag State upon further investigation or port inspection. Details of the apparent infringements and their disposition can be found in Sections 4.6-4.8.

### 3.3 Port Inspections

According to Article 43.10, the port State Contracting Party shall carry out inspections of at least 15% of all such landings or transshipments during each reporting year, unless otherwise required in a recovery plan in which case 100% coverage is required. Greenland halibut (GHL) is the only species which presence in the landing would require a port inspection (See Article 10). Port inspection reports are accomplished by port States using a PSC3 form (Annex IV.C).

In evaluating the compliance of port State authorities to Article 10, only trips with GHL onboard were considered. Table 3.3.1 shows the coverage levels (based on the number of trips) of port inspections for vessels that had GHL onboard.

**Table 3.3.1** *Fishing trips with Greenland halibut (GHL) catch (based on the Catch-on-Exit (COX) for the trip) and percent coverage of port inspections for that trip.*

	<b>Number of trips</b>	<b>Amount of GHL (tonnes)</b>
Trips which reported GHL catch (GHL at COX >0)	63	10 546
Trips which reported GHL catch AND inspected at port (PSC3)	57	9 495
Percent Coverage	90.5%	90.0%

In evaluating compliance with Port State Control measures outlined in Chapter VII of the NCEM, a review of the submission of Port State Control Prior Request (PSC1) and Port Inspection reports (PSC3) is presented in Table 3.3.2.

**Table 3.3.2** *The number of PSC1s and corresponding PSC3s received by the NAFO Secretariat by port States.*

<b>Port State</b>	<b>PSC1 (prior request of flag State for port entry)</b>	<b>PSC3 (port inspection report from port State authority)</b>	<b>% Coverage</b>
Canada	11	11	100.00
DFG (Faroe Is)	5	2	40.0
EU (Spain)	4	4	100.0
Iceland	3	1	33.3

### 4.0 Compliance

In this section, reporting obligations and apparent infringements (AIs) are examined. AIs are detected by at-sea inspectors and by port inspection authorities (see Section 3).

#### 4.1 Reporting Obligations

The NCEM requires fishing vessels and flag State Contracting Parties (through the Fisheries Monitoring Centre), port State Contracting Parties and at-sea observers to provide reports on the fisheries activity within a determined time frame. Compliance of port State Contracting Parties to reporting requirements is discussed in section 3.3.

#### 4.1.1 Vessel Activity Reporting

##### 4.1.1.1 Vessel Transmitted Information (VTI) – Catch-on-Entry (COE), Daily Catch Reports (CAT), and Catch-on-Exit (COX)

The Fisheries Monitoring Centres (FMCs) of flag States are responsible for transmitting the VTI reports to the Secretariat. The COE and COX are transmitted signifying the entry to and exit from the NRA. COE-COX information is used to estimate the fishing-days effort in a fishing trip. The CATs are daily catch quantities reported by species and by Division while on a fishing trip. CATs are used to monitor the quota uptakes by the fleet of the Contracting Parties.

In Table 4.1.1.1, the number of COE, COX, and CAT, as well as of fishing trips and fishing effort-days in the NRA, is presented. All identified 2018 fishing trips had corresponding COE and COX.

In total 4390 CATs were received within the calendar year 2018. This number is expectedly higher than the number of fishing days because some vessels were fishing in more than one Division in a single day.

**Table 4.1.1.1** *Fishing effort and VTI statistics in the NRA, 2018.*

Number of fishing trips identified	105
Fishing Days	4105
Number of Daily Catch Reports (CATs)	4390
Number of Catch on Entry Reports (COEs)	121
Number of Catch on Exit Reports (COXs)	124

No major technical issue was encountered in transmission and receipt of the VTI reports. All expected reports, including the Daily Catch reports (CAT), were received by the Secretariat.

The timely receipt of the CATs allowed an effective monitoring of the quota uptakes and the effective implementation of quota transfers and charter arrangements. No quota was exceeded in 2018.

##### 4.1.1.2. Catch reporting on sharks

Article 28.6.g requires that all shark catches be reported at the species level, to the extent possible. When species specific reporting is not possible shark species shall be recorded as either large sharks (SHX) or dogfishes (DGX).

The 2018 CAT reports were examined and not all shark catches were reported to the species level. It is not known how many species of the retained sharks were lumped into SHX. All reported rejections of shark species were identified to species level. Greenland shark constitute the bulk of the total shark catches (see table 4.1.1.2).



**Table 4.1.1.2.** Amount of shark catches (t) as reported in CATs in 2018.

3-Alpha Code	Scientific Name	Common Name	Retained (t)	Rejected (t)	Total (t)	Percentage
BSK	<i>Cetorhinus maximus</i>	Basking shark		1.0	1.0	0.3%
DGS	<i>Squalus acantias</i>	Spiny (=picked) dogfish		0.0	0.0	0.0%
DGX	<i>Squalidae</i>	Dogfishes (NS)		7.6	7.6	2.2%
GSK	<i>Somniosus microcephalus</i>	Boreal (Greenland) shark	10.5	310.3	320.8	91.1%
POR	<i>Lamna nasus</i>	Porbeagle		9.6	9.6	2.7%
SHX	<i>Squaliformes</i>	Large sharks	0.3	4.3	4.6	1.3%
SMA	<i>Isurus oxyrinchus</i>	Shortfin mako shark		8.5	8.5	2.4%
<b>TOTAL</b>			<b>10.8</b>	<b>341.3</b>	<b>352.1</b>	<b>100.0%</b>

#### 4.1.1.3 Fishing logbook (haul by haul) Reports

The submission of fishing logbook data on a haul by haul basis became mandatory in 2015 (Article 28.8.b). The haul by haul data must be submitted to the Secretariat in the format prescribed in Annex II.N. for all hauls of the fishing trip. The Secretariat has received logbook data for 102 of 105 trips that were completed in 2018. One CP is investigating the missing three reports.

The Secretariat highlighted that although the information contained in the haul x haul reports were found to be generally reliable, several inaccuracies and impossible values in the coordinates and fishing time have been detected through mapping and cross verification with VMS and depth data.

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

According to Article 29, every fishing vessel operating in the NRA shall be equipped with a satellite monitoring device capable of continuous automatic transmission of position to its land-based FMC, which in turn is transmitted to the Secretariat in real time. The transmission of position reports (POS) shall be no less frequently than once an hour.

The Secretariat can confirm that the requirement is fully complied with. In 2018, a total of 112 823 POS reports were received. Occasionally, technical problems were encountered by the fishing vessels or FMC. During these occasions, the POSs were transmitted manually. Technical issues were usually resolved within a few days through the coordination between the Secretariat and the FMC.

#### 4.1.1.5 Closed Areas and Exploratory Fisheries

As of 2018, in total 21 areas in NAFO have been closed to bottom fishing including 14 areas with significant concentration of coral, sponges and sea pens, one coral protection zone, and six seamounts. The measures concerning the protection of Vulnerable Marine Ecosystems (VMEs) from bottom fishing are stipulated in Chapter II of the NCEM.

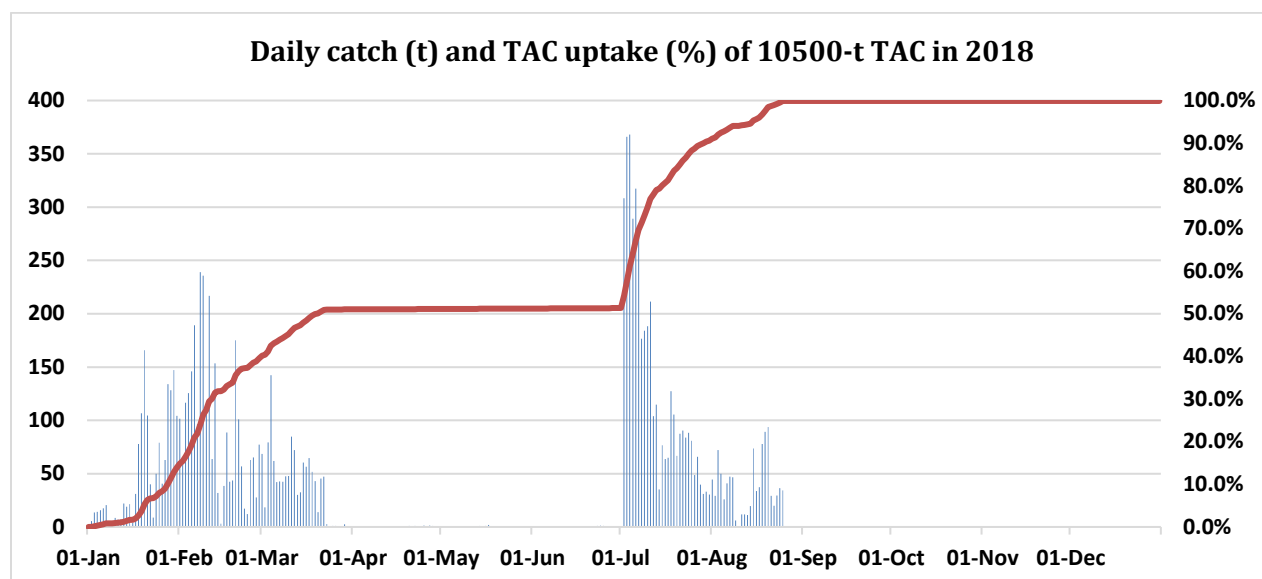
Based on the VMS positions, no bottom fishing was detected within the closed areas.

No Contracting Party notified its intention to conduct exploratory fisheries (as defined in Article 18) to the Secretariat in 2018.

#### 4.1.1.6 Vessel activity after 3M redfish 50%- and 100%-TAC uptake notifications

The stock 3M redfish is the only stock listed in the Quota table which Total Allowable Catch (TAC) is considerably less than the sum of the quotas. The Secretariat monitors the TAC uptake through the daily catch reports it receives from the vessels and FMCs. When the TAC is projected to be reached, CPs are notified and are required to instruct their vessels to cease directed fishery on the stock starting on the date projected by the Secretariat.

Figure 4.1.1.6 shows the total daily catches and the percentage of cumulative catch derived from CAT reports. According to Article 5.5.d of the NCEM, not more than 50% of the TAC may be fished before 01 July. A total of 22 vessels were targeting 3M redfish in early 2018. On 15 March 2018, the five-day prior notification of 50%-TAC uptake was circulated, stating that the 50% of the quota was projected to be taken by 20 March 2018, at which time the fishery would be suspended until 30 June. On 20 August 2018, the 96-hour notification was circulated, advising that 100% of the TAC was projected to be reached by 24 August. By the projected closure date, 99.8% of the 10500 t-TAC was fished. No directed fishery on this stock was conducted after the closure.



**Figure 4.1.1.6** Daily catches of 3M redfish and TAC uptake in 2018. Source: 2018 CATs.

#### 4.1.1.7 Chartering arrangement

Article 26 allows chartering arrangements between two CPs – the chartering CP (with quota) and the flag State CP (with fishing vessel). Catches made by the vessel are counted against the quota of the chartering CP. In 2018 one (1) arrangement was made with a fishing possibility of 340 tonnes of yellowtail founder.

Through the daily catch reports of the vessel where chartering catches are identified, the Secretariat could monitor the implement of the arrangement. The charter catches amounted to 339 t. With regards to the submission of the documentations (Article 26.7 and 26.8) and reporting of implementation dates (Article 26.9), both Parties of the charter complied to the requirements.

#### **4.1.2 Observer Reports**

Under Article 30.A – Observer Scheme, vessels are always required to have an independent observer on board (i.e. 100% coverage) during every fishing trip.

In evaluating compliance of observer reports submission, only reports from vessels operating under Article 30.A were considered. In 2018, of the 95 fishing trips under Article 30.A, the Secretariat received observer reports from 86 trips, an 91% reporting coverage.

#### **4.2 Apparent Infringements detected at-sea and at-port**

In 2018, a total of six (6) vessels were cited with AI by inspectors at sea and port authorities. Details on the nature of the AIs and their disposition are provided in Table 4.2.

**Table 4.2** Details of Apparent Infringements (AI) detected by inspectors at-sea and by port authorities in 2018 and their disposition. AIs presented in bold were considered "serious" by the inspectors as per Article 38 definition.

CP	Vessel Code	Inspection Date	AI's detected at-sea. Serious AIs in bold.	Confirmation in port of AI detected at sea (PSC3: Section E.1.B.a).	AI's detected in port (PSC3: Section E.1.B. c.) Serious AIs in bold.	Follow-up action (Article 40) and Status as of June 2019
RUS	3	18-Apr-18	<b>-Art. 28.2.a and b- Fishing logbook.</b> -Art. 28.5.a - Stowage Plan.	Art 28: 2(b)/3(a)/5(a)		Penalty was paid by the ship-owner in accordance with the established procedure. CLOSED
NOR	113	14-May-18	-Art. 25.11 - Capacity Plan			Warning Issued. CLOSED
EU	43	04-Jul-18			-Art.27.1 - [Product labelling]	Case led by Spain. Procedure about to start. PENDING
RUS	40	27-Jul-18			<b>-Art. 38.1.i Mis-recording, contrary to Art. 28.</b>	Russia investigated the incident and concluded that "the activity of the fishing vessel was carried out in strict accordance with the provisions of NAFO Measures". CLOSED
USA	116	18-Sep-18	<b>-Directed fishing for 3M Cod (Art. 38.1)</b> -Fishing logbook missing (Art. 28.2) -Production logbook missing (Art. 28.3) -Capacity Plan (Art. 25.10.a)			STILL UNDER INVESTIGATION
EU	49	03-Dec-18			-Art. 28.3. Production logbook <b>-Art. 28.2 Overrecording of HAL</b> <b>-Art. 28.2 Overrecording of RED</b> <b>-Art. 28.2 Underrecording of COD</b> -Art. 27.1 Product labelling - COD-GUH labelled as COD-OTH	Case led by Spain Procedure started on 11.12.2018. PENDING

### 4.3 Follow-up to apparent infringements

NCEM Article 39 spells out obligations of a flag State Contracting Party that has been notified on an apparent infringement. It includes taking immediate judicial or administrative action in conformity with the national legislation of the flag State Contracting Party and ensuring that sanctions applicable in respect of infringements are adequate in severity.

Article 40 requires Contracting Parties to report on the disposition of the AIs. The legal resolution of AIs may take more than a year. Contracting Parties shall continue to list such infringements on each subsequent report until it reports the final disposition of the infringement. In Table 4.3, a summary of status of AI cases in the last five years (2014-2018) and their resolution are presented.

**Table 4.3** *Resolution of citations (by at-sea inspectors and port authorities) against vessels fishing in the NAFO Regulatory Area by year in which the citations were issued (as of May 2019). A citation is an inspection report that lists one or more apparent infringement. Inspections carried out for confirming a previous citation are not included.*

Year	Number of Inspection Reports with AI citation/s	Number of Resolved cases	Number of Pending Cases *	% Resolved
2014	6	5	1	83%
2015	3	0	3	0%
2016	11	6	5	54%
2017	7	5	2	71%
2018	6	3	3	50%

\* still under investigation, litigation, or appeal.

## 5.0 Trends and Analysis

Five-year trends (2014-2018) on effort and catch, reporting obligations of CPs and observers, compliance by fishing vessels, and at-sea inspections and AIs are presented in this section.

### 5.1 Effort and Catch

Trends in fishing effort and catches are presented in Table 5.1, Figures 5.1.1, 5.1.2 and 5.1.3.

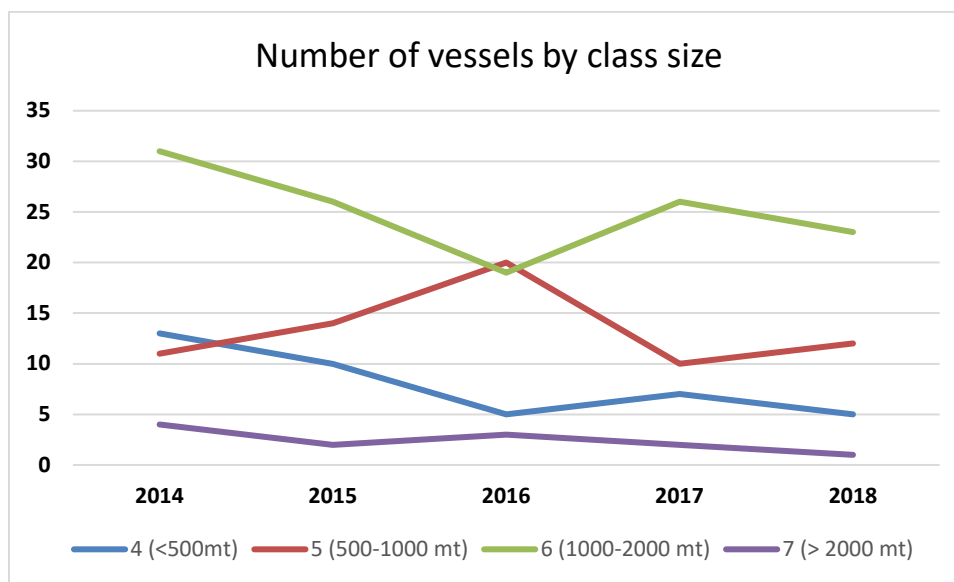
Observations:

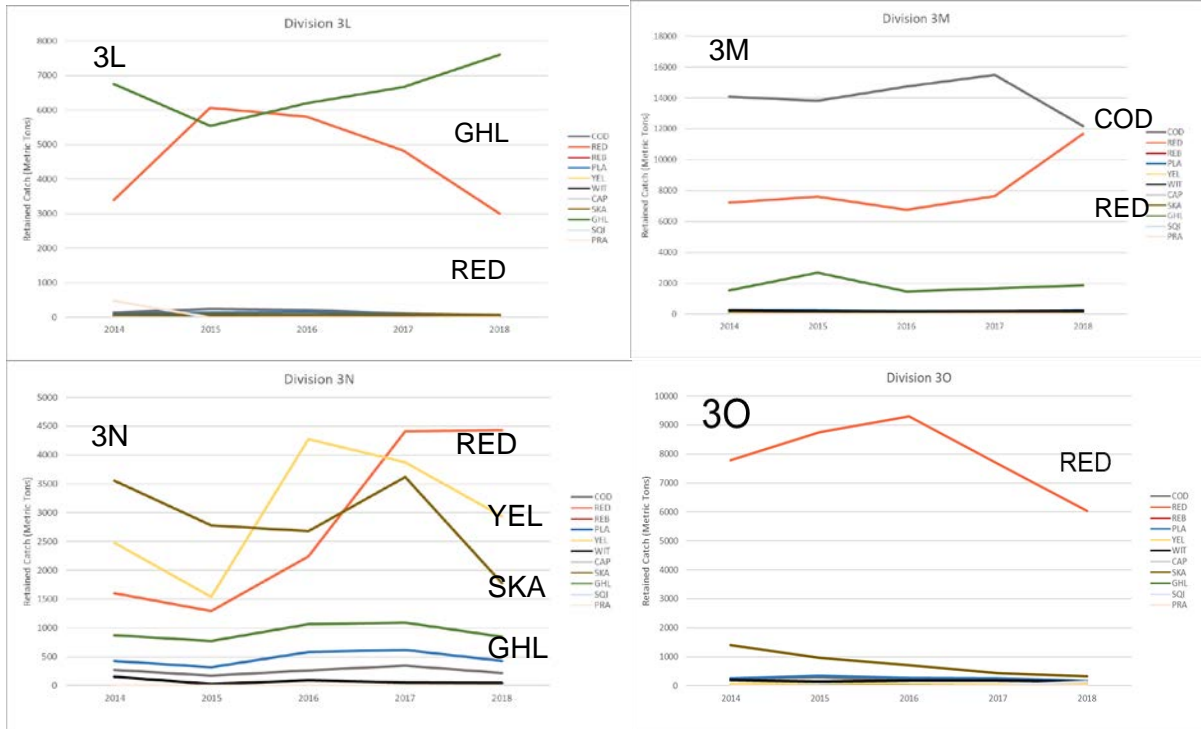
- There was a 6% effort increase in 2018 compared to the previous year; however, there was a 20% decrease of fishing effort in the 5-year period.
- Total catch of TAC-managed species remained steady, ranging 52.0K t and 57.8K t.
- Catch per unit effort (CPUE) of TAC-managed species remained steady, ranging 10.8 and 14.6 tonnes/day.
- Considerable amount of both American plaice and cod was caught in Division 3N, while in comparison a lesser count of cod was caught in Division 3O. Both species are under moratoria.
- Reversed catch trends were observed between Greenland halibut and redfish in Division 3L, and between cod and redfish in Division 3M (see Figure 5.1.2).

**Table 5.1.** *Fishing days, as defined by Article 1.6, by fishing gear.*

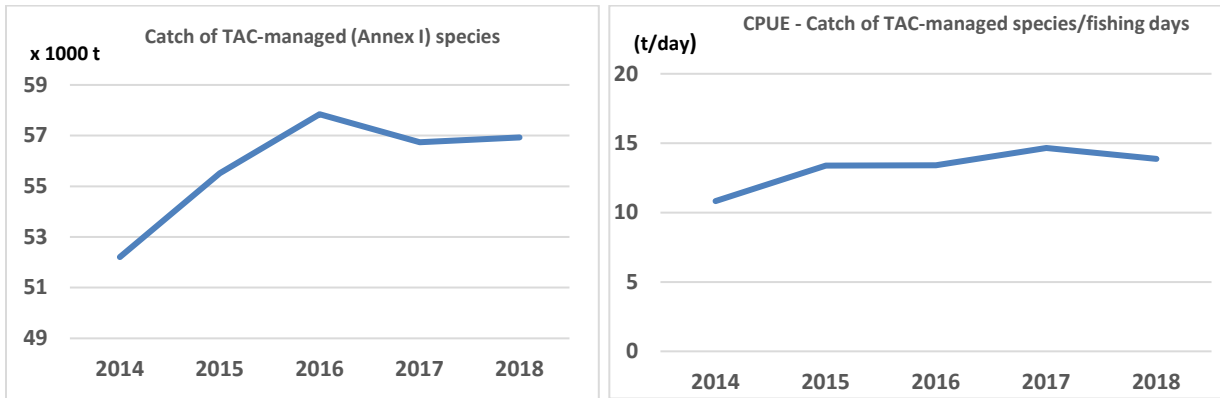
	Longline	Midwater-trawl	Bottom-Trawl	TOTAL
2014	352	56	4414	4822
2015	272	93	3785	4150
2016	260	181	3873	4314
2017	314	0	3558	3872
2018	304	82	3719	4105

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**Figure 5.1.1** *Number of fishing vessels in Divisions 3LMNO by class size, 2014-2018. The class sizes are based on the STATLANT classification.*



**Figure 5.1.2** Catches (in tonnes) by Division of selected species managed by TAC, 2014-2018 (Source: CATs)

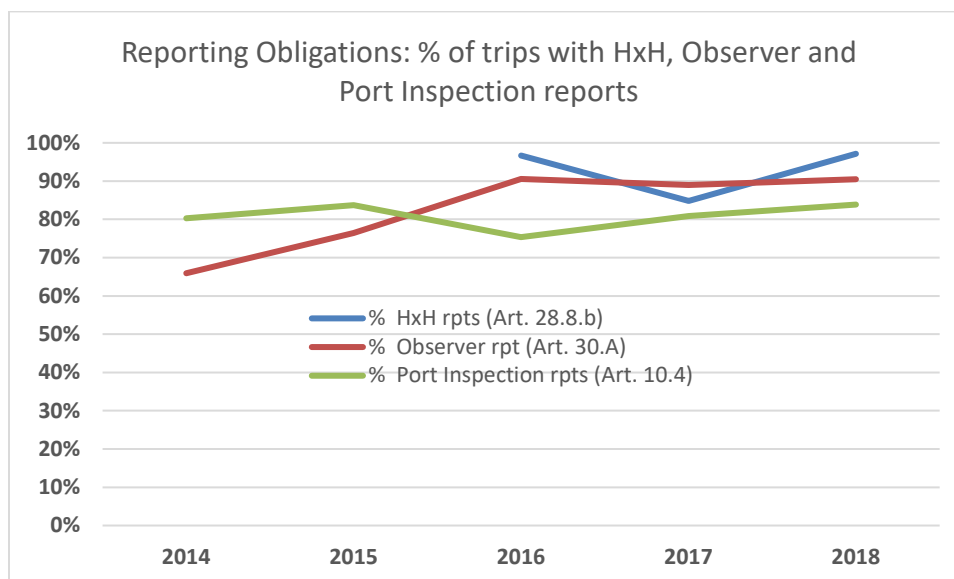


**Figure 5.1.3** Catch of TAC-managed species and CPUE in 2014 -2018, expressed in total catch of TAC-managed species per fishing day. Data Source: CATs and VMS reports.

**5.2 Reporting Obligations by Contracting Parties and Observers**

Compliance to reporting obligations is quantified as a percentage coverage – the ratio of the fishing trips accounted for by the reports and of the total number of relevant fishing trips. A 100% coverage would mean that all expected reports were delivered to the Secretariat, less than 100% means some fishing trips did not have a corresponding report. Figure 5.2 presents the percentage coverage of port inspections reports on vessels with Greenland halibut landings, observer reports from vessels operating under Article 30.A, and haul by haul reports in accordance with Article 28.8.b.





**Figure 5.2** *Percentage coverage of Port Inspections reports with Greenland halibut landings reports (Arts. 10.4 and 42.10), Observer Reports on fishing vessels operating under Article 30.A, and Haul by Haul reports (Article 28.8.b and Annex II.N), 2014-2018.*

### 5.3 Compliance by Fishing vessels

In the 5-year review period, VMS and VTI requirements (Article 28 and 29) have been fully complied with.

Hourly position reports (POS), as well as the Daily Catch Reports by Division (CATs), were transmitted to the Secretariat while the vessels were in the NRA. The Catch-on-Entry (COE) and Catch-on-Exit (COX) reports for each fishing trip were also transmitted.

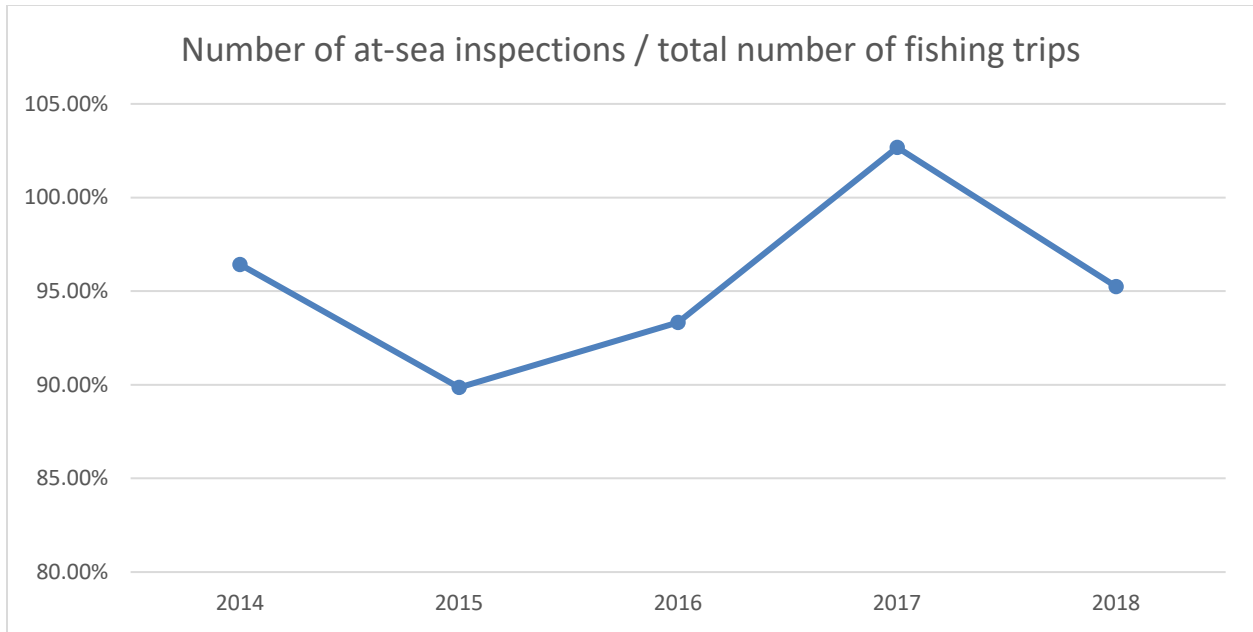
### 5.4 Inspections and Apparent Infringements

At-sea inspection rates, computed as a ratio of the number of at-sea inspections and the total fishing effort, in the period 2014-2018 are presented in Figure 5.4.1. Frequency of AI cases in the period 2014-2018 are presented in Figure 5.4.2.

Inspection rates have remained steady with no more than 10% inter-annual difference. The 2018 inspection rate decrease compared to the previous year.

With regards to AIs detected at sea and at port, mis-reporting of catches have remains to be the most common AI. There is no other discernable trend with regards to the nature and frequency of the AIs.





**Figure 5.4.1** *Inspection rates (number of at-sea inspections/fishing trips) in the NAFO Regulatory Area, 2014-2018. The 2017 instance of over 100% inspection rate occurred due to multiple inspections occurred during single trips.*

	2014	2015	2016	2017	2018
Bycatch - move-away	•				
By-catch requirements	••	•	••••	••	
Catch communication violations (COX)			•		
Directed fishing of moratorium stock			•	•	
Directed fishing of stock without quota allocation					•
Evidence tampering	•		•		
Fishing after date of closure			•		
Gear requirements - mesh size, illegal attachments	•			•	
Inspection protocol		•	•		
Mis-recording of catches - inaccurate recording	•••••••• •	••	•••••••• •	••••	••••
Mis-recording of catches -stowage	••	•	•	•••	•
Observer requirements	•				
Product labelling	•••			•	••
Quota requirements			••		
Vessel requirements - capacity plans	•		•		••
VMS requirements	•				

**Figure 5.4.2** Frequency of apparent infringement cases detected by at-sea inspectors and port authorities in 2014-2018. Black and blue dots represent apparent infringement issued at sea and at port, respectively.

## 6.0 Conclusions

In NAFO, there are three main fisheries conducted mainly with trawl gear and a limited presence of longline gears. The catches are stable around 56 000 tonnes with a 3% discard rate.

Overall compliance with reporting obligations is high and has continued to improve in recent years. Contracting Parties are providing the required compliance indicators necessary to complete the compliance review process.

However, concerns are expressed with some discrepancies related to catch reporting and the sizable increase in the reporting of discards of Greenland shark, noting that they comprise 23.8% of all discards in NAFO.

## 7.0 Recommendations

STACTIC recommends that the Secretariat evaluates frequency of exceedance of bycatch thresholds and move-along compliance. STACTIC will include a section on bycatch and discard compliance in the Annual Fisheries and Compliance Review.

STACTIC recommends that all Contracting Parties continue to strive for coordination and collaboration.

STACTIC encourages Contracting Parties and Masters of fishing vessels to be mindful of the veracity of the haul by haul reports before being transmitted to the Secretariat.

STACTIC recommends that inspectors should continue to consider discrepancies in reporting and continue make use of the NAFO MCS Website when planning inspections.

STACTIC recommends that Contracting Parties continue to ensure the correct reporting of species by division, including species where no catch limitations apply.

STACTIC recommends that all Contracting Parties maintain and continue efforts to protect stocks that are subject to moratorium.

STACTIC recommends that Contracting Parties with an inspection presence continue to enforce the CEM with uniformity and consistency.

STACTIC recommends that the Secretariat split out the information in Table 3.3.1 by Contracting Party for the next Compliance Review.

STACTIC recommends to review the mechanism for updating the cancelation of the PSC1 to the NAFO Secretariat.

STACTIC recommends a column be added to Table 3.3.2 to clarify vessels intentions (e.g. landing vs. use of port services) for the next Compliance Review.

STACTIC recommends that vessel names be included in table 4.2 in the initial draft of the Compliance Review, but be removed prior to making the document public for the 2020 review.

STACTIC recommends that the Secretariat include a trend for the number of fishing vessels in figure 3.1 for the next Compliance Review.