



30TH ANNUAL MEETING – SEPTEMBER 2008

ANNUAL COMPLIANCE REVIEW 2008

1. Introduction

In 2004, NAFO introduced its first compliance review (FC 04/13). This review uses information from diverse NAFO monitoring, control and surveillance (MCS) activities to determine how well the international fisheries complied with the annually updated NAFO Conservation and Enforcement Measures (NCEM). The review also assesses the performance of NAFO Contracting Parties with regard to their monitoring and enforcement obligations.

The format of the compliance review is being continuously developed by the Standing Committee on International Control (STACTIC). The current 2008 NAFO compliance review compares information for the years 2004 to 2007 from the following sources: a) Vessel Monitoring System (VMS), b) Observer Reports, c) Port Inspection Reports, d) At-sea Inspection Reports and e) Reports on Dispositions of Apparent Infringements. The data tables were compiled by the NAFO Secretariat and circulated to the Contracting Parties in June 2008 as Working Paper 08/3 for review and discussion.

2. Fishing Activities (effort) in the NAFO Regulatory Area

In the years covered by this review, the fishery in the NAFO Regulatory Area (NRA) has continually diminished. In 2004, there were 134 active vessels operating in the NRA. By 2007 the number of active vessels had decreased to 76, representing a 43% decrease (Figure 1). This decrease is particularly pronounced in the pelagic redfish fishery where vessels dropped by almost 60%, from 48 in 2004 to only 20 in 2007.

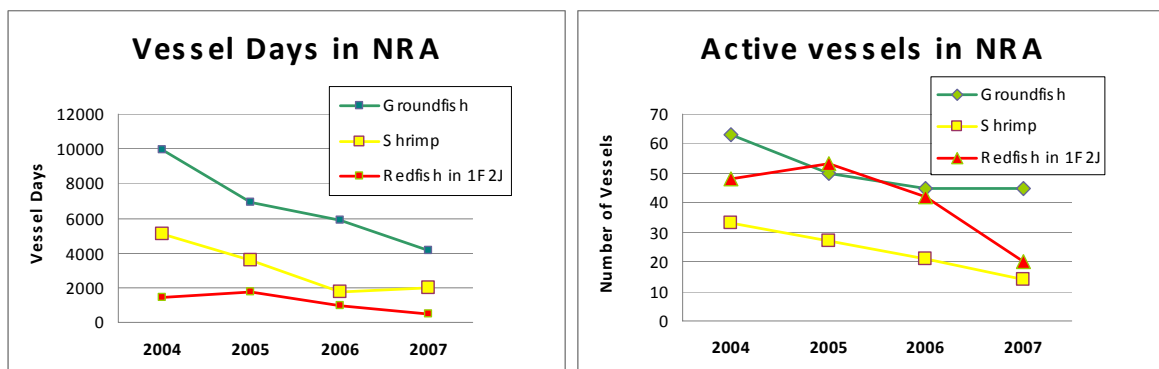


Figure 1. Number of vessels and vessel days in the NAFO Regulatory Area by fishery type

The fishing effort is measured in vessel-days per year in the NRA. Vessel-days are ascertained by the position reports transmitted by the vessels through their respective Fisheries Monitoring Centres via the VMS. Although the number of vessels decreased by 43%, from 2004 to 2007 total fishing effort diminished by 60%, i.e. from 16,480 days to 6,598 days (Figure 1, Table 5). The fact that fishing

effort has declined more than the number of vessels per year suggests that the average duration of the fishing trips has become shorter over time. NAFO identifies three main different fishery types, i.e. groundfish, shrimp and pelagic redfish fisheries. Almost two thirds of the fishing effort can be attributed to the groundfish fishery (62%) whereas the pelagic redfish fishery only accounts for a tenth of the effort (11%). It should be noted that the number of vessel days in the NRA for the pelagic redfish fishery declined by 65 percent, from 1,414 days in 2004 to 488 days in 2007, as compared to a 62 percent decline in the shrimp fishery and a 58 percent decline in the groundfish fishery.

3. Compliance by Fishing Vessels

To ensure that vessels fishing in the NAFO Regulatory Area adhere to the NAFO conservation and management measures, NAFO monitors, surveys and controls the fishery. In this context NAFO conducts joint at-sea inspections by NAFO-certified inspectors as well as inspections in NAFO member ports. Through the random at-sea and obligatory port inspections, NAFO is able to uncover infringements of the NAFO regulations and collect evidence for the following prosecution within the legal system of each NAFO flag state.

Although the total number of at-sea inspections decreased from 401 inspections in 2004 to 296 inspections in 2007, the frequency rate of at-sea inspections in relation to the effort (number of inspections per vessel-days per year) actually increased from 2.4% in 2004 to 4.5% in 2007 (Figure 2). Inspection rates increased in all three fishery types.

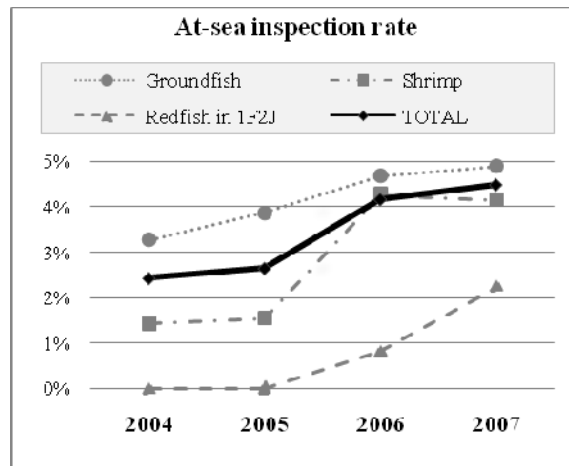


Figure 2. Inspection rates (number of at-sea inspection/vessel-days) in the NAFO Regulatory Area by fishery type.

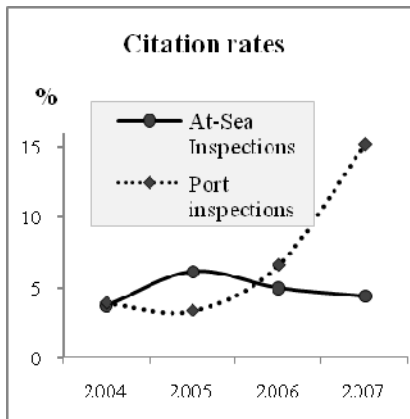


Figure 3. Percentage of inspections that resulted in a citation at sea and in ports

NAFO inspectors cite a vessel if they have reason to suspect that the vessel breached one or more NAFO regulations. During the review period, at-sea inspectors issued between 13 and 20 citations per year¹ and the average citation rate (i.e. the percentage of inspections resulting in a citation) of about 5% of the at-sea inspections remained fairly constant during the review period. In contrast, for port inspections the citation rate more than doubled in 2007 compared to previous years (Figure 3, Table 6).

Each citation issued by NAFO inspectors can list one or more infringement. NAFO recognizes 10 serious infringements (CEM Article 36.1). NAFO inspectors also detect other infringements that are not classified as serious, such as missing stowage plans or product labels. The frequency of infringements found by NAFO inspectors during the review period is presented in Figure 4. More detail on these infringements for the years 2004 through

2007 is provided in Table 5. The most frequent infringement is inaccurate recording of catches, a serious offence that was particularly pronounced (59 %) in citations issued in 2007 by port inspectors. In addition, based on the information presented in Table 5, it appears that mis-recording of catches on stowage plans is more detectable at sea, while inaccurate recording of catches is more detectable in port.

The percentage of infringements by fisheries type is displayed in Figure 5. More than half of the infringements come from groundfish vessels. This can be attributed to the fact that groundfish fishery effort constitutes more than half of the total fishing effort in the NAFO Regulatory Area in terms of vessel-days. It should be further noted that all of the infringements detected by port inspectors involved groundfish vessels (Table 5).

¹Inspections for the sole purpose of confirming a previous citation were not counted.

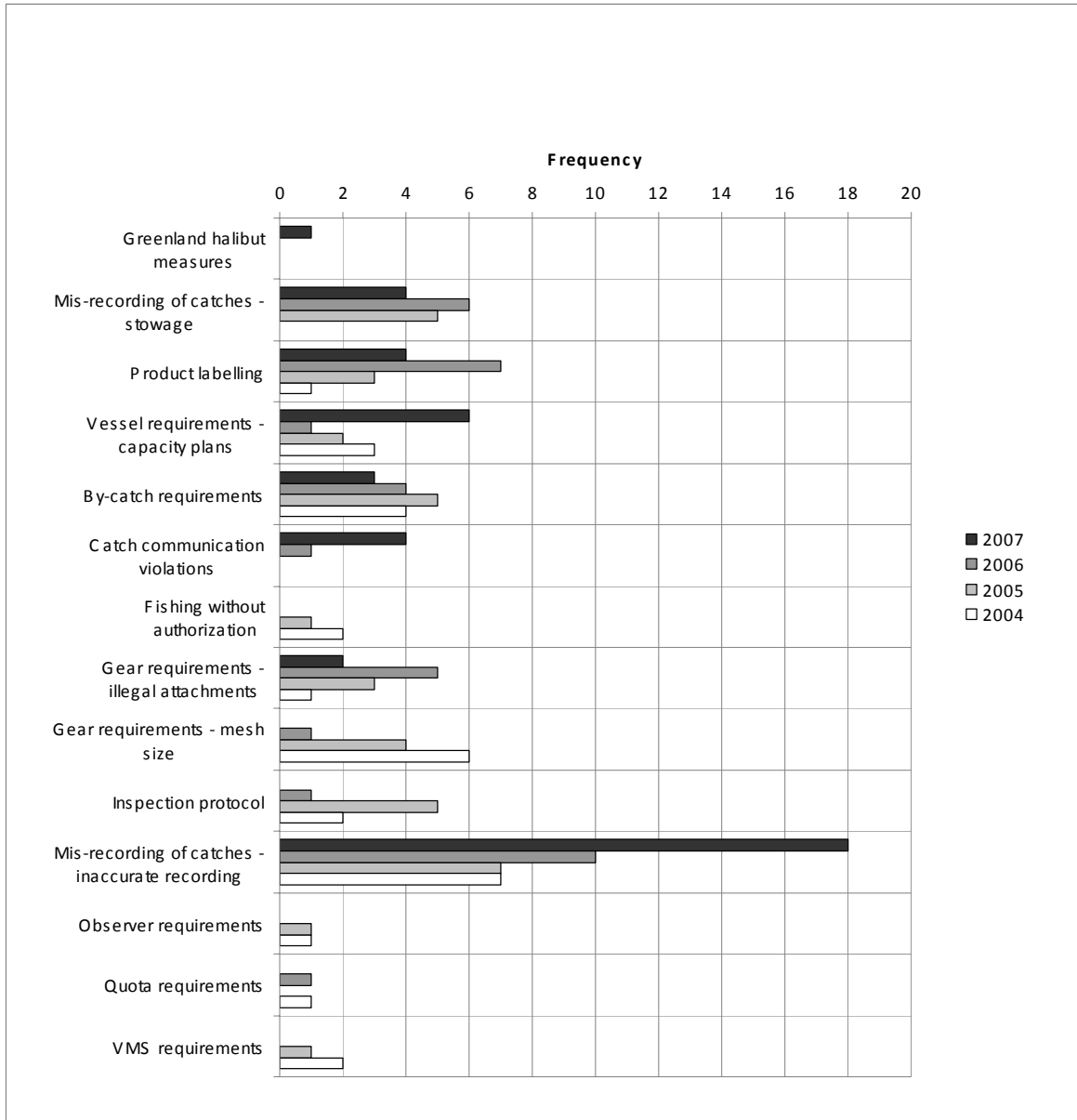


Figure 4. Apparent Infringements detected by NAFO at-sea and port inspectors. *Please note that the first 4 are non-serious infringements and the remaining 10 are serious infringements.

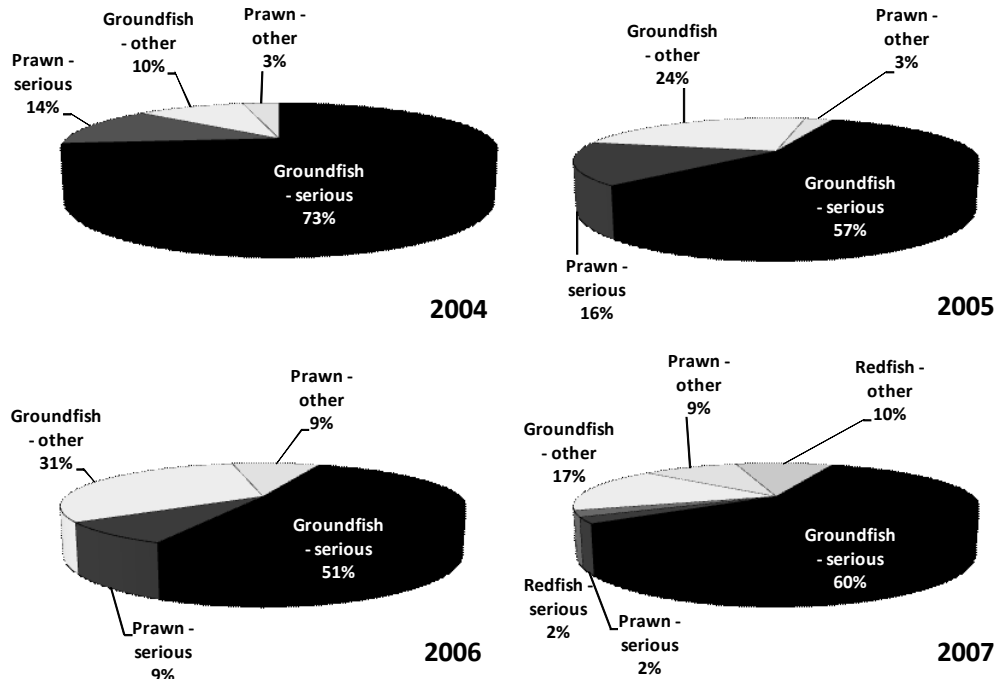


Figure 5. Percentages of serious (dark areas) and non-serious (light areas) infringements (by fishery type) detected by at-sea and port inspectors.

4. Reporting obligations by fishing vessels and NAFO Contracting Parties

Monitoring the NAFO fisheries includes submission of reports on catch and effort by vessel from different sources: VMS reports such as Catch-on-Entry (COE) and Catch-on-Exit (COX) are submitted by the fishing vessels through their respective Fisheries Monitoring Centres; port inspection reports by the port authorities; and observer reports² by the flag state members. These reports from different sources allow a comparative analysis of catches; they should ideally cover 100% of the fishing trips and account for all the days the fishing vessels are present in the NRA. Figure 6 shows the relative coverage of fishing trips from the reports received; deviations from 100% are caused by missing reports.³ Since 2005, catch reports received by NAFO VMS have become the most complete source on catch-by-vessel information whereas the coverage by observers has recently decreased due to the implementation of the electronic catch reporting scheme.

² Vessels fishing in the NRA are required to have 100% observer coverage, i.e. presence of an independent observer on board at all times. Since 2007, Contracting Parties can alternatively opt for a daily electronic catch reporting scheme (see CEM, Chapter VII) which allows them to reduce the observer coverage on their vessels by up to 25%.

³ The percentage coverage for VMS catch reports (COE-COX) shown in Figure 6 was calculated from the number of days as indicated in each report and the total effort (vessel-days) as validated from the VMS position reports. Port reports included transshipments at sea (particularly important for the pelagic redfish fishery). In the evaluation of observer reports coverage, vessel-days of vessels participating in the electronic catch reporting scheme are excluded.

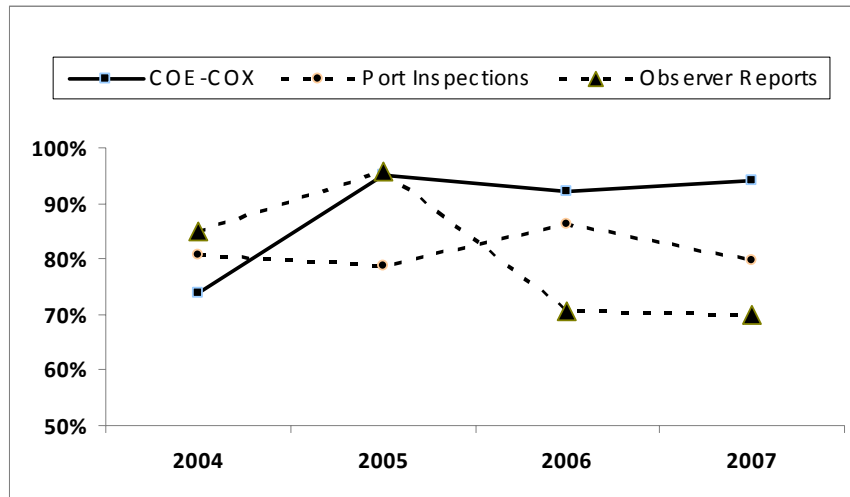


Figure 6. Percentage coverage of fishing effort by VMS, Port Inspection and Observer Reports.

Another issue is the timeliness of reports submitted by Contracting Parties to the NAFO Secretariat (as specified in NAFO CEM 2008 by Articles 27, 34, and 45). Figure 7 shows that with the exception of at-sea inspections most reports are not submitted within 30 days as required. Recently, at-sea inspection reports are also frequently delayed. It should be noted that timeliness of submission does not necessarily equate to a failure to submit the required reports.

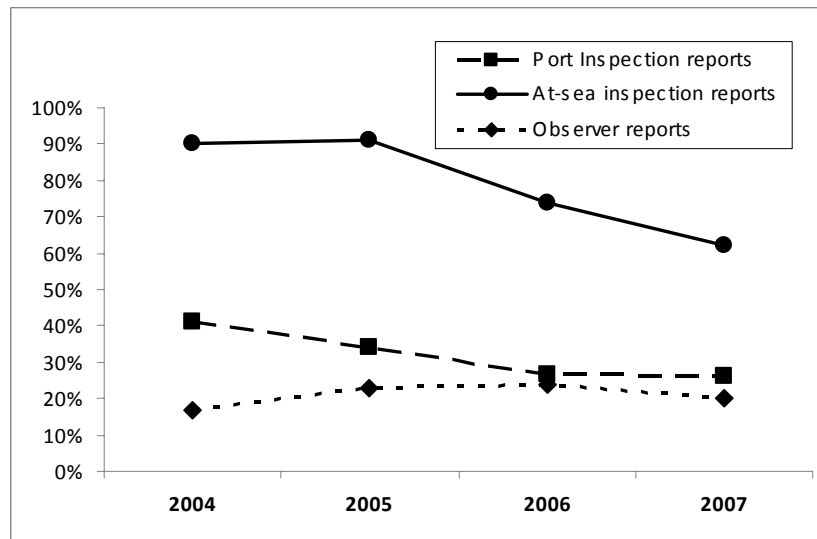


Figure 7. Timeliness of submission of reports.

5. Follow-up to infringements

Flags states are obligated to follow-up with further investigations and legal prosecution when NAFO inspectors issue a citation against a Contracting Party vessel. The Secretariat receives information on the status of each case. The legal procedure can take longer than one year and it is, therefore, not

expected that by 2008 all cases of the previous years could be resolved. This information is reflected in Figure 8 and also in Table 6.

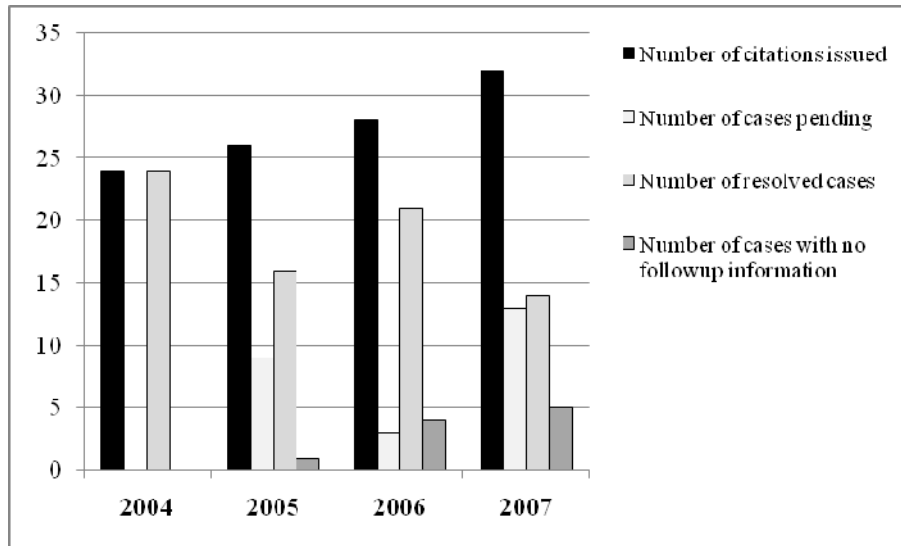


Figure 8. *Legal resolution of citations against vessels fishing in the NAFO Regulatory Area (as of 1st January 2008). A citation is an inspection report (from at-sea or port inspectors) that lists one or more infringements. Inspections carried out for confirming a previous citation are not counted.*

6. Observed trends (period 2004 to 2007)

- The total fishing effort in the NAFO area has declined both in terms of number of vessels in the NRA (43%) and the total number of fishing days (60%). In terms of active vessels, in the groundfish fisheries, effort has declined slightly overall since 2004, but remained stable over the past couple of years. Conversely, there has been a marked decline in the number of active vessels in the pelagic redfish and shrimp fisheries. In terms of vessel days, a 60 % decline in total fishing effort was observed across all 3 fishing types (groundfish, shrimp, and pelagic redfish), with pelagic redfish showing the largest decline of 65 %.
- There was a reduction of approximately 25% in the total number of at sea inspections between 2004 and 2007. The rate of at sea inspections per vessel fishing day increased from 2.4% in 2004 to 4.5% in 2007.
- The number of citations resulting from at sea inspections varied from 13 to 20 during the 4-year period. The citation rate decreased slightly since 2005, but has remained generally stable over the time period.
- There was a 29 % decline in port inspections from 2005 to 2007. The number of vessels cited by Port Authorities per year varied from a low of 6 in 2005 to a high of 16 in 2007. The number of apparent infringements issued ranged from 6 (2005) to 27 (2007), demonstrating a 48 % increase in 2007 in comparison to 2006.
- During the 4 year period, a total of 90 apparent infringements resulted from at sea inspections and 56 from port inspections. The apparent infringement category “Mis-recording of Catches” (Both Stowage and Inaccurate recording related) accounted for 28 of the apparent infringements issued at sea (31%) and 29 in port (52%). These infringements were issued more frequently in relation to groundfish fisheries.

- The follow-up on apparent infringements is of concern, with an increasing number of cases having no follow-up information from the Contracting Party. The Contracting Party may be following up on the apparent infringement, but may not have reported the status back to the NAFO Secretariat.
- Delayed submission of inspection (at sea and in port) and observer reports by Contracting Parties remains an issue. The general trend in timeliness of reporting is static, but there is a notable decrease in the timeliness of at sea inspection reports. Missing observer reports also remain an issue.
- Catch by vessels reported through daily electronic communication has become the predominant way to receive catch information. In parallel, the coverage by observers has recently decreased under this recently implemented electronic catch reporting scheme, which allows Contracting Parties to reduce observer coverage on their vessels by up to 25 %.

7. Annexes (the “Report tables)

Table 1. Submission of Fishing Reports*

Year	Days at the Regulatory Area (Effort)	Number of Days accounted by COE-COX pairs	Percentage of Effort accounted by COE-COX pairs	Number of Days accounted by Port Inspection and TRA reports	Percentage of Effort accounted by Port Inspection and TRA reports	Number of Days accounted by Observer and CAX reports	Percentage of Effort accounted by Observer and CAX reports
2004	16480	12156	74%	13327	81%	12779	78%
2005	12290	11706	95%	9679	79%	11326	92%
2006	8663	7991	92%	7488	86%	5921	68%
2007	6598	6210	94%	5269	80%	4276	65%

*COE = Catch on entry, COX = Catch on exit, TRA = transshipment, CAX = Daily catch report

Table 2. Timely submission of Port Inspection Reports

Year	2004	2005	2006	2007
Total Number of Port Inspection Reports received	228	177	151	125
Total Number of Port Inspection Reports received late	134	117	111	92
Percentage % of late Port Inspection Reports	59%	66%	74%	74%

NB: Article 45 stipulates the transmission of port inspection reports to the Secretariat within 30 days on which the landing was completed.

Port Inspection Reports are submitted by the CP of the Port Inspection Authority.

Table 3. Timely submission of At-Sea Inspection Reports

Year	2004	2005	2006	2007
Total Number of at-sea Inspections	401	326	361	296
Number of at-sea Inspections received late	40	30	95	112
Percentage % of late at-sea Inspection Reports	10%	9%	26%	38%

NB: Timely submission means transmission of the report with 30 days.

At-sea Inspection Reports are submitted by the CP with inspection presence at NAFO Regulatory Area.

Table 4. Timely submission of Observer Reports

Year	2004	2005	2006	2007
Total Number of Observers Reports	211	170	114	84
Number of Observers Reports received late	176	131	87	67
Percentage % of late Observers Reports	83%	77%	76%	80%

NB: Article 24 stipulates the transmission of the observer reports to the Secretariat within 30 days after the completion of the observer's assignment.

Observer Reports are submitted by the Flag State of the vessels.

Table 5-2004, part 1. Effort, at sea inspections and AIs by fisheries type

Fisheries*	GRO	PRA	REB	Total
Number of vessels	63	33	48	134**
Days Present in NRA	9966	5100	1414	16480
Number of at-sea inspections	328	73	0	401
Number of at-sea inspection report containing citation of one or more AIs	13	2	0	15
Number of vessels cited with AIs at sea	10	2	0	12
AIs issued by category - from at-sea inspections***				
Greenland halibut measures				0
Mis-recording of catches -stowage				0
Product labeling	0	1	0	1
Vessel requirements - capacity plans	3	0	0	3
By-catch requirements	3	0	0	3
Catch communication violations				0
Fishing without authorization	0	1	0	1
Gear requirements - illegal attachments	1	0	0	1
Gear requirements - mesh size	5	0	0	5
Inspection protocol	2	0	0	2
Mis-recording of catches - inaccurate recording	1	0	0	1
Observer requirements	0	1	0	1
Quota requirements	1	0	0	1
VMS requirements	0	2	0	2
TOTAL	16	5	0	21
* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2J				
** Some vessels switched directed species within the year.				
*** AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.				

Table 5-2004, part 2. Effort, port inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	63	33	48	134**
Days Present in NRA	9966	5100	1414	16480
Number of port inspections	85	138	5	228
Number of port inspection report containing citation of one or more AIs	9	0	0	9
Number of vessels cited with AIs by port authorities	9	0	0	9
AIs issued by category - from port inspections***				
Greenland halibut measures				0
Mis-recording of catches -stowage				0
Product labeling				0
Vessel requirements - capacity plans				0
By-catch requirements	1	0	0	1
Catch communication violations				0
Fishing without authorization	1	0	0	1
Gear requirements - illegal attachments				0
Gear requirements - mesh size	1	0	0	1
Inspection protocol				0
Mis-recording of catches - inaccurate recording	6	0	0	6
Observer requirements				0
Quota requirements				0
VMS requirements				0
TOTAL	9	0	0	9

Table 5-2005, part 1. Effort, at sea inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	50	27	53	116**
Days Present in NRA	6948	3558	1784	12290
Number of at-sea inspections	270	55	1	326
Number of at-sea inspection report containing citation of one or more AIs	16	4	0	20
Number of vessels cited with AIs at sea	14	3	0	17
AIs issued by category - from at-sea inspections***				
Greenland halibut measures				0
Mis-recording of catches -stowage	5	0	0	5
Product labeling	2	1	0	3
Vessel requirements - capacity plans	2	0	0	2
By-catch requirements	2	0	0	2
Catch communication violations				0
Fishing without authorization	0	1	0	1
Gear requirements - illegal attachments	2	1	0	3
Gear requirements - mesh size	3	0	0	3
Inspection protocol	3	1	0	4
Mis-recording of catches - inaccurate recording	5	1	0	6
Observer requirements	0	1	0	1
Quota requirements				0
VMS requirements	0	1	0	1
TOTAL	24	7	0	31
* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2J				
** Some vessels switched directed species within the year.				
*** AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.				

Table 5-2005, part 2. Effort, port inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	50	27	53	116**
Days Present in NRA	6948	3558	1784	12290
Number of port inspections	80	87	10	177
Number of port inspection report containing citation of one or more AIs	6	0	0	6
Number of vessels cited with AIs by port authorities	6	0	0	6
AIs issued by category - from port inspections***				
Greenland halibut measures				0
Mis-recording of catches -stowage				0
Product labeling				0
Vessel requirements - capacity plans				0
By-catch requirements	3	0	0	3
Catch communication violations				0
Fishing without authorization				0
Gear requirements - illegal attachments				0
Gear requirements - mesh size	1	0	0	1
Inspection protocol	1	0	0	1
Mis-recording of catches - inaccurate recording	1	0	0	1
Observer requirements				0
Quota requirements				0
VMS requirements				0
TOTAL	6	0	0	6

Table 5-2006, part 1. Effort, at sea inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	45	21	42	92**
Days Present in NRA	5908	1776	979	8663
Number of at-sea inspections	277	76	8	361
Number of at-sea inspection report containing citation of one or more AIs	11	5	2	18
Number of vessels cited with AIs at sea	10	4	2	16
AIs issued by category - from at-sea inspections***				
Greenland halibut measures				0
Mis-recording of catches -stowage	5	1	0	6
Product labeling	1	2	0	3
Vessel requirements - capacity plans	1	0	0	1
By-catch requirements	2	0	0	2
Catch communication violations				0
Fishing without authorization				0
Gear requirements - illegal attachments	2	2	1	5
Gear requirements - mesh size	0	0	1	1
Inspection protocol	0	1	0	1
Mis-recording of catches - inaccurate recording	4	0	0	4
Observer requirements				0
Quota requirements				0
VMS requirements				0
TOTAL	15	6	2	23

* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2J

** Some vessels switched directed species within the year.

*** AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

Table 5-2006, part 2. Effort, port inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	45	21	42	92**
Days Present in NRA	5908	1776	979	8663
Number of port inspections	76	56	19	151
Number of port inspection report containing citation of one or more AIs	10	0	0	10
Number of vessels cited with AIs by port authorities	10	0	0	10
AIs issued by category - from port inspections***				
Greenland halibut measures				0
Mis-recording of catches -stowage				0
Product labeling	4	0	0	4
Vessel requirements - capacity plans				0
By-catch requirements	2	0	0	2
Catch communication violations	1	0	0	1
Fishing without authorization				0
Gear requirements - illegal attachments				0
Gear requirements - mesh size				0
Inspection protocol				0
Mis-recording of catches - inaccurate recording	6	0	0	6
Observer requirements				0
Quota requirements	1	0	0	1
VMS requirements				0
TOTAL	14	0	0	14

Table 5-2007, part 1. Effort, at sea inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	45	14	20	76**
Days Present in NRA	4158	1948	488	6594
Number of at-sea inspections	202	81	11	294
Number of at-sea inspection report containing citation of one or more AIs	4	5	4	13
Number of vessels cited with AIs at sea	4	5	4	13
AIs issued by category - from at-sea inspections***				
Greenland halibut measures				0
Mis-recording of catches -stowage	3	1	0	4
Product labeling	0	1	0	1
Vessel requirements - capacity plans	0	2	4	6
By-catch requirements				0
Catch communication violations				0
Fishing without authorization				0
Gear requirements - illegal attachments	0	1	1	2
Gear requirements - mesh size				0
Inspection protocol				0
Mis-recording of catches - inaccurate recording	2	0	0	2
Observer requirements				0
Quota requirements				0
VMS requirements				0
TOTAL	5	5	5	15

* GRO = groundfish primarily in Divs. 3KLMNO; PRA = shrimp fisheries in Divs. 3LM; REB = redfish in Divs. 1F2J

** Some vessels switched directed species within the year.

*** AIs from citation reports serving to confirm an incident are not counted. AI categories in bold are considered serious.

Table 5-2007, part 2. Effort, port inspections and AIs by fisheries type

FISHERIES*	GRO	PRA	REB	Total
Number of vessels	45	14	20	76**
Days Present in NRA	4158	1948	488	6594
Number of port inspections	67	51	7	125
Number of port inspection report containing citation of one or more AIs	19	0	0	19
Number of vessels cited with AIs by port authorities	16	0	0	16
AIs issued by category - from port inspections***				
Greenland halibut measures	1	0	0	1
Mis-recording of catches -stowage				0
Product labeling	3	0	0	3
Vessel requirements - capacity plans				0
By-catch requirements	3	0	0	3
Catch communication violations	4	0	0	4
Fishing without authorization				0
Gear requirements - illegal attachments				0
Gear requirements - mesh size				0
Inspection protocol				0
Mis-recording of catches - inaccurate recording	16	0	0	16
Observer requirements				0
Quota requirements				0
VMS requirements				0
TOTAL	27	0	0	27

Table 6. Resolution of Apparent Infringement (AI) Cases (as of January 1, 2008)

	2004	2005	2006	2007
Number of citations issued*	24	26	28	32
Number of cases pending	0	9	3	13
Number of resolved cases	24	16	21	14
Number of cases with no follow-up information	0	1	4	5

* Number of at-sea and port inspection reports issuing serious and non-serious AIs.
A report may contain one or more AI.
Reports serving to confirm identical cases are not counted.