Northwest Atlantic

Serial No. N6632



Fisheries Organization

<u>NAFO/FC Doc. 16/19</u> [Adopted]

38TH ANNUAL MEETING - SEPTEMBER 2016

Annual Compliance Review 2016 (Compliance Report for Fishing Year 2015)

1. Introduction

This compliance review is being undertaken in accordance with Rules 5.1 and 5.2 of the Fisheries Commission Rules of Procedure. The scope of the review is to determine how international fisheries complied with the annually updated NAFO Conservation and Enforcement Measures (NCEM) when fishing in the NAFO Regulatory Area (NRA), and assess the performance of NAFO Contracting Parties (CPs) with regard to their reporting obligations.¹

This review utilizes information for the years 2004 to 2015 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 Apparent Infringements provided by the Contracting Parties, and Observer Reports sent to the Secretariat. It starts with the description of the fisheries in the NAFO Regulatory Area.

2. Fishing effort and fishing trends in the NAFO Regulatory Area

NAFO 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. Some effort was exerted on REB fisheries by one CP which formally objected to the moratorium. In 2015, there were 57 fishing vessels spending a total of 4209 days in the NRA (Table 1), and 138 trips were identified.

	Numbe	er of fishing v	vessels		Fishing effort (days present in the NRA)				
Year	Groundfish (GRO)	Shrimp (PRA)	Pelagic Redfish (REB)	TOTAL*	Year	Groundfish (GRO)	Shrimp (PRA)	Pelagic Redfish (REB)	TOTAL
2014	52	3	5	59	2014	4699	67	56	4822
2015	51	0	7	57	2015	4107	0	102	4209
% change	-1.9%	-100.0%	40.0%	-3.4 %	% change	-12.6%	-100.0%	82.1 %	-12.7%

Table 1.2014-2015 Comparison of Fishing Effort in the NAFO Regulatory Area.

*The total reflects the total number of vessels operating in the NAFO Regulatory Area in a year.

The groundfish fishery accounted for 97.6% of the total fishing effort (in terms of fishing days), shrimp for 0%, and the pelagic redfish fishery for around 2.4%. The groundfish fishing effort decreased by 12%, shrimp fishing effort decreased by 100% and pelagic redfish effort increased by 82%. The non-effort in the shrimp fishery is attributed to the moratorium in 2015. There was an increase in the number of vessels participating in the pelagic redfish fishery and as a result, and

¹For the purpose of this compliance analysis, only fishing trips which ended in 2015 were considered. Fishing trip for a fishing vessel includes "the time from its entry into until its departure from the Regulatory Area and continues until all catch on board from the Regulatory Area is unloaded or transhipped" (NCEM Art. 1.7).

increase in the effort. In all, a decrease (12.7%) of the total fishing effort was observed (Table 1) compared to 2014.

2

For the period 2004–2015, the overall fishing activities in the NRA show a declining trend, from 134 active vessels in 2004 to 57 in 2015, representing a 57.5% decrease. The decline in terms of overall fishing days was a 74.5% decrease for the same period from 16 480 days in 2004 to 4 209 days in 2015. The average number of days each vessel operates in the NAFO Regulatory Area also declined from 123 days in 2004 to 74 days in 2015.

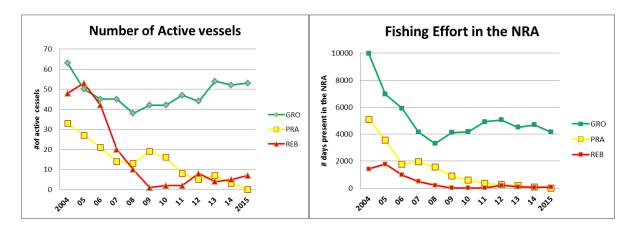


Figure 1. The trend of fishing effort in the NAFO Regulatory Area in the period 2004-2015.

Figure 1 illustrates the changes described above for each of the major fisheries. NAFO fisheries remain dominated by the groundfish category. After five years of steep decline, the groundfish effort has been stable since 2009. Figure 2 illustrates the current effort distribution compared to 2004 and the 2004-2015 average. By 2015, the fishing effort contribution of shrimp fisheries was reduced to 0% due to the shrimp TAC of zero.

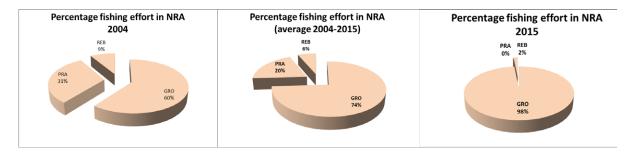
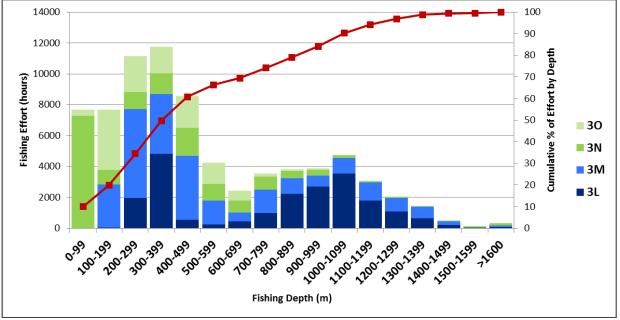


Figure 2. Fishing effort proportions of the three different fishery types (2004-2015) suggesting a shift in fisheries over the years).

Effort distribution by depth of groundfish vessels

The requirement of providing the speed and course information in the Vessel Monitoring System (VMS) reports facilitated the estimation of fishing effort in terms of fishing hours. Speeds between 0.5 and 5 knots were considered fishing speeds. In Figure 3, the distribution of fishing effort in hours of groundfish vessels is presented. Figure 3 shows that about half of all groundfish effort is at depths 400 meters and below (skates, redfish and cod). Figure 4 shows the comparison of the



fishing depth distribution between 2014 and 2015. It suggests an increase of fishing effort at 300-700 m depth and a decrease at 700-2000 m.

14000 12000 10000 2014 (HRS) 2015 (HRS) **Fishing Hours** 8000 6000 4000 2000 0 1000-1099 300.399 1100-1199 1300-1399 100-1299 200:299 400-499 500.599 600.699 800.899 900.99⁹ 1200-1299 1400-1499 1500-1598 100:199 0^{,99} 71600

Figure 3. Distribution of groundfish fishing effort by depth in the NRA in 2015 (Divisions 3L, 3M, 3N, and 30).

Figure 4. 2014-2015 Comparison of groundfish fishing effort distribution by depth in the NRA (Div. 3LMNO).

. <u>A</u>.A

3. Compliance by Fishing Vessels

Monitoring, Control and Surveillance (MCS) measures are spelled out in Chapters III-VII of the NCEM. Through the at-sea and port inspections, NAFO monitors, controls and conducts surveillance of the fisheries in the NRA exposing infringements of the NAFO regulations and collecting evidence for the following prosecution within the legal system of each NAFO flag State Contracting Party.

Position reporting – Vessel Monitoring System (VMS)

Vessels in the NRA are required to transmit position reports at one hour intervals. In addition, the course and speed information must be included in the position reports. Examination of the position reports revealed that vessels were compliant to this requirement. The position reports were received by the Secretariat in practically real-time through the Fisheries Monitoring Centres (FMC) of individual flag States. When technical difficulties were encountered by the vessels in complying with the position reporting requirements, the position reports were reported by FMCs every 4 hours as per NCEM Art. 29.8. Generally, the technical issues were resolved at most within a few days through the coordination and communication between the Secretariat and the FMCs. The timeliness of submission of position reports was not an issue since VMS reports were being received by the Secretariat and CPs with inspection presence in real-time through satellite technology.

With an estimated total fishing effort of 4209 vessel-days, the expected number of VMS reports is 101 016. A total of 107 731 VMS position reports within the vessel-days were received in 2015 fishing trips. This amount suggests that some vessels transmitted their positions more frequently than the required hourly interval. Some vessels which were landing or calling on Canadian ports continued to transmit VMS reports. This also contributed to the higher-than-expected number of VMS reports received in the Secretariat. From compliance perspective, this is not an issue.

Activity and catch reporting – Vessel Transmitted Information (VTI): Catch-on-Entry, Catch-on-Exit, Daily Catches

Catch quantities on board upon entry to (COE) and exit from (COX) the NRA must be reported for each fishing trip. While fishing in the NRA, fishing vessels are required to transmit daily catch reports (CAT) detailing catch quantities by species and division. Catch reports are transmitted through the same technology and communication channel as the transmission of VMS (positions) reports. (See section *Vessel Transmitted Information (VTI) – Catch-on-Entry (COE), Catch-on Exit (COX), Daily catch reports (CAT)* below.)

Daily catch reports are not limited to species listed in Annex I.A of the NCEM (under TAC or moratorium). Vessels are required to report catches (and discards) at the species level to the extent possible. The catches of regulated and selected non-regulated species are presented in Table 2.

Division	1F	3L	3M	3N	30	6G	?	Grand Total
Species (3- alpha FAO code)								
САР				1.2	0.9			2.1
COD		219.0	13250.1	181.1	262.9		0.1	13913.3
GHL		5078.0	2568.9	765.7	13.6	0.0		8426.1
HKW		0.0	45.5	104.6	261.2		0.2	411.5
PLA		126.1	267.5	333.6	303.2		0.1	1030.5
REB	2951.5	0.0						2951.5
RED		5262.3	6937.7	1212.0	8081.4		1.2	21494.4
SKA	0.0	63.8	72.4	2536.5	849.0	0.0	2.9	3524.5
WIT		28.9	197.9	26.6	148.3		0.2	401.8
YEL		8.1		1518.7	148.6		0.1	1675.5
ALF				0.0		66.4		66.5
ANG				23.7	98.5		0.3	122.5
САТ		15.4	27.2	9.4	3.6			55.6
HAD			87.8	34.7	123.8		0.4	246.7
HAL		119.6	114.5	294.0	170.6		0.2	698.9
RHG		116.0	77.7	36.9	0.2			230.9
RNG		48.8	73.7	4.8	0.3			127.6
Grand Total	2951.5	11085.9	23720.8	7083.8	10465.9	66.4	5.7	55380.0

Table 2.Total reported catches (retained and rejected (t)) of regulated and selected non-regulated species
in 2015 (Source: CAT reports).

Vessel activity after 3M redfish 100%-TAC-uptake notification

The stock 3M Redfish is the only regulated stock 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 (CATs) it receives from the fishing vessels. When the TAC is reached, Contracting Parties are notified required to instruct their vessels to cease directed fishery on the stock.

According to Article 5.5 d) of the 2015 NCEM, not more than 50% of the TAC may be fished before 1st July. A total of 12 vessels were targeting 3M redfish in early 2015 and on 6th February 2015, a 50%-TAC uptake notification was circulated by the Secretariat, on which time the fishery would be suspended until 30th June. Figure 5 shows the total daily catches and the percentage cumulative catch derived from CAT reports. On 3th July 2015, the five day notification was sent. On 13th July 2015, a 100% TAC uptake notification (6700 t) was sent effective 13th July. By the closure date, the TAC was exceeded by 3.5%. There were a total of 19 vessels targeting 3M redfish in July 2015.

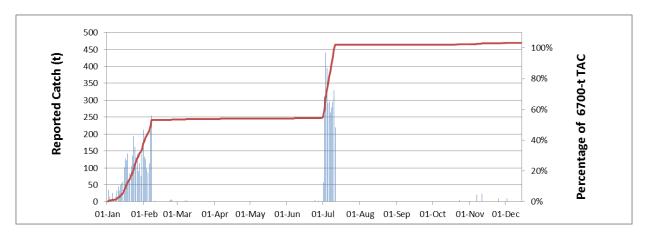


Figure 5. Daily 3M redfish catches of all vessels in 2015

Closed areas and Exploratory Fisheries

Since 2007, in total 20 areas in NAFO have been closed to bottom fishing including 13 significant coral and sponge areas, one coral protection zone and six seamounts. The conservation and enforcement measures concerning the protection of the VMEs from bottom fishing are stipulated in Chapter II of the NCEM.

An examination of the VMS position reports revealed that the closed areas were respected (Fig. 6). Fishing activities were confined within the footprint, except for two vessels which fished in Division 6G (in the environs of the closed Corner Seamounts) for 7 and 13 days in January (of which 4 days were in December 2014) and February 2015 respectively (Fig. 6.D). According to the observer report of the fishing trips in Division 6G, the fishing gear that was used was mid-water trawl (OTM). The main species caught was splendid alfonsinos. Possible management measures concerning fishing stocks associated with seamounts are under discussions in 2016 the provision for exploratory bottom fisheries within the seamount areas was removed from NCEM Art. 17.

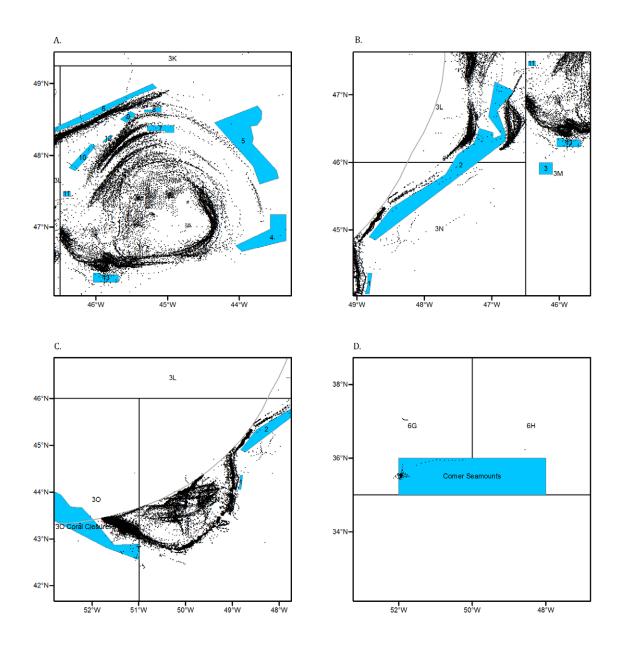


Figure 6. VMS position plots of all vessels at speed 0.5 -5.0 knots in the NRA in 2015 in relation to the VME closed areas and Corner Seamount. A: Flemish Cap, B: Flemish Pass, C: Division 30 Coral Zone, D: Corner Seamount.

Catch reporting on sharks

Fishing for the purpose of collecting shark fins is prohibited under NCEM Art. 12. Sharks species taken in NAFO fisheries are not associated with shark fining practices, and there has never been an incident of shark fining observed in the NRA. It has been noted that there has been a lack of species-specific reporting of shark catches in the NRA. In this regard, it became a requirement in 2012 to report, the extent possible, all shark catches at the species level (NCEM Art. 28.6.g).

The 2015 CAT reports were examined. Not all shark catches were reported to the species levels. A little more than half of all shark catches were reported as Greenland shark (Table 4). It is not known how many species of shark were lumped into DGX.

8

EAO 2 Almha Cada	Common Nome	Reported catch	Deveentege		
FAO 3- Alpha Code	Common Name	Retained (CA)	Rejected (RJ)	Percentage	
BSH	Great blue shark	0	50	0.06%	
CFB	Black dogfish	0	3 426	4.03%	
DGS	Spiny dogfish	0	1	0.00%	
DGX	Dogfishes (NS)	24 506	1 667	30.79%	
GSK	Greenland shark	1 500	48 739	59.11%	
POR	Porbeagle shark	0	5 000	5.88%	
RHT	Atlantic sharpnose shark	0	105	0.12%	

Table 4.Amount of shark catches (t) as reported in CATs in 2015.

At-sea inspections

The NAFO Joint Inspection and Surveillance Scheme is implemented to ensure management and enforcement measures are complied with by fishing vessels fishing in the NRA. Inspectors are appointed by Contracting Parties and assigned to fishery patrol vessels tasked to carry out NAFO inspection duties at sea (Chapter VI of NCEM).

The total number of at-sea inspections dropped from 135 in 2014 to 110 in 2015. This decrease was partially attributed to mechanical problems with one of the Canadian inspection vessels in 2015. With the decrease of total fishing effort (down 12.5%, from 4822 days in 2014 to 4209 days in 2015), the inspection rate (number of inspections/fishing effort) decreased slightly, from 2.8% to 2.6% (Fig. 7).

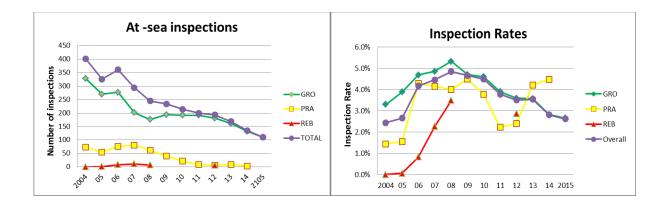


Figure 7. Number of At-Sea Inspections and Inspection rates (number of at-sea inspection/vessel-days) in the NAFO Regulatory Area by fishery type.

Apparent infringements detected at-sea

Each citation issued by at-sea inspectors can list one or more apparent infringements (AI). In 2015, one vessel was issued with an apparent infringement at sea. In comparison, there were ten AIs issued to four vessels in 2014. Table 5 gives details of the AI issued at-sea in 2015 (See Section 5 for follow-up actions and disposition of the AI cases).

In Figure 8, the composite list of AIs issued and the frequency of the cases since 2011 are shown. Product mis-labelling, expired vessel capacity plans, and mis-recording of catches are the most frequent AIs.



Table 5.Details of Apparent Infringements (AI) detected in 2015 by inspectors at-sea.

AI	Vessel Code	СР	FS	Directed Species (according to CAT)	Inspecting CP	Division in NRA or Port Location	Date of inspection	Apparent Infringement	Serious AI? As considered by Inspectors	Article (2015 NCEM)	Disposition/Followup/update as of March 2016	Reference of Disposition
1	1	EU	PRT	Cod	Canada	3М	9-Feb- 2015	Where a ban on fishing applies (moratoria), did retain on board the greater of 1250 kg or 5% of American plaice in Div. 3N	No	Art. 6.3 (d)	Apparent Infringement confirmed at landing with additional infringement (Art. 38.1. I - misreporting of catch). Case pending	EU Annual Rpt on Inspection and Surveillance Activities (At sea). 17 Feb 2016.

	2011	2012	2013	2014	2015
Mis-recording of catches -stowage	••••			••	
Product labelling	•	•••		٠	
Vessel requirements - capacity plans	•	•••		•	
Bycatch - move-away			•		
			•••••		
Bycatch - retaining 3m Redfish			••••		
By-catch requirements	•				•
Gear requirements - mesh size	•			•	
Mis-recording of catches - inaccurate recording		•		•••	
Observer requirements				•	
Quota requirements		••			
VMS requirements		•		•	

Figure 8. Frequency of AI cases detected by NAFO at-sea inspectors in 2011 - 2015.

4. Reporting obligations by NAFO Contracting Parties and Observers

The NCEM obliges vessels and Contracting Parties to provide reports on their activity within a determined time frame. The completeness and regular delivery of those reports in time are of key importance to evaluating overall compliance. In evaluating the completeness, reports were examined to determine which fishing trips were covered by the reports. Each fishing trip must have Vessel Transmitted Information and Observer reports; vessels landing Greenland halibut must have port inspection reports. The percentage coverage is computed as a ratio of fishing days accounted for by the reports and total fishing days effort in the NRA. Less than 100% coverage suggests that there were missing reports that should have been received by the Secretariat.

Vessel Transmitted Information (VTI) – Catch-on-Entry (COE), Catch-on Exit (COX), Daily catch reports (CAT)

The FMCs of flag States are responsible in transmitting the VTI reports to the Secretariat (see also section *Activity and Catch Reporting*). The COE and COX are transmitted signifying the start and end of a fishing trip. A 100% coverage would mean that all expected COEs are paired up with all expected COXs. For the purpose of evaluating the coverage, a trip with a missing COE or COX would not account for the number of days of a fishing trip in the NRA.

In Table 6, the number of COE, COX, and CAT, as well as of the fishing trips and fishing effort-day in the NRA, is presented. Ideally, the number of COE and COX should correspond to the number of fishing trips. The higher-than-expected numbers suggest that duplicates and erroneous reports are occasionally sent. The VMS-VTI system features a cancel report (CAN) which allow vessels and FMCs to withdraw or correct previously sent VTI report. Nonetheless, all identified fishing trips had the corresponding COE and COX report, representing 100% coverage (see also Fig. 10). In long fishing trips, some vessels which visited Canadian ports, not to land but to obtain provisions, transmitted COEs and COXs. This accounts for the higher number of COEs and COXs than the fishing trips.

Number of fishing trips identified	138
Days Present in the Regulatory Area	4209
Number of Daily Catch Reports (CATs)	4349
Number of Catch on Entry Reports (COEs)	161
Number of Catch on Exit Reports (COXs)	163

Table 6.Fishing effort and VTI statistics in the NRA, 2015.

In total 4943 CATs were received, more than the total effort of 4209 vessel days. This indicates that vessels which fished in two or more Divisions in a day transmitted multiple reports, consistent with the requirement that fishing vessels shall report daily their catches by species and by Divisions. The CAT reports have proven to be useful in monitoring quota uptakes of the Contracting Parties.

Port inspections

Prior to 2009, port State Contracting Parties were required to conduct port inspections on *all* vessels landing or transhipping fish species from the NRA, i.e. 100% coverage. Since the adoption of the Port State Control measures in 2009, the 100% coverage has been maintained for vessels



landing NAFO species under recovery plans, in particular Greenland halibut. When landing catch species not under recovery plans, port inspections are not required if the vessel flag State Contracting Party and the port State Contracting Party are the same; if the flag State and the port State are different, the latter is required to conduct port inspections only 15 % of the total fish landing port of call in a year.

In 2015, 87 port inspection reports were received by the Secretariat all of which were associated with groundfish. Some port States submitted port inspection reports on their own vessels making the coverage considerably more than 15%.

In evaluating the compliance of port State authorities in conducting inspections, only trips with Greenland halibut onboard were considered. The identification of these trips was done by examining COX reports. Of the 138 fishing trips identified, COXs of 80 fishing trips indicated Greenland halibut on board. Of the 80 fishing trips (3468 days effort), 73 fishing trips (3331 days effort) have corresponding port inspection reports – an 96% coverage (see Fig. 10).

Observer reports

Under the "traditional" scheme, vessels are required to have an independent observer on board at all times (i.e. 100% coverage) in every fishing trip (NCEM Art. 30.A). Observers in this scheme are committed to deliver within 30 days after their assignment period their observer report, which contains information on date of fishing trip as well as catch and effort.

Since 2007, Contracting Parties have the option of the electronic reporting scheme. Under this electronic scheme, CPs may allow their vessels in a single year to have observers onboard at least 25% of the time the vessels are on a fishing trip (NCEM Art. 30.B). CPs must give prior notification to the Secretariat of which vessels participate in the electronic scheme. Observers under this scheme are required to report daily the catches and discards (OBR) while the fishing master transmits the daily catch reports (CAT) every trip. The CAT and OBR reports are transmitted through the same technology and communication channels as the VMS. In 2015, two vessels submitted OBR reports while fishing in the NAFO Regulatory Area.

In evaluating compliance of observer reports submission, only reports from vessels under the "traditional" scheme were considered. As in the port inspection reports, percentage coverage was computed as the ratio of the fishing days accounted for by the observers and the total fishing days (of the trips under this scheme) in the NRA. In 2015, the percentage was 84%, i.e. 3507 (106 trips) out of 4188 (136 trips) days were covered by observer reports (Fig. 9).

Catch information in observer reports may be crosschecked with other data sources (e.g. port inspection reports and CATs). According to NCEM Art. 30.A.2.(c), the observers shall record, among others, the catch, effort, and discard information for each haul. The Secretariat has noted a vast improvement in this regard. Whereas there were only 12 out of 79 reports contained haul by haul information in 2013; in 2014, 83 out of 87; in 2015 98 out of 99 observer reports received by the Secretariat contained haul by haul information in the observer reports.

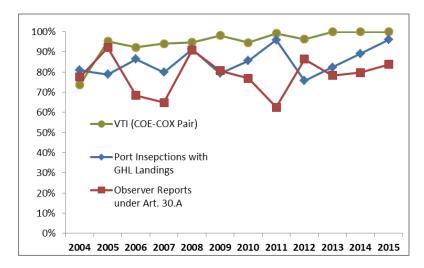


Figure 9. Percentage coverage of fishing effort by VTI (COE-COX Pairs), Port Inspection and Observer Reports as a measure of compliance to report submission requirements.

Catch data source comparisons for Greenland halibut in Div. 3LMNO (PSC3 declared, landed, and CATs)

A comparison of catch data found in the port state inspections forms (declared and landed) compared to the daily CAT message for the catch retained on board (discards not included) for trips that occurred in 2015. For the vast majority of these fishing trips, the difference between landed figures and catch retained on board are within the range of \pm 5%.

Timeliness of submission of reports

VMS messages are required to be provided every hour; hail messages at each entry and exit from the NRA as well catch reports on a daily basis; observers and at-sea inspection reports are expected to be submitted within 30 days and port inspection reports (PSC3 forms) should be sent to the Executive Secretary "without delay." For the purpose of timeliness analysis, PSC 3 forms, as well as at-sea inspection reports received more than 30 days after the date of inspection were considered late. VMS and VTI messages were not included in the timeliness analysis as they are received practically in real time through satellite technology.

Figure 10 shows the timeliness of submission of at sea inspection, observer and port inspection reports. Less than half of the number of observer reports was received on time (17%). Timeliness in the submission of at-sea and port inspection reports was 75% and 37%, respectively.

At-sea and port inspection reports containing citations of infringements were always transmitted to the Secretariat without delay.



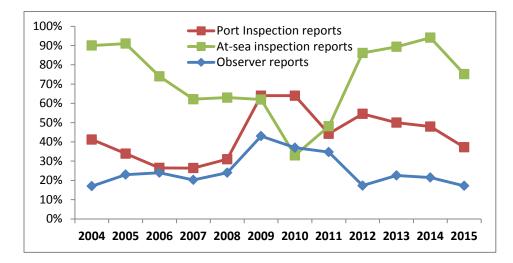


Figure 10. Timeliness of submission of reports. Reports received 30 days after assignment or inspection are considered late.

5. Follow-up to infringements

NCEM Art. 39 spells out obligations of a flag State Contracting Party that has been notified of an infringement. It includes taking immediate judicial or administrative action in conformity with their national legislations and ensuring that sanctions applicable in respect of infringements are adequate in severity. In 2015, a citation of one non-serious AI was issued by at-sea-inspectors (See Table 5 for details).

It must be noted that legal resolution of AIs may take more than a year. In Table 7, a summary of the status of AI cases detected at sea in the last five years (2011-2015) and their resolution are presented.

Table 7.Legal resolution of citations against vessels fishing in the NAFO Regulatory Area by year in which
the citations were issued (as of August 2016). A citation is an inspection report (from at-sea) that
lists one or more infringements. Inspections carried out for confirming a previous citation are not
included.

	Number of At-sea	Resolved ca	Pending		
Year	Inspection Reports with AI Citation/s	Number	%	cases	
2011	8	8	100%	0	
2012	10	10	100%	0	
2013	13	13	100%	0	
2014	5	4	80%	1	
2015	1	0	0%	1	
Total	37	35	95%		

Northwest Atlantic Fisheries Organization

6. Trends, Conclusions and Recommendations

Three main fisheries are identified by NAFO, these are groundfish (primarily in Div. 3LMNO), shrimp (primarily 3LM) and pelagic redfish (primarily in Div. 1F & 2J). Data collected in relation to these fisheries was reviewed to develop the following trends, conclusions and recommendations.

General Trends

The number of vessels active in the NRA went from 134 in 2004 to 57 in 2015 (a 57.5% decrease). Although this represents a significant overall declining trend, there was increased activity in one of the three main fisheries. The groundfish fisheries have shown a steady upward trend since 2013, ranging from 39 vessels in 2008 to an average of over 50 vessels from 2013 to 2015.

From 2004 to 2008 there has been an observed decline in fishing effort (the number of days a vessel is present in the NRA), a trend that appeared to stabilize in 2009 with ~5000 days of effort. During the years since, fishing effort remained relatively stable with some fluctuation. Since 2013, the fishing effort went from 4779 days to 4822 days in 2014 (+0.9%) followed by a decline to 4209 days in 2015 (-12.7%). The total fishing effort in 2015, in terms of fishing days, is comprised of 97.6% groundfish (4107 days) and 2.4% pelagic redfish fisheries (102 days), virtually a 100% groundfish based industry.

In the shrimp fishery, with the exception of the 2007 and 2008 fishing years, the number of active vessels and the fishing effort has declined steadily since 2004, with zero activity or effort identified in 2015. Over the last three years, effort has gone from 7 (2013) to 3 vessels in 2014, in the 3L fishery. Subsequently, in 2013 and 2014, there were further declines in fishing effort, reduced from 64.7% from 190 days in 2013 to just 67 days in 2014. As a result of the fishery closures in 2015, there were no shrimp vessels active in the NRA.

The pelagic redfish fishery (REB) has increased by 25%, with 7 vessels fishing in 2015 compared to 5 in 2014. There was a resulting increase in fishing effort from 56 days in 2014 to 102 days in 2015.

Analysis of groundfish activity by water depth shows that about half of all groundfish effort in 2015 occurred at depths of <400m, comparable to the profile of 2014. Fishing effort in water depths greater than 700m continue to present a declining trend, with approximately 70% of all fishing occurring below 700m. There is a notable overall decrease in effort in depths greater than 700m while the distribution in shallower depths (0-99 m), remains relatively unchanged.

Compliance by fishing vessels

For 2015, indications are that the VMS reporting requirements are being met by Contracting Party vessels. However, further in depth analysis of the VMS and VTI data on a trip basis is required to make a more concrete conclusion on the compliance with this requirement.

Using GHL as a case study, it is demonstrated that the cumulative CAT reports for a trip as declared by the vessel master generally match the figures identified at landing in port inspections. This indicates that in general, accurate CAT reports are being declared and transmitted by vessel operators. This suggests that this data is a reliable reflection of vessel activity.



Out of 4209 fishing days spent in the NRA in 2015, as only 20 were spent beyond the footprint in Division 6G, and 102 days were spent in Division 1F and by vessels engaged in pelagic trawling (therefore not restricted to remain within the fishing footprint), it is demonstrated that there is significant compliance of vessels to area closures.

16

There has been no detected incidence of shark finning by NAFO inspectors in the NRA in 2015.

Inspections and Apparent Infringements

The total number of at-sea inspections dropped from 135 in 2014 to 100 in 2015–in part due to mechanical problems on an inspection vessel. However, given the decline in total fishing effort from 2014 to 2015, the inspection rate (number of inspections/fishing effort) only decreased slightly from 2.8% to 2.6%.

In 2015, 87 port inspection reports were received by the Secretariat, all of which were associated with groundfish.

In 2015, catch on exit reports identified 80 fishing trips landing Greenland halibut. Vessels landing Greenland halibut must be inspected in port, yet the Secretariat only received inspection reports from 73 of the trips that submitted catch on exit reports with Greenland halibut. CPs should investigate why the 100% inspection requirement is apparently not being satisfied. Nonetheless, it does appear that the in-port inspection rate of vessels landing Greenland halibut is improving from 2014, when 89% of trips were inspected, to 2015, when 96% of trips were inspected.

In 2015, only one (1) apparent infringement was detected at-sea. The apparent infringement is associated with a bycatch requirement. It is not considered serious and was the first apparent infringement associated with a bycatch requirement detected at-sea since 2011. Apparent infringements detected at-sea are down significantly from 2014, when 12 were detected.

Just considering the reports on at-sea inspections, it may be interpreted that compliance is improving in NAFO as in 2015 there were less AIs detected at-sea in comparison to all other years since 2011. However, the number of AIs detected at-sea cannot be used as a direct indication of compliance in the absence of further information on apparent infringements detected in port.

Reporting Obligations by CPs and Observers

In 2015, 84% of fishing days were covered by observer reports, which is similar coverage that was seen in 2014. Additionally, 98 out of 99 observer reports received by the secretariat contained haul by haul information. This is also a positive improvement on previous years; however, the timeliness of submission of reports will be examined by appropriate Contracting Parties.

No analysis is available to determine the observer coverage rate or compliance with the OBR reporting requirements for Contracting Parties employing the electronic reporting protocol under Article 30.B. Additional analysis is necessary to ensure that Contracting Parties are complying with minimum observer coverage levels and submitting the required reports. In 2015, only 2 vessels took part in this scheme.



Timely submission of Inspection Reports

The majority of at-sea and port inspection reports noting apparent infringements are being transmitted on a timely basis to the Secretariat by CPs. However, the timeliness of in-port inspection reports where there is no apparent infringement detected is generally poor over the last few years with no improvement noted in 2015.

Recommendations

It would significantly improve the ability to evaluate compliance in the NAFO Regulatory Area if port inspection data was available. Therefore a requirement for the CPs to provide less aggregated data to the NAFO Secretariat should be considered for inclusion in the CEM.

Haul by haul information should be incorporated for future analyses.

A further in depth analysis of the VMS and VTI data on a trip basis should be completed to make a concrete conclusion on the compliance with this requirement.

The Secretariat shall provide to individual Contracting Parties a monthly update on outstanding report submissions in order to facilitate the timely transmission of reports.

