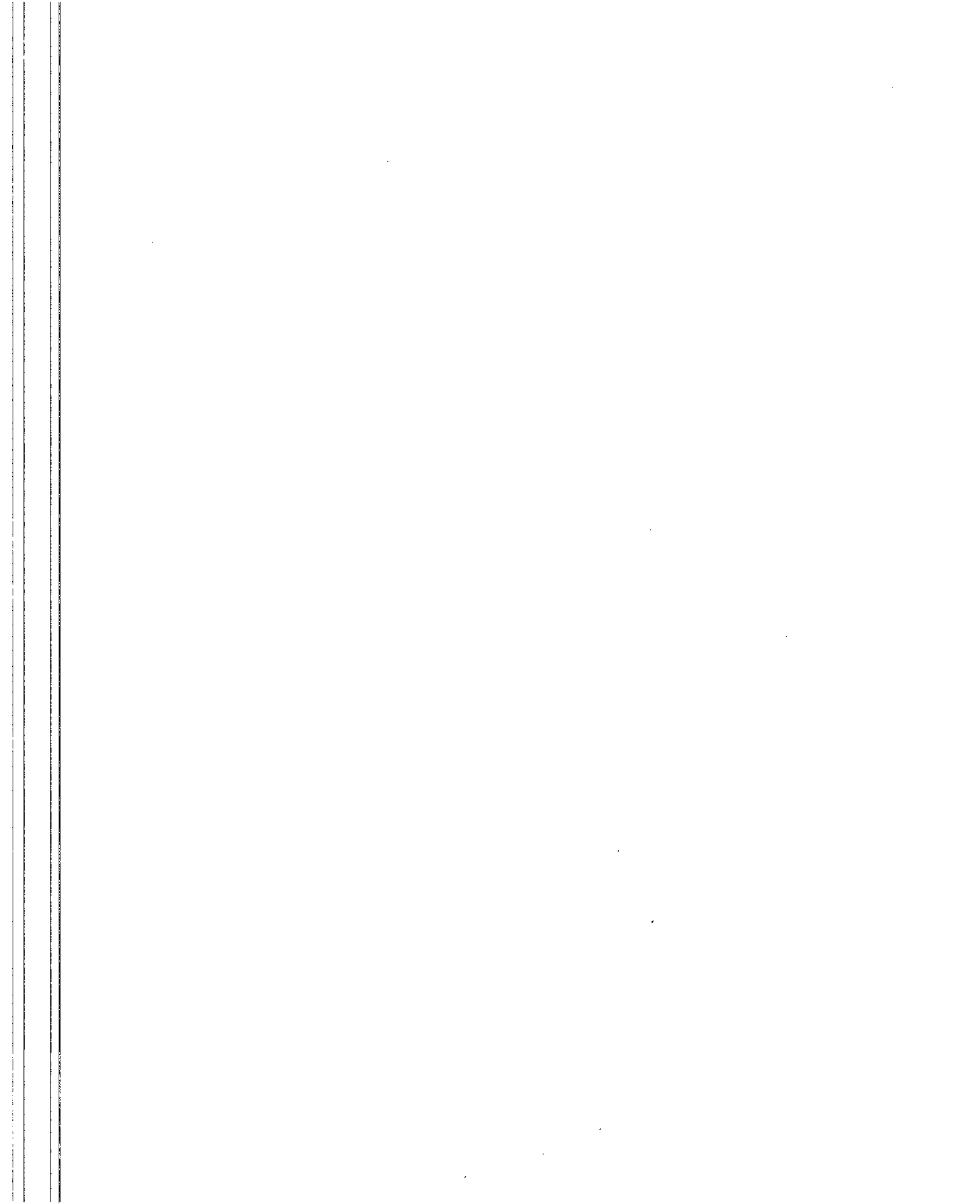


SECTION IV

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Report of the Standing Committee on International Control (STACTIC) 14-15 May 1998 Copenhagen, Denmark

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**Report of the Standing Committee on
International Control (STACTIC)**
(FC Doc. 98/3)

**14-15 May 1998
Copenhagen, Denmark**

1. Opening of Meeting

The Chairman, D. Bevan (Canada) opened the meeting at 0930 on 14 May 1998. Representatives from the following Contracting Parties were present: Canada, Denmark (in respect of the Faroe Islands and Greenland), Estonia, the European Union (EU), Iceland, Japan, Norway, Russia and the United States (Annex 1).

2. Appointment of Rapporteur

Paul Steele (Canada) was appointed Rapporteur.

3. Adoption of Agenda

The agenda was adopted as attached (Annex 2).

4. Review of Reports on the Pilot Project for Observers and Satellite Tracking

The Chairman invited the Contracting Parties to provide any relevant updates of the reports that they had submitted at the June, 1997 STACTIC meeting in Copenhagen. Written reports were submitted by Canada (STACTIC Working Paper 98/1), Japan (98/2), the United States (98/3), Denmark, in respect of the Faroe Islands (98/4) and the European Union (98/5 and 98/6). Estonia gave an oral report to update the written report submitted by Estonia in 1997 (STACTIC Working Paper 97/17). In his oral report the representative from Estonia indicated that the data captured by Estonian observers has been computerized and is now available for the use of scientists. He also noted that all Estonian observer reports are being sent to the NAFO Secretariat.

The representative from Canada pointed out that Part VI.3.d of the NAFO Conservation and Enforcement Measures requires Contracting Parties to submit all observer reports to the NAFO Secretariat. He noted that not all Contracting Parties are currently complying with this obligation.

The representative from the European Union pointed out that, even though some Contracting Parties have submitted updated reports on the implementation of the pilot project, there continues to be a lack of clarity regarding certain issues. Specifically, the European Union representative listed the following questions which he asked each Contracting Party to address:

1. Who employs the observers, i.e. do they meet the requirements regarding independence and impartiality?
2. Is the 100% coverage requirement being adhered to?
3. Are all observer reports submitted to the NAFO Secretariat?
4. Are the observer reports available to scientists, and to what extent do they make use of the reports?
5. Are hailing requirements still being adhered to by all vessels, or are hails no longer required for vessels covered by satellite tracking?

6. Is satellite tracking data now being used to control fishing activity, e.g. to control effort days in the shrimp fishery?

Representatives from Denmark (in respect of the Faroe Islands and Greenland), Norway, Canada, Japan, Estonia, EU and Iceland responded orally to the questions. A summary of the responses is attached as Annex 3.

The Chairman asked that reports on implementation of the pilot project be submitted by all Contracting Parties who were not in attendance at this meeting, as well as by any other Contracting Parties which have not yet submitted written reports. He also asked that all Contracting Parties not in attendance submit written responses to the six questions posed by the European Union representative. Those Contracting Parties in attendance who had not provided complete answers for all six questions were asked to do so, in writing, to the NAFO Secretariat as soon as possible.

The representative for the Executive Secretary pointed out that the NAFO Secretariat has not been receiving notification from Contracting Parties regarding the names of vessels which will be equipped with satellite tracking devices while fishing in the Regulatory Area (such notification is required under Part III.E.4 of the Conservation and Enforcement Measures). The Chairman asked that all Contracting Parties provide this information to the Secretariat in the future.

5. Evaluation of the Pilot Project

The Chairman requested comments on how to best proceed with the evaluation of the pilot project in comparison to the traditional means of control. The representative from Denmark pointed out that Contracting Parties had completed the evaluation framework document, which was developed at the June 1997 meeting, in different ways. He noted that this makes it difficult to analyze the results, and therefore Contracting Parties should attempt to agree on a uniform approach to completing the evaluation form.

The representative from Iceland expressed reservations about the using the evaluation framework, as he felt it was too restrictive in that it does not allow for comments and explanations of why some criteria are not applicable in certain fisheries.

After considerable discussion it was agreed that Contracting Parties would revise their individual evaluation framework tables, using a consistent methodology adopted by the committee, and that these individual reports would then be rolled up to produce a single evaluation framework table which could be submitted to the Fisheries Commission at the annual meeting in September, 1998. This approach was adopted on the understanding that the table is indicative and does not pre-judge the weights to be attached to individual elements, that Contracting Parties would be able to add footnotes to explain and elaborate on the information in the table, and that the written evaluation reports previously submitted by Contracting Parties would still stand. Furthermore, the qualifications high, medium and low should not be taken to indicate whether schemes are insufficient or sufficient. The summary table adopted by the committee is attached as Annex 4.

It was also agreed that a composite table would be developed to provide an overall summary of costs involved in delivering the three surveillance options, i.e. observer coverage, satellite tracking and traditional enforcement methods. This summary table is attached as Annex 5. During the discussion that followed, the Canadian and EU representatives noted the fact that the costs associated with the traditional surveillance methods are very high in comparison to the costs for satellite tracking and observer coverage. Canada also noted that NAFO membership comes not only with privileges but also with responsibilities.

The Chairman requested that Contracting Parties review the costing data and provide any corrections or other relevant information to the NAFO Secretariat as soon as possible. He also reminded Contracting Parties that, in order to maintain consistency, all cost data should be for the 1996 fishing year. The Chairman also asked that 1997 cost data be submitted to the Secretariat.

The Chairman also asked the Contracting Parties to provide the NAFO Secretariat with information with respect to fishing effort as per the table entitled Surveillance Results, 1992-1997 (Annex 6). The NAFO Secretariat will prepare a summary table based on the data received from Contracting Parties and the data held by the Secretariat on apparent infringements. The results will be finalized together with the data on the number of fishing days and patrol days in the Regulatory Area. The Executive Secretary will have to use his judgement in assigning the apparent infringements to the categories listed in the table.

6. Possible Amendments to Improve the Current Scheme (to be considered at the 20th Annual Meeting of NAFO)

The representative from the European Union pointed out that the future of the pilot project must be decided at the NAFO annual meeting in September 1998, and it will be important for all Contracting Parties to clearly make their positions known well in advance of the meeting. He indicated that if any Contracting Parties are not in favour of continuing the pilot project, they should submit alternative proposals to the NAFO Secretariat as soon as possible, so that other Contracting Parties will have an opportunity to fully consider the proposals before the annual meeting.

This approach was accepted by the Committee. The Chairman suggested that Contracting Parties wishing to propose changes to the pilot project should submit detailed proposals to the NAFO Secretariat by August 15, 1998.

The representative from the United States advised that they would be submitting a proposal regarding transshipments and inspections of Non-Contracting Party vessels.

The representative from Iceland noted that work is being done by the NEAFC with regard to data availability and transmission of catch data from vessels at sea. Iceland intends to propose similar improvements to the NAFO control scheme. Iceland will also want to discuss possible options to reduce the costs involved with the current pilot project. He indicated that Iceland will propose that satellite tracking coverage be increased from 35% to 100%, and that consideration be given to reducing the observer coverage requirements if improvements can be made in other areas such as data availability and data transfer.

The Canadian representative expressed strong support for the continuation of 100% observer coverage. He also agreed with the European Union regarding the need for clear position statements from all Contracting Parties regarding the future of the pilot project.

The representative from the European Union indicated that, although they have not yet developed a final position, the European Union will likely propose that all vessels fishing in the Regulatory Area be subject to satellite tracking by January 1, 2000. He also noted that the observer program has brought about improved compliance and should not be reduced from the 100% level at this time.

The representative from Russia noted that observer coverage is a very expensive element of the enforcement scheme, and that if Contracting Parties wish to reduce costs, the need for 100% coverage should be reviewed.

7. Consideration of means of allowing scientists access to and the use of data collected by observers under a permanent scheme

The representative from the European Union pointed out that there seems to be a lack of communication between STACTIC and the Scientific Council regarding the type of observer data needed by scientists and the best methods for transmitting the data to them. Although there is general agreement that the best possible use should be made of the information gathered by observers, it appears that this may not always be the case, as observer data is sometimes not brought forward for consideration by the Scientific Council.

It was agreed that further clarification is required from the Scientific Council regarding their data requirements in relation to NAFO observer programs. It was suggested that the Scientific Council should be asked to develop a protocol which would give guidance as to how observer data should be collected, the volume and type of data required, and harmonized sampling procedures. Such a protocol would also help to bring some consistency to the manner in which Contracting Parties carry out their observer programs in the Regulatory Area.

It was agreed that the best approach to advancing this issue would be to propose a joint meeting of STACTIC and the Scientific Council during the week of the annual NAFO meetings in September, 1998. If the Chairman of the Scientific Council agrees, a short meeting will be scheduled at a mutually convenient time during that week.

The European Union representative offered to work with the European Union scientists to develop a draft protocol which can be used as a discussion document at the September meeting.

8. Other Business

The representative of the Executive Secretary reminded Contracting Parties that a commitment was made at the September, 1997 STACTIC meeting that Contracting Parties would exchange data on discards prior to the May, 1998 meeting (please see STACTIC Report, item 8(a)). To date, only Canada and Norway have supplied the requested data. All other Contracting Parties were asked to forward their data to the NAFO Secretariat as soon as possible.

The representative from Iceland asked about the status regarding the implementation of the recommendations from the report produced in 1997 by the STACTIC Working Group on Satellite Tracking (STACTIC Working Paper 97/15). The representative from the European Union explained that while the Fisheries Commission has accepted submission of the report, it has not yet gone through a formal approval process, which would include a mail vote. The representative from Iceland stated that there is a need to continue the work begun by this working group. The representative of the Executive Secretary reported that two service providers had been asked to provide estimates on the work that would be required to enable the NAFO Secretariat to handle satellite tracking and hail reports on a real time basis. In-house networking and a mainframe computer have been installed at the Secretariat.

9. Adoption of the Report

A draft report was reviewed by the meeting and comments presented by delegates. The Chairman requested the Secretariat to circulate the amended report by mail to Heads of Delegations present at the meeting for adoption.

10. Adjournment

The delegate of Canada expressed gratitude to the Greenland Home Rule for providing the fine meeting facilities as well as the luncheon served. This was applauded by all delegates. The meeting was adjourned at 1500 hrs on Friday, 15 May 1998.

Annex 1. List of Participants

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G. Moulton, Statistical Officer
M. Hansen (Greenland Home Rule), Denmark Office

Annex 2. Agenda

1. Opening Remarks and Introductions
2. Appointment of the Rapporteur
3. Adoption of the Agenda
4. Review of reports on the Pilot Project for Observers and Satellite Tracking
 - Outstanding reports on the implementation of the Pilot Project for Observers
 - Update of reports on the implementation of the Pilot Project for Satellite Tracking
5. Evaluation of the Pilot Project for Observers and Satellite Tracking
6. Possible amendments to improve the current scheme, and which may reduce cost without compromising conservation and enforcement effectiveness, to be considered at the 20th Annual Meeting of NAFO with a view to implementing such a scheme on a permanent basis effective January 1, 1999.
7. Consideration of means of allowing scientists access to and the use of data collected by observers under a permanent scheme
8. Other business
9. Adoption of the Report
10. Adjournment

Annex 3. Contracting Party Responses to Questions Regarding the Pilot Project

Questions:

1. Who employs the observers, i.e. do they meet the requirements regarding independence and impartiality?
2. Is the 100% coverage requirement being adhered to? (Is it prohibited to fish without an observer?)
3. Are all observer reports submitted to the NAFO Secretariat?
4. Are the observer reports available to scientists, and to what extent do they make use of the reports?
5. Are hailing requirements still being adhered to by all vessels, or are hails no longer required for vessels covered by satellite tracking?
6. Is satellite tracking data now being used to control fishing activity, e.g. to control effort days in the shrimp fishery?

Denmark (in respect of Greenland)

1. The observers are government employees.
2. Observer coverage is required at all times in the Regulatory Area.
3. All observer reports are sent to the NAFO Secretariat.
4. Observer reports are made available to scientists.
5. Greenland does not have a satellite tracking program for vessels fishing in the Regulatory Area.

Norway

1. The observers are supplied by a Canadian company.
2. Observer coverage is required at all times in the Regulatory Area.
3. All reports are sent to the NAFO Secretariat.
4. Observer data is used by scientists.
5. Satellite tracking is now used instead of the hail system.
6. Satellite tracking is used for control of fishing effort.

Canada

1. Observers are supplied by a private sector company.
2. Observer coverage is required at all times in the Regulatory Area.
3. All reports are sent to the NAFO Secretariat.
4. Observer reports are made available to the scientists.
5. All Canadian vessels are still required to submit hail reports.

Estonia

1. The observers are government employees.
2. The 100% observer coverage is adhered to by Estonian fishing vessels.
3. All reports are sent to the NAFO Secretariat.
4. The information is not yet used by scientists.
5. Satellite tracking could be used to replace hail reports.
6. Satellite tracking is used to monitor vessels' activities in the NRA.

Iceland

1. The observers are government employees.
2. Observer coverage is required at all times in the Regulatory Area and fishing is prohibited without an observer on board.
3. Not sure whether reports are submitted to the Secretariat; will check on this point.
4. Observer reports are used by scientists.
5. Satellite tracking has not replaced the hail system.

Denmark (in respect of Faroe Islands)

1. The observers are government employees and are certified by the government.
2. They are required 100% of the time.
3. Reports are not sent to the NAFO Secretariat.
4. The information is made available to scientists.
5. Satellite tracking has not replaced the hail requirements.
6. Satellite tracking is not used to control fishing effort.

Japan

1. The observers are trained by the Japanese Government and are Government employees.
6. Japan has not implemented a satellite tracking system.

European Union

1. Observers are contracted from private sector companies.
2. There is 100% coverage at all times in the Regulatory Area. Fishing is prohibited unless an observer is on board the vessel.
3. All observer reports are sent to the NAFO Secretariat.
4. All reports are supplied to scientists of the EU flag states.
5. EU will soon be advising the NAFO Secretariat that EU vessels equipped with satellite devices will be submitting hails through satellite transmission.
6. Satellite tracking is used for monitoring purposes.

Annex 4. Evaluation Framework Summary Table

Management Measures	Pilot Project Compliance Measures										Traditional methods of control (*)				
	Satellite Tracking					Observer Scheme									
	Relevance		Efficacy/Efficiency			Relevance		Efficacy/Efficiency			Relevance		Efficacy/Efficiency		
	YES	NO	H	M	L	YES	NO	H	M	L	YES	NO	H	M	L
Fishing location	Y		H			Y		H			Y		H		
Fishing activities															
No. of operation	Y		No Consensus			Y		H			Y				L
Time in the area	Y		H			Y		H			Y		H		
Fishing Time	Y			M		Y		H			Y				L
Gear used		N				Y		H			Y			M	
Catch retained															
By species		N				Y		H			Y		No Consensus		
By live weight		N				Y		H			Y			M	
Discards															
Juveniles		N				Y		H			Y				L
By-catches		N				Y		H			Y				L
High-grading		N				Y		H			Y				L
Processing															
By species		N				Y		H			Y			M	
By presentation		N				Y		H			Y			M	
By production weight		N				Y		H			Y			M	
Landing/Transshipment															
Port/Location	Y		H			Y		H			Y		H		
Quantities Landed		N					N				Y		H		

Efficiency/Efficacy – H(High), M(Medium), L(Low)

*Traditional means: fishing and processing logbook, landing/transshipment declaration, sightings and inspections at sea (either by vessel or aircraft), hail-system and communication of catches, single mesh size, inspection ashore, etc.

1. Bolded ratings reflect consensus view, subject to explanatory notes.
2. Shaded areas reflect no consensus on efficiency/efficacy.

No. of operations (satellite tracking) - Efficiency/efficacy dependant on number and frequency of transmissions.

Catch retained by species (traditional) - Efficiency/efficacy subject to level of surveillance and fishery (shrimp versus multiple species).

Explanatory Notes

<u>Management Measure</u>	<u>Contracting Party</u>	<u>Note</u>
Catches retained on board	Denmark (Faroes & Greenland)	Observers assumed 100% effective.
No. of Operations	European Union	Satellite Tracking – Moderate, depending on number of positions per day.
Gear Used	European Union	Includes mesh size and sorting grid.
	Canada	Traditional – High during inspections.
Discards	European Union	Evaluation of discards goes beyond simple enforcement effectiveness.
Landing/Transshipments	EU/Norway	No transshipments observed.
Port/Location	EU	Observer-High, but not included in observer duties.
Efficiency/Efficacy (Observer)	Iceland	Overall – Not in terms of cost efficiency.
		Fishing location – High, in respect of accuracy but this is not real time location so it will not support inspection control.
		Juveniles – Not relevant for shrimp fishery.
Efficiency/Efficacy (Satellite)	Iceland	By-catches, high-grading and Processing by species – High, but not significant issue in shrimp fishery.
		All fishing activities (excluding gear used) – High, but due to low coverage, potential efficiency does not equal actual efficiency.
		Fishing time – High, can be obtained by calculation of vessel speed, although variable or lower speed may not necessarily indicate fishing.

Efficiency/Efficacy (Traditional)	Iceland	May be improved through enhanced use of electronic data exchange.
	Canada	Dependent on level of surveillance by platform type (aircraft, patrol vessel, dockside monitoring).
Overall	Iceland, Norway Denmark (Faroes & Greenland)	Evaluation based on experience in the shrimp the shrimp fishery only.

Annex 5. Estimated Cost of Surveillance - NAFO Regulatory Area
(Based on 1996 information)
(in Canadian dollars)

CONTRACTING PARTY	Secretariat	Norway	Deni(Gr/Ind)	Canada	Latvia	USA	Deni(Far)	Japan	Estonia	Iceland	EU	Russia	Total	Average
Reference Documents	97/4	97/1,97/2	97/3,97/25	97/6,97/22	97/12	97/29	98/4	97/16	97/17	97/19	97/33,97/34			
Satellite Tracking Technology														
Capital	\$ 21,000	\$ 100,000			\$12,000	\$70,000	\$ 22,000		\$ 24,000	\$ 200,000			\$ 449,000	
Operating Costs	\$ 6,000	\$ 20,000		\$ 150,000	\$ 4,000	\$20,000	\$ 1,000		\$ 8,000	\$ 24,000	\$ 500,000		\$ 733,000	
Operations Center							\$ 20,000						\$ 20,000	
Other	\$ 5,000				\$ 2,000				\$ 3,000				\$ 10,000	
Observer Coverage														
Operating Costs(\$/sea day)		\$ 400	\$ 388	\$ 350	\$ 350	\$ 352	\$ 200	\$ 530	\$ 350	\$ 318	\$ 320		\$ 3,558	\$ 356
Traditional Surveillance														
Vessels				\$ 3,600,000							\$ 1,400,000		\$ 5,000,000	
Aircraft				\$ 5,500,000									\$ 5,500,000	
Administration				\$ 1,500,000							\$ 150,000		\$ 1,650,000	
Total Inspections				278							97		375	
Cost/Inspection				\$ 19,000							\$ 24,000		\$ 43,000	\$ 13,000
Number of Vessels (WG WP 98/4)		15	6	8	3		15	2	6	39	47		141	
Number of observer and fishing days (WP 97/21)		1550	172	179	171		1883	320	1085	5984	7678		19002	
Total costs														
Satellite Technology														
One Time	\$ 21,000	\$ 100,000			\$12,000	\$70,000	\$ 22,000		\$ 24,000	\$ 200,000			\$ 449,000	
Annual	\$ 11,000	\$ 20,000		\$ 150,000	\$ 6,000	\$20,000	\$ 21,000		\$ 11,000	\$ 24,000	\$ 500,000		\$ 763,000	
Observer Coverage		\$ 606,000	\$ 67,000	\$ 63,000	\$60,000		\$ 377,000	\$171,000	\$390,000	\$1,696,000	\$2,456,000		\$ 6,076,000	\$ 320
Traditional Surveillance				\$10,800,000							\$2,350,000		\$13,150,000	\$ 692

1. Costs for NAFO Secretariat based on satellite technology at headquarters
2. Some Contracting Parties exceeded the 35% satellite requirement
3. Fishing days for some Contracting Parties decreased in 1997
4. Canadian vessel surveillance excludes military vessel support (estimated at \$5.0M)

Annex 6. Surveillance Results, 1992-1997

Fishing Effort

Year	1992	1993	1994	1995	1996	1997
Number of Vessels						
Number of Days						

Patrol Activity

Year	1992	1993	1994	1995	1996	1997
Sea-days						
Inspections						

Apparent Infringements

Year	1992	1993	1994	1995	1996	1997
Fishing location						
Fishing activities						
No. of operation						
Time in the area						
Fishing time						
Gear used						
Catch retained						
By species						
By live weight						
Discards						
Juveniles						
By-catches						
High-grading						
Processing						
By species						
By presentation						
By production weight						
Landing/Transshipment						
Port/Location						
Quantities landed						