



**TWENTY SEVENTH MEETING OF THE COUNCIL**  
 3 - 4 April 2019, Tórshavn, Faroe Islands

<b>DOCUMENT 11</b>	<b>PROPOSAL FOR A REVISED OBSERVATION SCHEME</b>
<b>Submitted by</b>	<b>CIO</b>
<b>Action requested</b>	Consider the proposal and its recommendations.
<b>Background</b>	NAMMCO 26 tasked CIO to continue the review of the Observation Scheme with the aim of presenting results and recommendations at the next Council meeting. The review should look at the text of the Provisions and the Implementation of the Observation Scheme.

## MAIN RECOMMENDATIONS

In reviewing Section B – the International Observation Scheme, criteria by which the Scheme could be evaluated were discussed. In addition, three main concerns were identified:

- the lack of clear purpose and objectives  
CIO agreed to expand the Scheme to collect reliable information on all kinds of hunting activities in the NAMMCO area, and not limit it to be a mechanism to monitor whether decisions made by the Commission are respected. CIO also agreed that it is the role of CIO to assess if NAMMCO recommendations are followed i.e. implemented in national legislation and the role of the observer is to see if national regulations are adhered to.
- the role of the observer  
CIO recognises that NAMMCO hunting activities are carried out in areas under national jurisdiction unlike e.g. the NAFO observer programme that applies within the NAFO regulatory area, an international area outside national borders. The majority of the CIO is therefore of the opinion that by assigning controlling responsibilities to observers i.e. *immediate* reporting of infringements, the observers will perform duties that belong to flag states/coastal states, and not NAMMCO.
- safety issues  
CIO recognises the significance of accounting for safety issues with regard to the observer's mission. CIO agreed on the importance of identifying the bodies responsible for implementing these measures.

### CIO agreed to forward the following recommendations for a revised Observation Scheme:

CIO **recommends** changing the current title from “Provisions of the Joint NAMMCO Control Scheme for the hunting of marine mammals” to “Provisions of the NAMMCO Inspection and Observation Scheme for the hunting of marine mammals in member countries”.

CIO **recommends** that the Section B - International Observation Scheme of the Provisions as laid out in appendix 1 is approved by Council with the purpose and objectives defined as:

*The purpose of this Observation Scheme is to collect reliable information on all kinds of hunting activities in the NAMMCO Member Countries. The objectives are to*

- a) *provide a mechanism for NAMMCO to oversee whether recommendations made by NAMMCO are implemented and national regulations adhered to*
- b) *provide a foundation for the member states to evaluate whether a recommendation is serving its purpose or not*
- c) *contribute to the improvement of the national regulation of hunting activities in the Member Countries*

Furthermore, CIO **recommends**:

- increasing coverage rates, more flexibility in setting the scope and the frequency of the observation activity is recommended. This means that observations are not automatically conducted every year, but that the budgets of several years may be combined in one year to allow a greater focus on one country and/or hunt, thus increasing the probability of observing more hunting events and diversifying the type of

hunts observed in a specific country. This would give better coverage and be more cost-efficient.

- developing an evaluation procedure including a periodicity and a set of criteria. A day observation rate could for example be a better measure for on-board observation activity than the fleet observation rate, as it would reflect the fact that the vessels are observed only part of the season and would account for the time lost in transit.
- updating and further developing the checklists for the various hunts observed and the NAMMCO reporting forms which are part of the mandatory reporting. It is also recommended that these lists be used for each observed catching event. The information collected on these reporting forms should allow compiling the data necessary to carry out a quantitative evaluation of the implementation.
- observing the kill of individual animals (drive hunts and sealing) to gain precise information on the compliance to the legal killing procedure.
- members collecting and submitting data necessary for evaluating the Scheme (e.g. hunting effort). The data, as defined by CIO, should be submitted annually by the members for inclusion in a database at the Secretariat, thus facilitating any review of the Scheme.
- the Secretariat keeping a precise and updated database of hunting and observation activities in NAMMCO countries to facilitate future evaluations of the Scheme.
- giving NAMMCO the possibility of assigning to the observer other tasks than observation activities (including scientific work).
- considering the feasibility of comparing results of the NAMMCO observation and that of the national inspection for specific hunts and season, to see whether they differ, thus indicating some possible issues.
- convening a course ultimate 2019, as the last training course for observers organised by NAMMCO was in 2013.
- encouraging observers to divide their time between several platforms in one season, instead of spending a longer time on a single platform.
- establishing routines to ensure whether on-board observers are aware of safety issues and safety measures.
- Allowing national observers - observers may observe in the country in which they reside.



## CIO PROPOSAL TO COUNCIL ON THE REVISION OF THE INTERNATIONAL OBSERVATION SCHEME

### This document includes:

CIO proposal for a revised Section B - International Observation Scheme, *page 5*

Appendix 1: new text of the Provisions, Section B - International Observation Scheme, *page 12*

Appendix 2: revised text of guidelines to Section B, *page 15*

Appendix 3: overview table of hunts in NAMMCO and observed years, *page 17*

Annex 1: Secretariat review of the Observation Scheme (2017/2018) amended by CIO, *page 18*

## CIO proposal for a revised Section B - International Observation Scheme

### **Background**

Council 26 endorsed the recommendation forwarded by the Committee on Inspection and Observation (CIO) to carry out a review of the NAMMCO International Observation Scheme. CIO was tasked to undertake such a review and give its recommendations to Council 27. The review should look at both the text of the Provisions related to the Observation Scheme and the implementation of the Scheme (Annual Report 2017, item 6.1, page 12).

The Provisions of the Joint NAMMCO Control Scheme for the Hunting of Marine Mammals was finalised and approved by Council in 1996. The Provisions consists of two sections – Section A dealing with ‘Common elements for national inspection schemes for coastal whaling in NAMMCO member countries’ and Section B dealing with the ‘International Observation Scheme’. There are 2 appendices, appendix 1 ‘Items for inclusion in whaling logbooks’ and appendix 2 (adopted by Council in 1997) ‘Guidelines to Section B – International Observation Scheme’. The text of the Provisions has later been revised and amended in 2006 and 2009.

The first operative season of the Observation Scheme was 1998. Since then NAMMCO has contracted observers every year up to and including 2017. In 2018 the Observation Scheme was put on hold, awaiting the outcome of this review.

Previously the Observation Scheme has been evaluated one time, in 2005. The current evaluation is based on a review undertaken by the Secretariat in 2017/2018 and amended by CIO (appendix 4) following internal processes in the member countries.

### **Evaluation**

For a detailed description of the administration of the Observation Scheme; the process of nominating and selecting observers and the scope and range of annual observations, and the role of the observers including instructions and reporting see section 3.1 – 3.3 in appendix 4.

For a description of the observed hunting activities during the years 1998 to 2017 per country and hunts observed see section 3.4 in appendix 4. For information on coverage rates and representativeness of observation activities and the cost effectiveness of the Observation Scheme see section 3.5.

CIO recommends that a new set of Provisions, Section B - International Observation Scheme are set up – see appendix 1. The main revision to the text pertains to purpose and objectives. The overall text has been reworded, restructured and updated. CIO focussed on rendering the Provisions more consistent with the provisions of other organisations, taking into account that NAMMCO observation activities in practice take place in national jurisdiction areas, as well as adhering to current international standards regarding e.g. safety of the observers.

A major concern raised in the review of the Observation Scheme carried out by the Secretariat was the lack of clear objectives for the Observation Scheme. It was further stated that this lack of objectives made an evaluation of the implementation of the Observation Scheme difficult. CIO agrees with this conclusion. The present assessment has therefore taken this into account and proposes a new set of Provisions, described and argued for below.

**Purpose of the Scheme: Observation versus inspection – monitoring versus controlling**

The purpose of the Observation Scheme as put down in the current Provisions, Section B, (B.1) states: “to provide a mechanism for NAMMCO to monitor whether decisions made by the Commission are respected. For this purpose, NAMMCO appoints observers who oversee hunting and inspection activities in NAMMCO member countries”.

It further states (B.2.1): “Observers are responsible for overseeing hunting activities and for observing whether or not these are carried out in accordance with decisions made through NAMMCO and national regulations” and (B.2.3) “shall report any violation of the regulations in a given area, and as soon as possible, send a report of such to the Secretariat, with a copy to the authorities in the country in question, as well as to the owners of the vessel. The captain, those in possession of the licence, and, if present, the inspector, shall be given the opportunity in a special paragraph of the report, to record their comments.” The guidelines to B.2.5 further states “the observer shall control whether these activities are carried out in accordance with relevant national regulations”.

CIO finds that the Provisions Section B including its guidelines does not clearly distinguish between the role of observing and controlling (i.e. notifying infringements) and also refers in places to *inspectors* and not *observers*. Presently the terminology in the text refers to the duty of the observer with the words monitor and oversee, but also control. Likewise, it is stated that the observer shall report any violations as soon as possible to the Secretariat and the authorities in the country where these have taken place. CIO finds that this reference, immediate reporting to the national authorities, can be interpreted as representing a control element.

It is the opinion of the CIO that the Observation Scheme is best served by only assigning the observer the role of observing, monitoring and collecting information on hunting related activities. Monitoring is here referring to the process of watching, keeping track of and gathering data on performance. Control on the other hand is to exercise authority. Inspectors<sup>1</sup> are officials authorised by national authorities who control compliance with national regulations. However, ensuring that national regulations are enforced, and that those who break them are sanctioned according to the regulations, is the responsibility of the member countries, not of NAMMCO, and therefore not of the NAMMCO observers.

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<sup>1</sup> In Greenland, controlling activities of whaling and sealing are carried out by wildlife officers, not inspectors. In this text, however, all controlling activities are referred to as inspector/inspection.

The majority<sup>2</sup> of NAMMCO hunts are conducted in waters under the national jurisdiction of one of the NAMMCO member countries or neighbours Exclusive Economic Zones (EEZ). The majority of the CIO is of the opinion that assigning controlling responsibilities that are embedded in and governed by national jurisdictions to an international body needs considerations of a principal nature that would require acceptance at a different level in the member countries. The observation takes place within EEZ and by giving observers the right to conduct control tasks they in fact perform duties that belong to flag states/coastal states.

**Purpose of the Scheme: monitoring the implementation of NAMMCO recommendations versus expanding the scope of the Scheme**

CIO thinks that the scope of the Observation Scheme should not be limited to: “provide a mechanism for NAMMCO to monitor whether decisions made by the Commission are respected” but to collect reliable *information on all kinds of hunting activities* in NAMMCO area. In so doing it will provide a mechanism for NAMMCO to oversee if its recommendations are implemented by its members, as well as informing NAMMCO’s future recommendations and ultimately concurring to improving national hunting legislations. Possible information emanating from the observation activities can be, besides compliance rate, information on hunting efficiency, hunting methods and conditions, national inspection activities etc.

Within this Scheme,

- the focus of NAMMCO though the CIO is to examine whether NAMMCO recommendations are implemented by national authorities through national regulations. This is a deskwork that the CIO should perform, comparing NAMMCO recommendations and national legislations and application framework.
- The focus of the observation is adherence to national regulations by the hunters and the national inspection.

Through the proposed new Scheme, the member countries will also get a foundation whereby they can evaluate whether a recommendation is serving its purpose and the Scheme can thus contribute to the improvement of national regulations pertaining to hunting activities.

CIO therefore propose the following general Provisions on purpose and objectives:

1. *The purpose of this Observation Scheme is to collect reliable information on all kinds of hunting activities in the NAMMCO Member Countries. The objectives are to:*
  - a) *provide a mechanism for NAMMCO to oversee whether recommendations made by NAMMCO are implemented and national regulations adhered to*
  - b) *provide a foundation for the member states to evaluate whether a recommendation is serving its purpose or not*
  - c) *contribute to the improvement of the national regulation of hunting activities in the Member countries*

**Evaluating the implementation of the Observation Scheme**

In the 2005 review CIO concluded that: “The success of the Scheme is not measured by a high number of actual hunting observations during a period, although this is desirable, but the fact

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<sup>2</sup> The exception being the international area outside the fishery zone around Jan Mayen. In reality the pack ice seal hunt due to poor ice conditions are taking place within Greenlandic and Icelandic EEZ, based on permission granted by these countries. Whaling can take place in the international area in the IWC areas ESB, EW, EN and CM. These regulations areas are defined annually.

that an observer is present and able to conduct his or her job without interference of any sort". It was further noted that the allocated funds would never allow for more than partial coverage. CIO agrees with the 2005 conclusion that having implemented an Observation Scheme in practice is the first step of a successful Scheme. However, this being achieved, CIO found it useful in 2013 to look into more quantitative measurement of success of the implementation. One such criteria proposed by the 2018 review is whether the achieved observation coverage allows to increase the observed compliance rate to the overall compliance rate for specific hunts. CIO also decided in 2013 to collect from the member countries data on national inspection and monitoring effort.

NAMMCO is recognised by FAO as a regional fisheries body. The review undertaken by the Secretariat/CIO (appendix 4) looked at international legal instruments, guidelines and practices pertaining to observation in fisheries and fisheries bodies and identified criteria for evaluating the implementation of the NAMMCO Scheme. CIO finds this to be relevant in its evaluation of the implementation of the Scheme and discuss the identified criteria below. (Text in cursive is taken from appendix 4).

*Coverage rate and representativeness of observations activities (see Appendix 4, section 2.1)*  
*Best practices among regional fisheries bodies show that the required observer coverage rates are quite variable ranging from 5% observation coverage to 100%, depending of the nature of the fisheries.*

Section B in the Provisions refers to observations of all kinds of hunting activities in member countries. As hunting in NAMMCO countries are multiple and varied this poses a challenge with respect to coverage (appendix 3). Some hunts are minor with respect to the number of animals caught, some are taking place in very remote places, over longer time period, scattered over big distances and in such an opportunistic manner that planning to send observers represent logistical challenges. Also, the probability of actually observing any hunting events during a given period varies a lot. All hunts are weather dependent in the sense that hunting does not take place if the weather is unsuitable for hunting and the availability of other resources e.g. fish, game animals, may compete with hunting of marine mammals.

The coverage level is defined as the percentage of hunting effort observed. The observer coverage is the proportion of observed hunting effort to the total hunting effort, by specific hunting season or over the years. Appendix 4, section 2.1 continues to define the level of observer coverage expressed as a fleet observation rate, a catch observation rate and a kill observation rate.

The review undertaken by the Secretariat/CIO (appendix 4) show that the overall and hunt specific coverage rates are low. It furthermore concludes that the applicability of the coverage parameters depends upon the specific hunt. Also, the information available through the reporting of the Scheme and ultimately by what the observers have been asked to look for and to report on influence the usability of these parameters. In particular, observers have not been prompted to report on individual kills in drive hunts and pack ice hunts.

CIO acknowledges that many hunts have never been observed by NAMMCO. This pertains to, among others, coastal sealing in Norway, sealing in Iceland, most small cetacean hunts and walrus hunts in Greenland. To extend the coverage of the Observation Scheme these hunts should be prioritised for observation to the extent possible.

*On-land observation versus on-board observation*

*General practices of RFMOs show a preference for on-board observation as opposed to on-land observation.*

On-board observation documents often both the process and its result, while on-land observations are only able to document the result. NAMMCO implemented on-board observations in 2002 and since then this has been the norm where applicable. Land-based observations continued for hunts where it is relevant like in the Faroes. CIO finds that the Scheme complies with general RFMOs practices.

*Observers' competence and safety of observers*

*Observers must be sufficiently qualified and trained. The FAO recognises that "large measure of the success of any observer program depends on the professional competence and personal integrity of the observers" and lists various criteria in this regard. Of particular relevance are the following:*

- *observers should not be granted enforcement powers;*
- *observers should receive appropriate training and evaluation;*
- *observers must be paid appropriately for their, often hazardous, duties.*

CIO finds that all the above requirements are met. Emphasis should be given to updating and developing the checklist for the various hunts observed and the NAMMCO reporting forms which are part of the mandatory reporting. These lists should be used for each observed catching event.

The last training course for observers organised by NAMMCO was in 2013. CIO finds that these courses should be held on a regular basis and recommends convening a course ultimate 2019.

The Observation Scheme is conducted in English or a Scandinavian language. CIO recognises that language, comprehension and communication will always pose a challenge also in terms of safety, which should be given attention

*Establishing and reviewing the Observer Scheme*

*Flag States should where appropriate, implement observer programmes for its fleet as part of the obligation to exercise effective monitoring, control and surveillance measures. This obligation should be implemented by sub regional or regional fisheries management organisations and arrangements and procedures should be developed to review and assess the effectiveness of compliance and enforcement measures on a regular basis.*

NAMMCO has not formalised a review procedure. CIO finds that such procedure would be useful and should be developed.

*Cost effectiveness of the Scheme*

*The obligation to implement observer programmes, where appropriate, is deriving from the Fish Stock Agreement and Code of Conduct. The implementation of the observer programme should be fulfilled in good faith, as required by UNCLOS. Good faith includes considering the cost effectiveness of a programme.*

CIO recognises the limitations set in the budget allocated to the Scheme. Increasing the cost effectiveness requires estimating how an increase in budget for a targeted hunt or a change in implementation strategy (e.g. allocating several budget years to one year) would increase the chance of increasing the number of actual observation events.

### **Conclusion and recommendations**

CIO **recommends** changing the current title from “Provisions of the Joint NAMMCO Control Scheme for the hunting of marine mammals” to “Provisions of the NAMMCO Inspection and Observation Scheme for the hunting of marine mammals in member countries”.

CIO **recommends** that the Section B - International Observation Scheme of the Provisions as laid out in appendix 1 is approved by Council with the purpose and objectives defined as:

*The purpose of this Observation Scheme is to collect reliable information on all kinds of hunting activities in the NAMMCO Member Countries. The objectives are to*

- d) provide a mechanism for NAMMCO to oversee whether recommendations made by NAMMCO are implemented and national regulations adhered to*
- e) provide a foundation for the member states to evaluate whether a recommendation is serving its purpose or not*
- f) contribute to the improvement of the national regulation of hunting activities in the Member Countries*
- g)*

Furthermore, CIO **recommends** the following:

- increasing coverage rates, more flexibility in setting the scope and the frequency of the observation activity is recommended. This means that observations are not automatically conducted every year, but that the budget of several years may sometimes be combined to allow a greater focus on one country and/or hunt, thus increasing the probability of observing more hunting events and diversifying the type of hunts observed in a specific country. This would give better coverage and be more cost-efficient.
- developing an evaluation procedure including a periodicity and a set of criteria. A day observation rate could for example be a better measure for on-board observation activity than the fleet observation rate, as it would reflect the fact that the vessels are observed only part of the season and would account for the time lost in transit.
- updating and further developing the checklists for the various hunts observed and the NAMMCO reporting forms which are part of the mandatory reporting. It is also recommended that these lists be used for each observed catching event. The information collected on these reporting forms should allow compiling the data necessary to carry out a quantitative evaluation of the implementation.
- observing the kill of individual animals (drive hunts and sealing) to gain precise information on the compliance to the legal killing procedure.
- members collecting and submitting data necessary for evaluating the Scheme (e.g. hunting effort). The data, as defined by CIO, should be submitted annually by the members for inclusion in a database at the Secretariat, thus facilitating any review of the Scheme.
- the Secretariat keeping a precise and updated database of hunting and observation activities in NAMMCO countries to facilitate future evaluations of the Scheme.

- giving NAMMCO the possibility of assigning to the observer other tasks than observation activities (including scientific work).
- considering the feasibility of comparing results of the NAMMCO observation and that of the national inspection for specific hunts and season, to see whether they differ, thus indicating some possible issues.
- convening a course ultimate 2019, as the last training course for observers organised by NAMMCO was in 2013.
- encouraging observers to divide their time between several platforms in one season, instead of spending a longer time on a single platform.
- establishing routines to ensure whether on-board observers are aware of safety issues and safety measures.
- Allowing national observers - observers may observe in the country in which they reside.

Sections highlighted in green represent new text as compared to the current text of Section B of the Provisions

## **SECTION B - INTERNATIONAL OBSERVATION SCHEME**

### **General provisions**

1. The purpose of this Observation Scheme is to collect reliable information on all kinds of hunting activities in the NAMMCO Member Countries. The objectives are to
  - a. provide a mechanism for NAMMCO to oversee whether recommendations made by NAMMCO are implemented and national regulations and adhered to
  - b. provide a foundation for the member states to evaluate whether a recommendation is serving its purpose or not
  - c. contribute to the improvement of the national regulation of hunting activities in the Member Countries
2. These objectives will be reached by NAMMCO appointing observers to observe hunting and inspection activities in NAMMCO member countries and the Committee on Inspection and Observation reviewing the observation activities and the implementation of NAMMCO recommendations in national legislations (see section 1).
3. The information collected through the Observation Scheme shall be made available to any NAMMCO body requesting it.
4. Observations of hunting activities can take place on board a vessel or on shore, including flensing, storage, landing or delivering of the catch.
5. NAMMCO/the Council decides annually the scope of observation priorities for the coming year. The Secretariat is responsible for the practical administration and coordination of these activities.
6. Deployment of observer according to this Scheme cannot be refused.

### **The Observer**

7. "Observer" means a person who is authorized and certified by the NAMMCO member countries to observe, monitor and collect information on all hunting related activities. The observer shall be independent and impartial, and have the knowledge, skills and abilities to perform all of the duties, functions and requirements specified in this Scheme.

### **Duties of the Member Countries**

8. Member countries shall take appropriate measures to ensure that observation of the relevant hunting activities can be carried out properly and efficiently. They shall require its hunters (cf. Section 4) to permit observers appointed by NAMMCO to perform their tasks and duties according to this Scheme.

9. Member countries, together with NAMMCO, will concur to take appropriate action to ensure safe working conditions, the protection, security and welfare of observers in the performance of their duties, consistent with international standards and guidelines.
10. Member countries shall ensure that their observers have no financial or beneficial interest in and, are paid in a manner that demonstrates financial independence from, the subject being monitored.

#### **Duties of the observer**

11. The observer shall perform such work, including for scientific purposes, as NAMMCO may request.
12. The observer shall execute their duties and functions in an unbiased manner on the basis of the guidelines adopted by NAMMCO (Appendix 2 – Guidelines to Section B). Observers are responsible to NAMMCO and can neither seek nor receive instructions from any other authority.
13. The observer has no authority of jurisdiction and cannot intervene in any activities connected with the hunting activities.
14. The observer shall check licences and relevant certificates, logbooks, all rooms on board or on land, hunting equipment and communication equipment which are relevant for the work. If an electronic monitoring system is mandatory the observer shall check the system certificates, that the seals of amplifiers and control boxes are not broken, and that the system is activated. Sealed components shall not be broken by the observer.
15. If a national inspector is present at the time of the observation, the observer shall also oversee whether the inspection is done according to national regulations.
16. The observer shall no later than 8 days after the end of the employment period submit a written report to NAMMCO on a NAMMCO observer report form.
17. The observer shall ensure confidentiality of information collected under this Scheme.
18. The observer shall introduce themselves to inspectors at sea, or in port upon arrival of the vessel.

#### **Duties of the observation subject**

19. Each hunter (cf. section 4 and 13) shall extend such cooperation and assistance as may be required to enable the observers to carry out their duties. This cooperation shall include providing the observer with such access as may be required to the hunting operation and catch, including storage, flensing site, landing or delivering site.
20. The observer is to be provided food and accommodations of a standard no less than provided to the hunters/crew.
21. The observer is to be included in all emergency drills conducted.

22. The master of a vessel shall notify the observer when an inspection party has signalled their intent to board the vessel.

23. Masters of hunting activities (cf. section 4) shall not obstruct, intimidate, interfere with, influence, bribe or attempt to bribe an observer in the performance of his/her duties.

#### **Duties of the Secretariat**

24. The Observer Scheme is administered by the Secretariat, in accordance with guidelines set down by NAMMCO.

25. The Secretariat prepares an annual report of the Observation Scheme for the review of NAMMCO. The report shall include all relevant information and comments.

26. The Secretariat shall send a copy of the observer's reports to the member country in which the observations have taken place.

A proposed new time schedule is highlighted in green.

## **GUIDELINES TO SECTION B - INTERNATIONAL OBSERVATION SCHEME**

### **OBSERVERS**

#### **Appointment of observer**

The Council appoints observers for one year at a time.

Member countries develop a list of candidates for the following year and send it to the Secretariat by **1 June**. Member countries may nominate non-nationals as observers.

The list shall include information on the qualifications of the candidates. The Secretariat circulates **by 15 June** a combined list of suggested candidates to member countries for approval. In the event that a member country wishes to make a reservation to any candidate, this must be done before **15 August**. It is understood that a reservation to the appointment of a particular candidate is a reservation to his/her appointment as a NAMMCO observer in any area of activity. The Secretariat then circulates the list of candidates approved by all member countries to the Council for appointment by **1 September**.

#### **Competence, training etc. of observers**

The requirements for the professional, linguistic and safety at sea qualifications of the observers are the following: Observers must have at least the same level of professional competence as that required of inspectors in the country where the observations are to take place. Exemption from this requirement can be given by the country where the observations are to take place.

For safety reasons, the language competency of observers must be taken into consideration. An observer on board a hunting vessel must be able to communicate spontaneously with the crew. For communication on land, a translator may be used.

In order to ensure that the persons appointed as observers are sufficiently informed about the relevant hunting regulations and the duties of national control personnel, observers shall participate in whatever training courses are compulsory for control personnel in the member countries where the observations are due to occur. If such courses are not held, or if the observer is unable for other reasons to participate in such courses, the observer must receive other relevant training, developed in co-operation between the national authorities and NAMMCO.

#### **Duties of the observer**

Observation activities can be carried out in four areas:

- observation of whaling carried out with the use of a harpoon gun or of flensing of whales taken with a harpoon gun;
- observation of sealing or forms of whaling other than with harpoon guns, or the flensing of animals from such hunting;
- observation of the landing/delivery of marine mammal catches;
- observations of national marine mammal inspection activities

The observer must check all the points listed for the hunt observed. Check lists are developed for every specific hunt.

**Reports**

No later than **eight days** after the end of the employment period the observer must submit a written report to the NAMMCO Secretariat. The report shall consist of the individual hunt event check list, NAMMCO hunting form (active hunting days etc, statistics) The language of the report shall be either English or a Scandinavian language.

**General conduct of observers**

During the exercise of their duties, observers shall conduct themselves with appropriate tact and respect. Upon arrival at a vessel, a landing/receiving station or other place where observation duties are carried out, the observer shall always display their authorisation and identification card to the person in charge.

**Confidentiality**

Observers shall ensure the confidentiality of their duties and shall not report on observations carried out under the NAMMCO Control Scheme to any other parties than the Secretariat.

**ADMINISTRATION OF THE SCHEME****Plans for observation and activities**

**By 1 October each** year the Secretariat in cooperation with CIO develops a proposal for the Council for the scope and range of observation activities during the following year in accordance with budgeted funds for these activities. The Council shall approve this proposal and appoint the observers **by 1 November**. The Secretariat, in co-operation with control authorities in respective member countries, then develops a specific plan for observation activities. The plan shall, among other things, define the time frame for observation activities and shall specify the observation areas for each observer. The Secretariat may for practical reasons, and in co-operation with the authorities of the relevant member countries, make changes in the plan if necessary. The detailed plan of observation activities shall only be known to the control authorities in the relevant member countries and the Secretariat.

**Employment of observers**

When a detailed plan of observation activities for the year is finalized, those observers who will be called upon for active observation will receive an employment contract from the Secretariat. When both parties sign this, the observer will receive an identification card, as well as other relevant documentation necessary for his/her duties. The observer shall return his/her identification card to the Secretariat together with the final report of activities. He/she shall then receive a letter from the Secretariat confirming his/her completion of duties according to the Scheme.

## OVERVIEW OF HUNTS AND YEARS OBSERVED

Country	Species / stocks	Type of hunt	Platform*1 and conditions	Dispatching mean	Years observed *2
Faroes	Pilot whale	drive	boats, killing from beach	spinal lance	1999-2001*, 2002, 2007, 2012, 2015
	Dolphins	drive	boats, killing from beach	spinal lance	
	Harbour porpoise	recreational	boat	shotguns with pellets cartridges	
	Grey seal	reduction purposes around fish farm	boat/land	rifle	
Greenland*3	Bowhead whale	professional	3 boats	harpoon cannon	
	Fin whale	professional	2 boats or larger boat	harpoon cannon	2006
	Humpback whale	professional	1 boat	harpoon cannon	
	Minke whale	professional	1 boat	harpoon cannon	2002, 2004, 2006, 2011, 2014
	Minke whale - collective	professional	minimum 5 skiffs/open motor boats	rifle	2011
	Bottlenose whale	professional/recreational	open motor boats - collective	rifle	
	Killer whale	professional/recreational	open motor boats - collective	rifle	
	Pilot whale	professional/recreational	open motor boats - collective	rifle	
	Harbour porpoise	professional/recreational	open motor boats - collective	rifle	2004, 2006, 2014
	Dolphins	professional/recreational	open motor boats - collective	rifle	
	Beluga (North -Qaanaaq)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Beluga (Central)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Beluga (South)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Beluga (East GL)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Narwhal/Beluga	professional/recreational	open water/under sea ice	net	
	Narwhal (Inglefield Bredning and Smith Sound)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Narwhal (Melville Bay)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Narwhal (Uummannaq and Disko Bay)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Narwhal East Greenland	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Walrus (Qaanaaq) Baffin Bay stock	professional	open water-from floe edge	harpoon, rifle, lance	
	Walrus (West Greenland) Southest Baffin Island	professional	open water-from floe edge	harpoon, rifle, lance	
	Walrus (East Greenland)	professional	open water-from floe edge	harpoon, rifle, lance	
	Harp seal	professiona/recreational	boat	rifle	2011, 2014
Hooded seal	professiona/recreational	boat	rifle		
Bearded seal	professiona/recreational	boat	rifle		
Ringed seal	professiona/recreational	on the ice	rifle		
Ringed seal	professiona/recreational	from ice edge (with kayak or small boat to haul out)	rifle		
Ringed seal	professiona/recreational	ice	net		
Harbour seal	<i>protected 2010</i>			2006	
Iceland	Fin whale	professional	boat	harpoon cannon	2010, 2013
	Minke whale	professional	boat	harpoon cannon	2010, 2011, 2013, 2017
	Grey seal	reduction purposes around fish farm	land, in rivers' mouth	rifle & club	
	Harbour seal	reduction purposes around fish farm	land, in rivers' mouth	net	
Norway	Minke whale	boat	boat	harpoon cannon (penthrite grenade)/back-up rifle	1998-2001*, 2002, 2003, 2009, 2013, 2016
	Harp seal	boat - ice	Main vessel, small boat or ice	rifle + hakapik (adults) rifle + hakapik/slagkrok (pups)	1998-2001*, 2005, 2008
	Hooded seal	<i>protected 2007</i>			1998-2001*, 2005
	Grey seal	recreational	hunter laying on land, animal on land or in water	rifle	
	Harbour seal	recreational	hunter laying on land, animal on land or in water	rifle	
	Ringed seal (Svalbard)	recreational	hunter laying on land, animal on ice, land or in water (16.08 - 30.11)	rifle	
Bearded seal (Svalbard)	recreational	hunter laying on land, animal on land, ice or in water	rifle		
* Before 2002, observations are land based only					
*1 Platforms mentioned is sometimes mandatory or the most usual platform used for that hunt					
*2 Covers the whole hunting process (the chase, the kill) and not all observations resulted in successful catch					
*3 1998-2001; only landbased observations, 2002 onwards a combination of land based and out at sea					



**REVIEW OF THE NAMMCO OBSERVATION SCHEME**

*Prepared by the NAMMCO Secretariat. Reviewed by Daniel Pike and CIO*

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# REVIEW OF THE NAMMCO OBSERVATION SCHEME

November 2018

## 1 INTRODUCTION

### 1.1 Background

The North Atlantic Marine Mammal Commission (hereinafter NAMMCO) since 1998 operates an international Observation Scheme (hereinafter often referred as the Scheme). The purpose is to monitor whether national legislation and recommendations made by NAMMCO are implemented and complied with. NAMMCO appoints international observers to monitor sealing and whaling activities in selected areas in NAMMCO member countries under the Provisions of the Joint Control Scheme for the Hunting of Marine Mammals<sup>1</sup>.

The last review of the Observation Scheme was prepared by the Secretariat for the Committee on Inspection and Observation (hereinafter CIO) meeting in January 2005<sup>2</sup> (Appendix 2). In 2017, the Secretariat undertook to review the Observation scheme for the CIO February meeting 2018.

### 1.2 Aim and structure of the report

The aim of the report is to:

- Review the implementation process of the NAMMCO Observation Scheme;
- Evaluate the Scheme's implementation;
- Recommend possible improvements in any domains related to the implementation process.

The review and evaluation of the Observation Scheme covers the period since its initiation in 1998 until and including 2017.

The report is structured as follows:

Following the introductory section 1, the report is broken into three sections:

- Section 2 "Methodology" clarifies methods used to review and evaluate the Scheme.
- Section 3 "Results and Discussions" is further divided into five sub-sections. The first shows how the observation process is carried out, including how observers are nominated and selected, what precisely is their role and what is the scope of observation. The second gives a tabular overview of some elements of the Scheme, while the third shows which infractions have been identified so far. The fourth sub-section reviews observed hunts. It is organised per member state, in alphabetical order. Emphasis has been placed on numerically expressing the findings, where possible, then to conduct a more precise evaluation and a comparison, where appropriate, with other regional observer programmes. The final sub-section explains the rationale behind the selection of evaluation criteria for the Scheme, before considering each criterion in turn.
- Section 4 "Conclusion and Recommendations", summarises provides the findings and the Secretariat's recommendations for improving the implementation process of the Observation Scheme.

## 2 METHODOLOGY

The review of the Scheme is based upon assessing the related NAMMCO documents, such as Provisions of the Joint Control Scheme for the Hunting of Marine Mammals, annual Secretariat's reports on the implementation of the Scheme, observers' reports and diaries and other relevant documents. In addition, some

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<sup>1</sup> Provisions of the Joint NAMMCO Control Scheme for the Hunting of Marine Mammals, 1997

<sup>2</sup> NAMMCO. 2005. Review of the NAMMCO Observation Scheme. Document NAMMCO I&O-2005-03.

more informal methods were used, such as consultations and interviews with key NAMMCO staff. The results are presented as a general overview, as well as per member country.

The evaluation relies on reviewing the implementation of the Scheme in light of criteria based on international instruments relevant to NAMMCO, as well as guidelines, standards and practices from other regional fisheries bodies practices and the Scheme objectives.

## **2.1 Coverage rate**

An important parameter for assessing observer programmes is the level of observer coverage, in the NAMMCO case, the percentage of hunting effort observed. The observer coverage is the proportion of observed hunting effort to the total hunting effort. The level of observer coverage can be expressed in three ways:

### *a) As a fleet observation rate (FOR) - for on-board observation*

The fleet observation rate per season, or season fleet observation rate (FOR), is the percentage of observed hunting vessels to the total number of hunting vessels in a specific season.

The fleet observation rate for observed seasons (OFOR) is the average of the fleet observation rates for all the observed seasons.

The fleet overall observation rate for all seasons since the inception of the scheme, or total fleet observation rate (TFOR), is the average of the season fleet observation rates for all seasons since the inception of the Scheme in 1998, with non-observed season having a fleet observation rate equal to 0.

The FOR is not a very precise representation of the observation coverage, as vessels are observed only part of the season and transit time to the hunting area is not accounted for. Transit time can represent several days in some hunts like minke whaling in the Barents Sea and sealing in the West Ice. A day observation rate would be a better measure for on-board observation activity. The data available from the observer reports did not allow for that to be calculated.

In the case of pilot whaling observation, a FOR could be estimated if the observers were asked to/could board some of the boats participating in a drive. However, this does not seem to have happened and has so far not been specifically asked for and is not applicable.

### *b) As a catching event observation rate (COR)*

The catching event observation rate (COR) is the ratio of catching events under observation to the total catching events in a specific season. As the FOR above it can be calculated for observed season (OCOR) or for all hunting seasons since 1998 (TCOR).

In the case of the Norwegian sealing, the catching event is defined as every time a group of seals is targeted by the sealers, seals killed and retrieved on board, regardless of the number of seals killed. The COR is not available, as the observers have not been specifically asked to report on the number of catching events observed.

In the case of the Faroese pilot whaling, the catching event is the *grind*, or the pilot whale drive. The observed season observation rate (OCOR) and the total observation rate (TCOR) are calculated in similar ways as above.

### *c) As a kill observation rate (KOR)*

The kill observation rate (KOR) would be the ratio of individual kill under observation to the total kill events (the total number of animals killed) in a catching event. In the case of large whale hunts, the COR and the KOR will be the same.

However, observers have not been specifically asked to report on individual kill neither for the Norwegian sealing nor the pilot whaling, so a kill observation rate is not available. This is a limitation of the Observation Scheme, as this could otherwise provide further information on the hunting process.

In the case of Greenland, the reporting requirements laid down in the Observation Scheme are quite general and do not always cover the necessary information to allow calculations of most of the different coverage rates. To be able to generate FOR, COR and KOR for all observed hunts will require more precise reporting requirements asked of the observers.

## **2.2 Identifying relevant sources for the evaluation criteria**

NAMMCO is recognised by FAO as a regional fisheries body<sup>3</sup>. International legal instruments and guidelines and practices pertaining to fisheries and fisheries bodies were therefore used to identify criteria for evaluating the implementation of the NAMMCO Scheme. This sub-section describes the rationale for this.

State Parties to the Law of the Sea Convention (hereinafter LOSC)<sup>4</sup> have general conservation obligations and responsibilities in their capacities as coastal and flag states. These obligations have been interpreted by the following relevant instruments<sup>5</sup>:

- **The Fish Stocks Agreement**<sup>6</sup>, as it sets out the regime for the conservation and management of straddling and highly migratory fish stocks, by reference to LOSC Annex I. Parts of the Fish Stocks Agreement, and in particular its provisions on regional management constitute generally accepted standards which coastal States must take into account when conserving and managing the living resources in their EEZ;
- **The FAO Code of Conduct**<sup>7</sup>, whilst not a legally binding instrument, mostly reflects customary international law;
- **FAO guidelines for responsible fisheries**<sup>8</sup> supporting the Code of Conduct;
- **RFMO measures** pertaining to observer programmes. These measures can be argued to constitute generally recommended minimum standards;
- **Chatham House Recommended Best Practices for Regional Fisheries Organizations**<sup>9</sup>, a document produced by an expert panel, which was set up following one of the recommendations of the ministerial-led Task Force on Illegal, Unreported and Unregulated Fishing on the High Seas.

<sup>3</sup> See <http://www.fao.org/fishery/rfb/nammco/en>.

<sup>4</sup> UN General Assembly, Convention on the Law of the Sea, 10 December 1982.

<sup>5</sup> All parties to the LOSC (which includes the NAMMCO Member States) are under the general obligation to protect and preserve the marine environment pursuant to Art. 192 LOSC in all maritime zones, whether within or beyond national jurisdiction. This includes marine living resources (see the Southern Bluefin Tuna Case), fish as well as marine mammals. This obligation to protect and preserve has to be interpreted quite extensively, including in light of the corpus of international environmental law (see the South China Sea Award).

More specifically, states in their capacity as flag state are under specific obligations to ensure that vessels flying their flag do not undermine these responsibilities (see LOSC Article 94, and Advisory Opinion to the SRFC). This requires taking the necessary administrative measures to ensure that this is so.

States are also, in their capacity as coastal state, under the specific obligation to conserve and manage the living resources in their EEZs so as to ensure that these are not endangered by over-exploitation. In so doing, states must inter alia take into account generally recommended international minimum standards, whether sub-regional, regional or global. The LOSC is therefore a relevant source for evaluating coastal State measures to conserve and manage living resources, including for example by adopting observation schemes. Being a framework convention, the LOSC contains no specific provisions on observation. However, in fulfilment of their obligations, state parties must consider subsequent instruments that do make reference to observation schemes when these measures are part of the general corpus of environmental law (thus informing states' obligations under Art. 192 LOSC) and when these measures match generally recommended standards which coastal and flag States must take into account.

<sup>6</sup> Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UN Fish Stocks Agreement).

<sup>7</sup> 1995 FAO Code of Conduct for Responsible Fisheries.

<sup>8</sup> Recent trends in monitoring, control and surveillance systems for capture fisheries. Flewwelling, P.; Cullinan, C.; Balton, D.; Sautter, R.P.; Reynolds, J.E. FAO Fisheries Technical Paper. No. 415. Rome, FAO. 2002.

<sup>9</sup> Recommended Best Practices for Regional Fisheries Management Organizations, Report of an independent panel Michael W. Lodge, David Anderson, Terje Løbach, Gordon Munro, Keith Sainsbury, Anna Willock, The Royal Institute of International Affairs Chatham House, 2007.

These instruments contain what could be considered criteria for evaluating observer programmes of regional fisheries bodies. The relevant criteria for evaluation of the NAMMCO Observation Scheme are as follows:

#### Coverage rate and representativeness of observation activities

Best practices among regional fisheries bodies show that the required observer coverage rates are quite variable: in tuna RFMOs a minimum of 5% observation coverage<sup>10</sup> is demanded while CCAMLR's observer programmes calls for the 100%. Full coverage of fishing activities, however, does not appear to be a standard in RFMO practices.<sup>11</sup>

Also, coverage needs must be assessed in line with the specific objectives and issues target of each monitoring programme.

#### On-land observation versus on-board observation

General practices of RFMOs show a preference for on-board observation as opposed to on-land observation. The motive for this is the higher effectiveness of the on-board observation, which documents both the process and its result - and issues if any, while on-land observation only documents the result, ignoring the process and its issues<sup>12</sup>.

#### Observers' competence and safety of observers

Observers must be sufficiently qualified and trained. The FAO recognises that "large measure of the success of any observer program depends on the professional competence and personal integrity of the observers"<sup>13</sup>, and lists various criteria in this regard. Of particular relevance are the following:

- observers should not be granted enforcement powers;
- observers should receive appropriate training and evaluation;
- observers must be paid appropriately for their, often hazardous, duties.<sup>14</sup>

#### Establishing and reviewing the observer programme

Flag States should where appropriate, implement observer programmes for its vessels as part of the obligation to exercise effective monitoring, control and surveillance (MCS) measures, which include observer programmes. This obligation should be implemented by sub regional or regional fisheries management organisations and arrangements<sup>15</sup> and procedures should be developed to review and assess the effectiveness of compliance and enforcement measures on a regular basis<sup>16</sup>.

#### Cost effectiveness of the observer programme

The obligation to implement observer programmes, where appropriate, is deriving from the Fish Stock Agreement and Code of Conduct (see discussion in the paragraph above). The implementation of the observer programme should be fulfilled in good faith, as required by the LOSC<sup>17</sup>. *Good faith* includes considering the cost effectiveness of a programme.

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<sup>10</sup> Tuna longline fisheries by IATTC and WCPFC where; the ICCAT CPC observer programme which only requires 20% coverage on large pelagic trawlers, longline and baitboat vessels; and the IOTC and CCSBT scientific observer programmes which only require 5% (IOTC) and 10% (CCSBT) coverage. SPRFMO Documents Observer Programmes

<sup>11</sup> Overview of current RFMOs practices is available *inter alia* in SPRFMO Secretariat Document COMM-04-INF-04, Observer Programmes of RFMOs, 2016.

<sup>12</sup> Overview of current RFMOs practices is available *inter alia* in SPRFMO Secretariat Document COMM-04-INF-04, Observer Programmes of RFMOs, 2016.

<sup>13</sup> Supra note 21, p.60.

<sup>14</sup> Ibid, p.61.

<sup>15</sup> The Fish Stock Agreement Art. 18(3) and Code of Conduct Art. 7.7.3. This obligation is qualified with the text "as appropriate", however the Chatham House Recommendations note "observer programmes have long been regarded as an essential component of fisheries MCS" (p. 47 Chatham House Recommendations).

<sup>16</sup> Supra note 22, p. 66.

<sup>17</sup> See LOSC Article 300.

### 3 RESULTS AND DISCUSSION

#### 3.1 Observation in practice

##### 3.1.1 **Nomination and selection of observers**

Member countries nominate observer candidates which are formally appointed by the Council for each calendar year. From the pool of appointed observers, the Secretariat selects the ones that will be contracted in a specific year. As a rule, NAMMCO observers are required to have at least the same level of qualifications and training as national inspectors and must be familiar with all relevant regulations relating to the activities they observe.

##### 3.1.2 **Role of the observer**

The role of the observer is to oversee hunting activities and the national inspection of these, in order to assess whether or not these are carried out in accordance with national legislation. Thus, the observers must be given access to all items of importance for the task at hand such as hunting permits, vessel logbooks, reports of catch, hunting equipment etc.

Observers are required to report immediately any violations of the national regulations but have no authority to intervene in hunting activities in any way. Actions with respect to possible infringements are the responsibility of the national control authorities.

##### 3.1.3 **Identifying the scope of the annual observation, selecting observers**

When the scope and range of the observation for the year is approved by Council (usually in January/February), the Secretariat contacts the observers to find out if and when they can go and for how long.

The selection of observer has been made considering factors like:

- using as many of the approved candidates as possible
- supporting knowledge sharing between NAMMCO countries, i.e., depending on the scope, contracting observers that may benefit from acquiring knowledge on how hunts are conducted other places
- using experienced observers when the activities in question have been special, i.e. when Iceland resumed whaling a very experienced observer was selected
- the availability of observers i.e. when and for how long can the observer be contracted. The observers have as a rule been fully employed persons, who have taken time off to work for NAMMCO. In the Norwegian seal hunt the main challenge has been the potential that the observer would have to be out for up to 8 weeks.

In dialogue with the authorities, information needed for the implementation are gathered, and national contact persons identified. The relevant authorities in the member states are:

- Norway and Iceland: Directorates of Fisheries
- Faroe Islands: Ministry of Fisheries
- Greenland: Ministry of Fisheries and Hunting

Planning the observation season requires different information depending on the hunts being targeted. The time spent planning and coordinating varies according to the target and the number of actors involved, e.g., the number of licenced boats in a season. In the Norwegian minke, whale hunt the number of active vessels in the observed seasons has ranged from 34 to 16 (1998-2016), in Iceland the numbers are 4 to 2. Identifying actual observation period must be coordinated with the availability of observers, i.e. if they have time off from work in the actual period.

For the Norwegian minke whaling, the selection of vessels to observe and contact with the owner/captains has been done by the Secretariat. This also involves determining the most optimal time and place for the observer to board the vessel. The role of the Secretariat in the implementation of the Scheme for the Norwegian minke whaling compared to the other hunts has been much greater, and quite time consuming.

In Iceland, given the small number of vessels, the main issue is whether they plan to go hunting and when, and the Directorate of Fisheries has had the direct contact to the captains whereas the Secretariat has coordinated with the observers.

In Norway and Iceland, whaling vessels with harpoon gun are obliged to take an observer on-board if required. This is a condition of the licensing. This is also the case for the pack ice sealing (for Norway see footnote<sup>18</sup>). In Greenland there is no such condition, but hunters shall attempt to notify the wildlife officers in advance of any planned hunting trip. The wildlife officer observes from their own boat, never on-board the hunting boat itself. NAMMCO observers have observed from the wildlife officer boat, and also on-board a hunting boat.

#### **3.1.4 Instruction and information to observers**

The observer shall conduct the observation activities in accordance with the Guidelines to Section B of the Provisions – Duties and Tasks of the Observer.<sup>19</sup>

To ensure independence and neutrality of the implementation of the Observer Scheme the Secretariat is operating the Scheme with minimum interference from the member states. When the observers have been selected, they receive all necessary documentation and information relevant for their assignment. The Secretariat ensures by communicating with observers that they understand the procedure and what is expected from them.

For Norwegian observation activities the Secretariat coordinates all contact with captains and boat owners and is the contact person for the observers while in Norway.

For observation activities in other countries, this has for practical reasons been done by the responsible authorities in the member country in question. The observers will typically have an initial meeting with representatives from the authorities where among other things the existing regulations and the control list will be reviewed. All observers have a contact person in the country they observe in.

#### **3.1.5 Reporting**

NAMMCO observers are employed by, and responsible to, NAMMCO alone. They are required to submit written reports to the NAMMCO Secretariat at the end of their assignment, using the mandatory forms (see Annex 3). They have also been asked to submit a diary for the use of the Secretariat. Otherwise it is a strict requirement for the observers to maintain the confidentiality of their observations. In the case of infringements of regulations, the observer shall send a written report with copy to flag state and owner of vessel<sup>20</sup>. The Secretariat compiles an overview of observation activities each year for the annual review of the NAMMCO Council. The observer reports are sent to the national authorities after the season.

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<sup>18</sup> Norwegian annual national regulation require that observers must be admitted on-board all vessels should this be decided.

<sup>19</sup> Provisions of the Joint NAMMCO Control Scheme for the Hunting of Marine Mammals: Guidelines to Section B – International Observation Scheme / AD B.2.5 – Duties and tasks of the Observers

<sup>20</sup> NAMMCO Guidelines to Section B, 6. And 7.



Figure 2 shows that the frequency (number of years) of observation for each hunt observed varies very much.

Figure 2: Number of years the different hunts were observed in the period 1998-2017

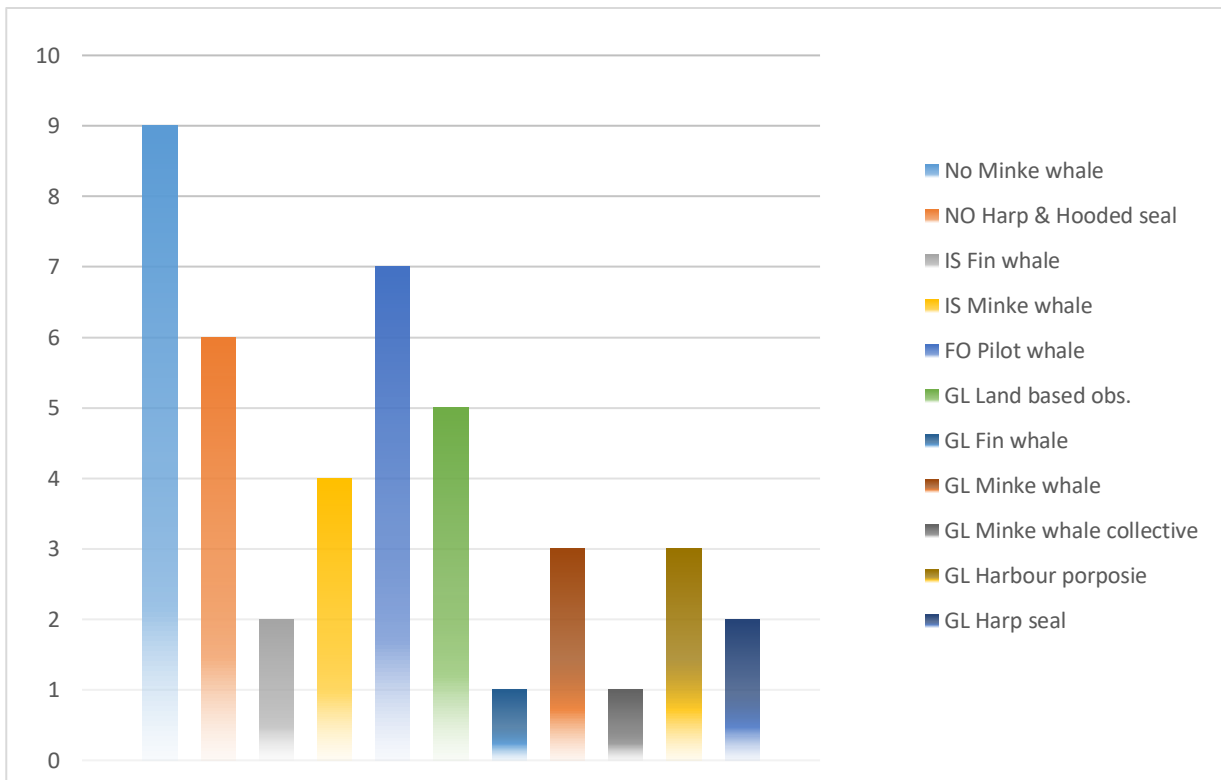


Table 2 provides a comprehensive overview of types of hunts in NAMMCO member countries.

Table 2: Overview of types of hunts in member States

Country	Species / stocks	Type of hunt	Platform*1 and conditions	Dispatching mean	Years observed *2
Faroes	Pilot whale	drive	boats, killing from beach	spinal lance	1999-2001*, 2002, 2007, 2012, 2015
	Dolphins	drive	boats, killing from beach	spinal lance	
	Harbour porpoise	recreational	boat	shotguns with pellets cartridges	
	Grey seal	reduction purposes around fish farm	boat/land	rifle	
Greenland*3	Bowhead whale	professional	3 boats	harpoon cannon	
	Fin whale	professional	2 boats or larger boat	harpoon cannon	2006
	Humpback whale	professional	1 boat	harpoon cannon	
	Minke whale	professional	1 boat	harpoon cannon	2002, 2004, 2006, 2011, 2014
	Minke whale - collective	professional	minimum 5 skiffs/open motor boats	rifle	2011
	Bottlenose whale	professional/recreational	open motor boats - collective	rifle	
	Killer whale	professional/recreational	open motor boats - collective	rifle	
	Pilot whale	professional/recreational	open motor boats - collective	rifle	
	Harbour porpoise	professional/recreational	open motor boats - collective	rifle	2004, 2006, 2014
	Dolphins	professional/recreational	open motor boats - collective	rifle	
	Beluga (North-Qaanaaq)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Beluga (Central)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Beluga (South)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Beluga (East GL)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Narwhal/Beluga	professional/recreational	open water/under sea ice	net	
	Narwhal (Inglefield Bredning and Smith Sound)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Narwhal (Melville Bay)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Narwhal (Uummanaq and Disko Bay)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Narwhal East Greenland	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Walrus (Qaanaaq) Baffin Bay stock	professional	open water-from floe edge	harpoon, rifle, lance	
	Walrus (West Greenland) Southeast Baffin Island	professional	open water-from floe edge	harpoon, rifle, lance	
	Walrus (East Greenland)	professional	open water-from floe edge	harpoon, rifle, lance	
	Harp seal	professiona/recreational	boat	rifle	2011, 2014
Hooded seal	professiona/recreational	boat	rifle		
Bearded seal	professiona/recreational	boat	rifle		
Ringed seal	professiona/recreational	on the ice	rifle		
Ringed seal	professiona/recreational	from ice edge (with kayak or small boat to haul out)	rifle		
Ringed seal	professiona/recreational	ice	net		
Harbour seal	protected 2010			2006	
Iceland	Fin whale	professional	boat	harpoon cannon	2010, 2013
	Minke whale	professional	boat	harpoon cannon	2010, 2011, 2013, 2017
	Grey seal	reduction purposes around fish farm	land, in rivers' mouth	rifle & club	
	Harbour seal	reduction purposes around fish farm	land, in rivers' mouth	net	
Norway	Minke whale	boat	boat	harpoon cannon (penthrite grenade)/back-up rifle	1998-2001*, 2002, 2003, 2009, 2013, 2016
	Harp seal	boat - ice	Main vessel, small boat or ice	rifle + hakapik (adults) rifle + hakapik/slagkrok (pups)	1998-2001*, 2005, 2008
	Hooded seal	protected 2007			1998-2001*, 2005
	Grey seal	recreational	hunter laying on land, animal on land or in water	rifle	
	Harbour seal	recreational	hunter laying on land, animal on land or in water	rifle	
	Ringed seal (Svalbard)	recreational	hunter laying on land, animal on ice, land or in water (16.08 - 30.11)	rifle	
	Bearded seal (Svalbard)	recreational	hunter laying on land, animal on land, ice or in water	rifle	
* Before 2002, observations are land based only					
*1 Platforms mentioned is sometimes mandatory or the most usual platform used for that hunt					
*2 Covers the whole hunting process (the chase, the kill) and not all observations resulted in successful catch					
*3 1998-2001; only landbased observations, 2002 onwards a combination of land based and out at sea					

### 3.3 Infractions reported during the 20 years of the implementation

Two cases of infractions have been reported during the 20 years the Scheme has been running. Both occurred in 2001. In Greenland, the observer noted that two vessels did not have the proper line or trawler winch on-board as required by national law, but instead were equipped with a hydraulic “power block” mounted on the boom. In Norway, the observer was denied access to a minke whaling vessel, which is contrary to the license requirement.

### 3.4 Review of the Scheme

#### 3.4.1 The Faroe Islands (FO), pilot whale hunt

##### General

Observation in the Faroe Islands has only targeted the pilot whale drive hunt (Table 1). The Faroese pilot whale hunt has been observed seven times, or 35% of the 20 years covered by the Scheme. Hunting takes place year-round, but 67% of the drives occur in the period July – September with a peak in August. Observers were usually sent during the “peak” hunting period to maximise the likelihood of observing a drive hunt. The opportunistic nature of the pilot whale hunt makes the observation effectiveness rather low, and a “best” observation period is difficult to identify. For example, there were six drives (grinds) of pilot whales in 2015, but only one happened during the 44 days the observer was present.

##### Coverage rate

The observation coverage rate in the Faroes (COR) is calculated as the ratio of total grinds and observed grinds per year (table 3).

*Table 3: Overview of drive hunt observation in the Faroe Islands*

*(observed years are marked grey - the number are based on available catch data from 1998 onwards as reported in the Annual Progress Reports to NAMMCO)*

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
No. of drive hunts	12	8	13	21	23	11	14	10	22	11	3	10	16	9	11	12	3	7	6	24
No. of pilot whale drive hunts	8	8	9	11	10	5	9	6	11	10	0	3	14	9	10	11	2	6	6	19
Catch of pilot whales	815	608	588	918	626	503	1100	302	856	633	0	310	1107	726	713	1104	48	501	295	1203
Drives occurred while the observer was in the Faroes		2	3	1	1					2					2			1		
Observed pilot whale drive hunts	0	1	2	1	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0
COR	0	12.5	15.38	4.762	0	0	0	0	0	9.091	0	0	0	0	9.091	0	0	14.29	0	0
OCOR - average of the COR for the observed seasons															9.3					
TCOR - average of the COR for all seasons	3.26																			

The catching event observation rate for observed seasons (OCOR) is around 9% and the total catching event observation rate (TCOR) is about 3%. About 68% of the grinds occurring while an observer was in the Faroes were observed.

##### Comments

Most of the drive hunts taking place in the Faroes are pilot whales (around 68% since 1998), the others are mostly white sided and bottlenose dolphins<sup>21</sup>, and only the former have been observed.

Compared to other NAMMCO observation targets, the efficiency of the Observation Scheme is lowest in the Faroes, because of the opportunistic character of the hunt, and the fact that there is only the drive hunts that are observed. Unless some of the observers ‘waiting hours’ are transformed to ‘effective working hours’ with some other tasks performed in the interests of NAMMCO, the Observation Scheme in the Faroes will remain inefficient.

<sup>21</sup> See whaling.fo

Only 60% of the grinds occurring while an observer was present in the Faroes were observed. The observation should be organized to increase and maximise the observation rate of the drives.

At present, it is not possible to assess the number of individual whale kill observed (KOR) or the qualification of the individual hunter as the observers have not been specifically asked to observe and report on that. Such information would be valuable and could be considered an element to be integrated in the mandate of the observer. Although, the observer will only be able to observe a few kills, due to the nature of a grind where up to hundreds of animals can be killed during a short period of time, this would increase the value of the observation activity.

### **3.4.2 Greenland (GL), fin and minke whale, harp seal and harbour porpoise hunt**

#### General

Hunting in Greenland is complex with a broad mixture of hunting methods and target species (table 2). Minke, fin, bowhead and humpback whales are hunted with a harpoon gun from boats. The collective minke whale hunt is carried out in settlements without harpoon gun boats, normally by around 8 -10 skiffs. Harbour porpoise, white-sided and white-beaked dolphins, long finned pilot whales, killer whales, narwhal and beluga are shot with a rifle in a collective hunt from small, open motorboats. In East and North Greenland, hunters are allowed to hunt with nets. Seal hunters focus on hunting harp seals, ringed seals and hooded seals; the former two being by far the most dominant.<sup>22</sup>

Hunting activities in Greenland are the most subsistence based hunts in the NAMMCO countries. Many hunters in Greenland are both fishermen and hunters and will switch between activities pertaining to “prey” availability and needs.

#### Observation activities

Hunting activities in Greenland were the target of NAMMCO’s observation activities nine times, or 45% of the 20 years since 1998. The rule has been that only one observer has been active during a season with the exception of 2004, where three observers were present.

From 1998 to 2001, observations in Greenland were land-based and focused on observing the landing/flensing and sale of products at “brættet” – the local market. From 2002 onwards, with the introduction of on-board observations, the observers in Greenland have observed both on land and at sea. Due to the opportunistic character of hunting activities in Greenland, observers have been instructed to observe any hunts that occurred during their stay. The following are examples of observations during some of the seasons:

In 2004, the three observers did both land based and on-board observations of whaling and sealing activities. They all observed the landings of seals and harbour porpoises. One observer also reported the chase, harpooning, and later the flensing of one minke whale.

In 2011, the observations were both land based and on-board three different vessels. The following was observed: two seal hunts, three minke whale hunts (two harpoon hunts and one communal rifle hunt involving 10 boats), flensing sites, the local markets and the landing and delivery sites<sup>23</sup>.

In 2014, the observer participated in one hunt for minke whales, but only seals and one harbour porpoise were caught during this trip. Although the observer travelled around to different localities the overall situation was that the hunters did not go out due to bad weather conditions.<sup>24</sup>

<sup>22</sup> For detailed descriptions of hunts see White paper on Sealing in Greenland 2015, White paper on Whaling in Greenland 2018 <https://www.businessingreenland.gl/da/Fiskeri,-Fangst-og-Landbrug/Publikationer-og-lovgivning/Publikationer/fangstomraadet> and NAMMCO 2017. Overview of Marine Mammal Hunting Methods and Monitoring/Observation in NAMMCO Member Countries.

<sup>23</sup> See observer’s report 2011

<sup>24</sup> See observer’s report 2014

### Coverage rate

As noted before the information available through the Observation Scheme is not sufficiently detailed to make many calculations of coverage rates for observations in Greenland. However, the catching event observation rate (COR) was calculated for minke whale hunts. Observations of successful and unsuccessful hunts by harpoon cannon and rifle hunts are included as ratio of total catch events in a year (table 4).

Table 4: Overview of coverage of minke whale hunts during the observed seasons in the period 2002 – 2017.

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total catch	149		190		184					189			157			
Observed catch/event	1		4		5					4			0			
COR	0.67	0	2	0	3	0	0	0	0	2	0	0	0	0	0	0
OCOR - average of the COR for the observed seasons											1.52					
TCOR - average of the COR for all seasons											0.48					

The catching event observation rate for observed seasons (OCOR) is around 1,5% for all seasons (TCOR) is about 0,5%.

### Comments

Amongst the 28 types of hunts identified in table 2, notably relatively few of them have been observed. The species-specific observations were limited to hunts of fin and minke whale, harbour porpoise and harp seal. With respect to the observed seal hunts, the information is not complete as some observers only reported on generic seal hunts without specifying which species they observed being caught.

In 2001, the observer noted that two vessels did not have the proper line or trawler winch on-board, as required by national law. Instead, these vessels were equipped with a hydraulic “power block” mounted on the boom.

As noted in the 2005 Review of the Scheme, the hunting scene is more complex in Greenland than in the other NAMMCO countries. An increased focus on hunting activities in Greenland, with more observers present at the same time, would likely give a better understanding of the overall situation<sup>25</sup> and level of compliance.

### **3.4.3 Iceland (IS), fin whale and minke whale hunts**

#### General

Iceland resumed commercial whaling under its reservation to the IWC moratorium in 2006, and NAMMCO’s first observation of whaling in Iceland took place in 2010.

The fin whale hunt was subjected to NAMMCO’s observation activities in 2010 and 2013 and the minke whale hunt in 2010, 2011, 2013 and 2017, so both hunts were observed in 33% of the hunting years. The observations were both land-based and on-board.

Observer efficiency was fairly high, as nearly all the observation time was used related to actual observation activities. In 2017, however, the minke whale hunt was not observed 11 out of 21 days due to bad weather<sup>26</sup>. The observation period per season lasted from one to a couple of weeks.

Fleet (OFOR and TFOR) and catch observations (OCOR and TCOR) rate of fin and minke whale hunt in Iceland are given in tables 5 and 6.

#### Coverage rate for fin whale hunt

Table 5: Overview of fleet and catch observation in Icelandic fin whaling

<sup>25</sup> See supra note 2, 2005. Review of the Observation Scheme.

<sup>26</sup> Information retrieved from the observer’s, S. Petersen, diary 2017.

(observed years are marked grey, year without hunting are in green)

IS Fin whale hunt, year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
No. of vessels	0	0	0	2	2	0	0	2	2	2	0	0
No. of observed vessels	0	0	0	0	1	0	0	1	0	0	0	0
Total catch	7	0	0	125	148	0	0	134	137	155	0	0
Observed catch	0	0	0	0	13	0	0	4	0	0	0	0
<b>FOR</b>	0	0	0	0	50	0	0	50	0	0	0	0
<b>COR</b>	0	0	0	0	8.78378	0	0	2.98507	0	0	0	0
<b>OFOR - average of the FOR for the observed season</b>	<b>50</b>											
<b>TFOR - average of the FOR for all season</b>	<b>16.67</b>											
<b>OCOR - average of the COR for the observed season</b>	<b>5.88</b>											
<b>TCOR - average of the COR for all season</b>	<b>1.96</b>											

With only two whaling vessels, the observation rate for observed seasons (OFOR) and total fleet observation rate (TFOR) were about 50% and 17%, respectively.

The fleet observation rate for observed seasons (OCOR) and total fleet observation rate (TCOR) are about 6% and 2%, respectively.

#### Coverage rate for minke whale hunt

Table 6: Overview of fleet and catch observation in Icelandic minke whaling (observed years are marked grey)

IS Minke whale hunt, year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
No. of vessels	n/a	n/a	n/a	5	4	3	3	3	2	1	3	2
No. of observed vessels	0	0	0	0	1	1	0	1	0	0	0	2
Total catch	61	43	38	81	60	58	52	35	24	29	46	17
Observed catch	0	0	0	0	2	2	0	4	0	0	0	0
<b>FOR</b>	0	0	0	0	25	33.3333	0	33.3333	0	0	0	100
<b>COR</b>	0	0	0	0	3.33333	3.44828	0	11.4286	0	0	0	0
<b>OFOR - average of the FOR for the observed season</b>	<b>47.92</b>											
<b>TFOR - average of the FOR for all season</b>	<b>21.30</b>											
<b>OCOR - average of the COR for the observed season</b>	<b>4.55</b>											
<b>TCOR - average of the COR for all season</b>	<b>1.52</b>											

The fleet data was not available for all years. Based on available vessel data (2009-2017), the observation rate for observed seasons (OFOR) and total fleet observation rate (TFOR) were about 48% and 21%, respectively.

The fleet observation rate for observed seasons (OCOR) and total fleet observation rate (TCOR) in the period 2006-2017 are about 4.5%, and 1.5%, respectively.

#### Comments

Whaling in Iceland is small in scale with respect to actors and thus the implementation of the Scheme has been relatively easy. At the most, the number of minke whale boats have been four (2010) and in the fin whale hunt, two active boats.

### 3.4.4 Norway (NO), minke whale hunt, harp and hooded seal hunt

#### General, minke whale hunt

The targeted whale species in Norway is the minke whale.

Norwegian minke whaling has been observed for nine seasons, with therefore, 45% of the 20 hunting seasons observed. Observation activities were land-based until 2002, focusing on delivery of catches in the Lofoten area. From 2002, observations were conducted on-board whaling vessels, observing the vessels' equipment, activities and the hunt.

One to three observers were contracted per observation seasons.

The minke whale hunt in Norway generally takes place from mid-May until the end of August. The duration of the NAMMCO observations fluctuated from year to year. The land-based observations of delivery of catches were conducted for periods not longer than a week, while observations on-board vessels lasted between 20-40 days. Since 2002 when onboard observations were initiated, the average period of season observed corresponds to about 20% of the duration of the season.

Coverage rate, minke whale hunt

One observer was typically present on one whaling vessel per season. Except in 2003, when the observer changed vessel out in the open sea. This was possible because the weather was calm; one vessel was waiting for instructions from local authorities and could not hunt; and the other vessel was not moving because the crew was cutting up and processing a whale. Under normal circumstances calm weather means vessels are fully occupied in hunting operations and probably not very eager to assist an observer in changing vessels and in rough weather changing vessels is not feasible due to safety reasons<sup>27</sup>.

Coverage rate is based on the data from the period from 2002 - 2017, as shown in table 7. In the period from 1998 to 2002 observations were land-based and were exclusively on-board vessels thereafter. Coverage rates for observation of the minke whale hunt in Norway are as follows:

- the observation rate for observed seasons (OFOR) and total fleet observation rate (TFOR) were about 9% and 3%, respectively.
- the fleet observation rate for observed seasons (OCOR) and total fleet observation rate (TCOR) were about 3% and 1%, respectively.

*Table 7: Overview of fleet and catch observation in Norwegian minke whaling (observed years are marked grey, l-b: land-based)*

Land-based observations only 1998 - 2001																				
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
No. of hunting vessels	34	34	33	33	34	34	34	31	28	28	27	21	18	19	18	17	21	21	16	11
Observed vessels	l-b	l-b	l-b	l-b	3	4	0	0	0	0	0	1	0	0	0	3	0	0	2	0
Total catch	625	582	487	552	634	647	544	639	545	597	536	485	468	533	464	591	736	660	591	432
Observed catch			n/a	n/a	5	25	0	0	0	0	0	21	0	0	0	6	0	0	20	0
FOR					8.82	11.73	0	0	0	0	0	4.76	0	0	0	11.76	0	0	12.5	0
COR					0.79	3.85	0	0	0	0	0	4.33	0	0	0	1.52	0	0	3.38	0
OFOR - average of the FOR for the observed seasons													9.28							
TFOR - average of the FOR for all seasons													2.92							
OCOR - average of the COR for the observed seasons													2.62							
TCOR - average of the COR for all seasons													0.87							

General, harp seal and hooded seal pack ice hunt

The harp and hooded seal hunts have been observed for six seasons, or 30% of the total hunting seasons (note that the hooded seal has been protected since 2007). Prior to 2002, the sealing was observed on land, in the Rieber port in Tromsø.

<sup>27</sup> See supra note 2.

In 2005 and 2008, NAMMCO observers were placed on-board sealing vessels. This shift in observation activities directly influenced the length of the observation period. While the land-based observations lasted 3 to 6 days, observing onboard vessels was significantly longer. The hunt for harp and hooded seals takes place in the West Ice and East Ice<sup>28</sup>, and may involve a sealing vessel, and thus the observer, being away for up to eight weeks.

One observer was contracted per given season.

Observer effectiveness was high with almost all of the planned observation time utilised, for both land-based and on-board observations. On the vessel, the time spent hunting was 36% of the total period in the field (data from 24.03-27.04.2005). Bad weather and night conditions accounted for the remaining 64% of the inactive time spent in the field.<sup>29</sup> Thus, one observer on-board the vessel was enough to cover the hunting activities taking place.<sup>30</sup>

#### Coverage rate, harp seal and hooded seal pack ice hunt

Form 1998-2001 observations of the harp and hooded seal hunt were focused on sealing vessels upon arrival to the Rieber port in Tromsø relating to the delivery of catch and checking the hunting permits, vessel logbooks, reports of catch.

Based on the data available from 2002 onwards and as shown in the table 8, the observation coverage efforts are:

- the observation rate for observed seasons (OFOR) and total fleet observation rate (TFOR) were about 58% and 7%, respectively, with the observed vessels catching 13% and 100% of the season seal catch respectively.

As noted under 3.4.1 on observation of pilot whaling, the observers do not/are not asked to report on individual kill. This could be considered an element to be integrated in the mandate of the observer. The observer will likely only be able to observe a few kills, due to the nature of this sealing where often several seals are killed simultaneously by several sealers, but this would add to the precision of the observation.

*Table 8: Overview of fleet effort/observation in Norwegian seal pack ice hunt (observed years are marked grey)*

Land-based observations only 1998 -2001																				
Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
No. of hunting vessels	5	3	3	3	3	3	4	6	6	5	1	3	2	4	2	4	3	1	1	1
Observed vessels	3*	3*	2*	2*	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0
Total catch	9067	6399	20636	12012	10771	12870	14809	21597	17037	14043	1263	8035	4797	10332	5593	15939	11986	2237	1470	2001
Observed catch	n/a	n/a	n/a	n/a	0	0	0	2767	0	0	1263	0	0	0	0	0	0	0	0	0
FOR					0	0	0	16.6667	0	0	100	0	0	0	0	0	0	0	0	0
COR					0	0	0	12.812	0	0	100	0	0	0	0	0	0	0	0	0

OFOR - average of FOR for the observed seasons

58.33

TFOR - average of FOR for all seasons

7.29

\*vessels observed delivering catch in Rieber port

#### Comments – both whaling and sealing

In 2001 there was a violation of the regulations laid down by the Observations Scheme when the observer was denied access to one minke whaling vessel in Norway. The incident was a result of communication failure

<sup>28</sup> West Ice: the pack ice areas in the Jan Mayen fishing zone and in the ocean areas of Jan Mayen outside Greenland EEZ and southwest of Svalbard, and adjacent areas to Greenland EEZ and Iceland EEZ. East Ice: the area east of 20°E in the Russian EEZ

<sup>29</sup> See supra note 2.

<sup>30</sup> One observer per vessel for example in tuna fishery is not sufficient, as fishing takes place without a break, 24/7.

between the observer and the skipper, and perhaps also grounded in too little knowledge of the observation scheme on behalf of the skipper<sup>31</sup>. There are no other records of similar incident since.

Observations of Norwegian sealing may require the observer being away for up to eight weeks making it difficult to find an available observer for such a long period.

Coastal seals hunted off Norway's mainland include grey and harbour seals (targeted species), ringed and harp seals (exceptionally, do not frequently occur along the coastline of the Norwegian mainland), off Svalbard bearded and ringed seals. The hunt for those species takes place from January to September in an opportunistic manner. These have not been observed by NAMMCO because it represents small, recreational hunts taking place randomly as a game hunt (table 2).

The Secretariat reiterates its conclusion from its 2005 review that the nature of the Norwegian hunts both with regards to minke whaling and pack ice sealing makes the implementation of the Scheme relatively simple<sup>32</sup>. Observations of the minke whaling is time-consuming with respect to finding vessels that will accommodate the observer, but when that is accomplished, it usually runs smoothly.

### **3.5 Evaluation of the Scheme**

#### **3.5.1 Evaluation of observer's reports**

Observers are only required to submit the basic report forms (see discussion in 3.1.5). On request from the Secretariat, more detailed written reports (diaries) have been submitted most of the times. However, these reports can vary a lot with respect to how informative they are. The practical input of this voluntary reporting has been important for this review/evaluation. Clearly the present mandatory reporting does not allow any quantitative assessment of the implementation.

Observers should be encouraged to produce more detailed reports and it is recommended that more detailed reporting templates be developed for each type of hunt and be made mandatory. At the same time, the Secretariat should be provided with the data allowing for a quantitative assessment of the implementation scheme, incl. a precise assessment of coverage and infraction rates.

#### **3.5.2 Coverage of the Parties' hunting activities**

The Provisions of the NAMMCO Control Scheme refer to the observation of *hunting activities*, hence referring to all hunting activities, both of organised and opportunistic character. As shown in table 2, hunting activities in NAMMCO Countries are multiple and varied. This is especially true in Greenland, where the number of hunting types is the highest. These factors probably explain why many Greenlandic hunts have not been observed during the 20 years the Scheme has been in place. The focus on Greenland needs to be increased in coming years to get a better overview of hunting activities in the remit of NAMMCO.

#### **3.5.3 Coverage rate and representativeness of observation activities**

The table 9 below summarises the findings from section 2 relating to coverage rates.

*Table 9: Overview of observation scheme coverage rate in NAMMCO member states (grey fields are not applicable to the member state and/or activity);*

*Acronyms:*

- *fleet observation rate for observed seasons (OFOR)*
- *total fleet observation rate (TFOR)*
- *catching event observation rate for observed seasons (OCOR)*
- *total catching event observation rate (TCOR)*

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<sup>31</sup> NAMMCO 2001 Report of the Observation Scheme.

<sup>32</sup> See supra note 2.

Member state and activity	FO	GL minke whale	IS fin whale	IS minke whale	NO sealing	NO minke whale
<b>OFOR</b>			50%	48%	58%	9%
<b>TFOR</b>			17%	21%	7%	3%
<b>OCOR</b>	9%	1.50%	6%	4,5%		3%
<b>TCOR</b>	3%	0.50%	2%	1.5%		1%

The specific level of observer programme coverage depends on several factors, most importantly the observed region and activity. The specific mandate of the NAMMCO Scheme, observing all hunting activities and detecting infractions, makes it difficult to compare its coverage rate to other RFMOs' observer programmes. For example, recent measures adopted in WCPFC, ICCAT, IATTC and IOTC have established minimum observer coverage rates of 5% for observing by-catch. This level of coverage is estimated as being sufficient to identify where and when by-catch occurs for extrapolating to the entire fleet and obtaining reliable by-catch rate.

The purpose of NAMMCO observation is to observe the compliance with standards/regulations related to hunting methods. Thus, the 5% coverage rate indicator, often used as a minimum threshold of observer programmes coverage, might not be relevant in the NAMMCO case.

Although it would be ideal to have complete observer coverage of all hunting activities, this is an unrealistic expectation given the cost and other practical considerations. NAMMCO's relatively small observation budget presently do not allow for more than a partial coverage. Observing all activities and during the whole hunting seasons would require a significantly higher budget. The 2005 review concluded that this was not feasible nor desirable<sup>33</sup>. However, what needs to be defined more clearly to be able to evaluate the adequacy of the coverage, is the overall objective of the NAMMCO observation scheme, as this will procure guidance for evaluating and implementing a scheme in appropriation with the objective.

#### Evaluating the selectiveness of the target of the observation

The Secretariat suggests the scope and range of the observation activities in any given year. The selection of scope has not followed any particular rules and has been primarily based on the idea of an equal distribution between countries and hunts.

#### Evaluating the selectiveness and randomness of the observation (target and period)

Different factors come into play depending on country.

##### *a) Norway*

In the Norwegian minke whale the choice of the vessels to be observed depends on:

- Whether the boats have room for one more person – safety and logistic issue. Some minke whaling vessels are small, and it is not always easy to accommodate an observer on-board, especially after the planning of the whaling season has been done. Although observation has also been conducted in the smaller category.
- The planned hunting schedule of the boat – when will they go hunting and back to port so an observer can either embark or disembark.

To facilitate the selection process and to lay the ground for good cooperation between observer and crew, the Secretariat informs the Norwegian Whalers Association prior to the whaling season and contacts the captains of the target vessels prior to the arrival of the observer. The consequence of this is that it removes the “surprise element”, which could be a positive aspect of the scheme. However, this was deemed necessary to maximise the efficiency of both the available budget and personnel.

<sup>33</sup> See supra note 2.

Several of the captains/owners of the sealing vessels were not prepared to take an observer on-board when asked if the request comes late in the planning phase of their season. Therefore, the choice of the target vessel is not random, which may compromise the representativeness of the observation. This problem should be addressed in future implementation of the scheme, as it leads to a bias sampling and thus undermines the the results of the Scheme for this hunt.

*b) Iceland*

In Iceland, the decisive factor has been which vessels were operating and when the vessels were going hunting, so the observation can be said to be more random.

*c) The Faroe Islands*

In the Faroes, the observation periods have been set to July and August as these months have been thought to be optimal for the likelihood of observing pilot whale drives. This means that only summer drives are observed, although drives in winter might be more difficult to conduct. The observation is random, only depending on if a drive hunt takes place and will be observed, if possible for the observer.

*d) Greenland*

In Greenland hunts take place nearly all year round and it is opportunistic by nature. The scope has therefore been to observe whatever can be observed, which in some way increases the randomness of the observation process.

Observers have only been sent in the early/late summer, although winter or ice-based hunts are different and therefore findings from the summer cannot be applied to the winter.

*e) General*

Generally, it has been easier to get observers (who are not permanently employed by NAMMCO) in the summer months as this often coincides with their holidays. Consequently, only spring to late summer hunting activities have been observed.

The implementation of the Scheme cannot be said to be a random process, which introduces some level of bias in different ways.

### **3.5.4 On-land observation versus on-board observation**

In 2002, NAMMCO implemented on-board observations with a duration of more than a day. Ever since, on-board observation has become the norm, where appropriate. Land-based observations are still done in Greenland and in the Faroes, where the nature of the hunt (e.g. pilot whaling in the Faroes) makes on-board observation more problematic.

By implementing on-board observation, NAMMCO acts in accordance with established international standards.

On-board observations when appropriate are more effective and allow for better coverage of the whole hunting activity. Before the blue box, the Norwegian national inspectors were embarked for six weeks. However, it removes the 'surprise element', which could be viewed as an important aspect of an observation scheme. It is, however, also the case in fisheries, where observers are placed onboard vessels for a longer period, while surprise inspection by inspectors, retain the element of surprise.

The presence of an observer may also influence the behaviour of the captain and the crew (the crew may act in accordance with regulations *only because* the observer is on-board). Again, this issue is similar for fisheries observation programmes in general, and not only related to NAMMCO's Scheme.

### **3.5.5 Observers' competence**

*a) Enforcement powers*

NAMMCO Observers have no authority and consequently cannot intervene in the hunting or other activities connected with the hunting<sup>34</sup>.

*b) Qualifications and training of observers*

The observers are formally appointed by the Council for each calendar year and are selected according to their qualifications from a list of candidates nominated by member countries. As a general rule, NAMMCO observers are required to have at least the same level of qualifications and training as national inspectors and must be familiar with all relevant regulations in relation to the activities they observe.<sup>35</sup>

In the early years NAMMCO benefited from national courses for inspectors held by Norwegian authorities. However, after the introduction of the electronic surveillance system (Blue box), these national courses were no longer held on an annual basis. Consequently, the Secretariat in cooperation with the CIO convened a training course for observers in 2013 built upon the model of the Norwegian national courses. In so doing, NAMMCO directly contributed towards the observers' training and not the least, acted in accordance with international regulations and standards.

Nevertheless, even beside fulfilling the qualifications requirement, oversights may occur. For example, NAMMCO observers are required to check that the blue box is on<sup>36</sup>, but in 2016 one observer did not do so. This pointed to an inadequate preparation by the observer. It is recommended that the hunt specific check lists are further developed as part of the mandatory reporting, and that these lists are developed for each observed catching event.

Another issue in the implementation of the NAMMCO observation scheme is the language barrier, particularly when observing in Greenland.

For many years it was a problem that deadlines were not kept and too few candidates were nominated. However, in connection with the 2013 training course member countries succeeded in assigning between 4 – 5 competent observer candidates each whom today represent a pool of observers from which to choose from.

*c) Adequate pay*

- Observers receive a daily salary of 1800 NOK for land based and 2400 NOK for on-board vessel observation per day. The salary level is a flat rate and reflects that the observer is expected to work long and odd hours without any overtime payment. In addition, an observer receives per diem 550 NOK to cover meals.
- Accommodation and travel costs are covered by NAMMCO.
- Additional costs may be reimbursed to cover extra necessary work clothing.
- The Observer will arrange for his own travel and accident insurance for the duration of his assignment as a NAMMCO Observer. Costs in this connection will be reimbursed by NAMMCO.

The payment rate is assumed to be adequate and has not been challenged by the observers.

### **3.5.6 Safety of observers**

NAMMCO pays specific attention to the safety of the observers.

For safety reasons, the language competency of observers must be taken into consideration, especially for observer on board a hunting vessel as the observer must be able to communicate spontaneously with the crew<sup>37</sup>.

<sup>34</sup> This is clearly stated in the Provisions text, B.21.

<sup>35</sup>B.4.1 The Council has compiled guidelines for requirements for the competence, training, etc., of observers. These guidelines are found in Appendix 2 of the Provisions text.

B.4.2 As a general rule, observers must have at least the same level of professional competence as that required of inspectors in the country where the observations are to take place. In special circumstances, exemption from this requirement can be given.

<sup>36</sup> Provisions, Guidelines to Section B, 2(iv).

<sup>37</sup> The Provisions text, B.4.3.

The Scheme stipulates that the observer should not come from the country in which he/she is doing observations. This poses a special problem for observations in Greenland as most foreigners do not speak or understand Greenlandic and the majority of hunters in Greenland do not speak English or any Nordic language. The same problem arises to a certain extent with observations out at sea in Norway.

When out at sea, it is the responsibility of the observer to ensure that he or she acquires the necessary information and knowledge related to safety issues and how to behave in an emergency<sup>38</sup>. Presently there has not been any check of this, and luckily no incidents either. However, this should be the object of some random check by the Secretariat.

### 3.5.7 Establishing and reviewing the Observer Scheme

By establishing and implementing the Observation Scheme, NAMMCO Parties have implemented the observer programme through a regional body, to monitor whether decisions made by the Commission are respected.

NAMMCO has not developed a review procedure but is undertaking its second internal review of the implementation. The first – qualitative in essence – review of the Scheme was in 2005, after seven years of implementation. This report presents the second, more comprehensive, review of the Scheme, just over a decade later. Moreover, NAMMCO is in the process of undertaking its first Performance Review carried out by a Panel of External Experts, which will *inter alia* review the compliance and enforcement mechanism of NAMMCO (NAMMCO 2017).

Nevertheless, it is recommended to define a periodicity for such reviews and to develop a review procedure, incl. a set of criteria, in order to make sure that the necessary data is collected and reported by the observer and the Parties. This should then be kept in a database at the Secretariat, to facilitate the review process.

### 3.5.8 Costs effectiveness of the Observation Scheme

The costs of the NAMMCO Observation Scheme are given in table 9 below.

The average annual budget for the implementation of the Scheme ranged from NOK 45,362 to 196,860, with an average of NOK 110,669.

Table 9: Price of the Observation Scheme's implementation per year

Year	2003	2004	2005	2006	2007	2008	2009	2010	2010	2011	2011	2012	2013	2013	2013	2014	2015	2016	2017
Region and hunt	NO, minke whale	GL	NO, pack ice seal	GL	FO, pilot whale	NO, pack ice seal	NO, minke whale	IS, minke whale	IS, fin whale	GL	IS, minke whale	FO, pilot whale	NO, minke whale	IS, minke whale	IS, fin whale	GL	FO, pilot whale	NO, minke whale	IS, minke whale
Price per year, in NOK	145359	196860	92469	90771	45362	123172	66782	56816		109028		64252	166367			94644	174508	163338	70301
Price per hunt, in NOK	145359	196860	92469	90771	45362	123172	66782	28408	28408	90740	18288	64252	106878	29744	29744	94644	174508	163338	70301
Vessels (grinds for FO) observed	4	n/a	1	n/a	1	1	1	1	2	n/a	1	1	2	1	1	n/a	1	5	2
Catch observed	25	n/a	2676	n/a	n/a	1250	21	2	3	n/a	2	n/a	9	4	4	n/a	n/a	20	17
Obs. days utilised	44	40	50	25	16	31	21	4	7	23	3	22	26	10	10	21	44	49	21

The costs per observed events are as follows:

<sup>38</sup> Ibid B.4.4.

*The Faroes, pilot whale drive hunt*

Average observation day price is 3,240 NOK  
 Average price per observed grind is 94,707 NOK.

*Greenland, all hunts combined*

Average observation day price is 4,251 NOK.

*Iceland, minke whale hunt*

Average price per observed vessel is 27,897 NOK  
 Average observation day price is 4,880 NOK  
 Average price per observed whale is 8,729 NOK.

*Iceland, fin whale hunt*

Average price per observed vessel is 21,974 NOK  
 Average price per observation day is 3,516 NOK  
 Average price per observed whale is 8,452 NOK.

*Norway, minke whale hunt*

Average price per observed vessel is 47,307 NOK  
 Average price per observation day is 3,482 NOK  
 Average price per observed whale is 7,259 NOK.

*Norway, pack ice seal hunt*

Average price per observed vessel is 107,821 NOK  
 Average price per observation day is 2,911 NOK

Clearly the budget allocated to the Observation Scheme activities changes a lot from year to year and per equivalent events. Evaluating whether the budget is appropriate is problematic without having clearly defined and stated overall objectives for the NAMMCO Observation Scheme, as this will procure guidance for assigning an appropriate budget. One would need to estimate how an increase in budget for a targeted hunt would increase the chance of increasing the number of actual observation events and the quality of the observation.

It could be envisaged, for example, to not automatically conduct the observation every year, but sometimes to focus several years budget on one country and/or hunt. Particularly in Greenland, having several observers present, targeting any hunting events might be cost-effective. In this case, a combination of non-national and national observers may help alleviating the language issue. Another, maybe more effective solution for observations in Greenland would be for the observer to always have a local assistant knowing both the language of the observer and the local situation.

#### **4 CONCLUSION AND RECOMMENDATIONS**

The purpose of the Scheme is specified in the Provisions text<sup>39</sup>, but the objective is not defined. This lack of definition is problematic, as the implementation level should be tuned to achieve this objective. Therefore, it makes it difficult to say whether the implementation is adequate or not.

The purpose of the Scheme is to detect infractions. Thereby, a logical objective would be to estimate an infraction rate for specific hunts. The Scheme is in essence a sampling program, and as such one should be able to extrapolate from the number of infractions detected to estimate the number occurring in the hunt. However, the present infraction rate of two infractions in 20 years for a total of between 30 and 40 types of

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<sup>39</sup> See Section B.1.

hunting activities (depending on definition) and many actors involved seems unlikely low. This could point to an inadequacy of the present implementation of the Scheme for assessing reliable infraction rates.

We know from other sources, that infractions occur, and have for example been reported to the IWC Infraction Sub-Committee.

The reasons for this apparent inadequacy of the Observation Scheme in providing infraction rates which can be assumed to be reliable are likely many, including:

- The low overall and hunt specific coverage rates. The level of observation needed to achieve a reliable infraction rate per hunt must be seen in relation to the infraction rate. If the infraction rate is very low, then a very high observation rate is needed.
- The fact that the sampling is somewhat biased. For example, in some instance the observers only observe on vessels that agree to take them, or observation only occurs in spring/summer.
- The lack of detailed and systematic reporting for many observations, which makes it difficult to assess whether the observation is in fact carried out in a faithful, efficient and comprehensive manner.

For the Scheme to be unbiased, one has to ensure as a minimum that all hunting actors submit to being observed at any time. The reasoning being that hunters who are inclined to "cut corners" or who have the wrong equipment will not agree to being observed. There are of course practical difficulties with this (as noted above in 3.1.3), but it is the only way the Scheme can produce reliable results.

To solve some of the coverage rate and logistic problems, the possibility of using technology to monitor hunts should be investigated. Security video systems, remote electronic monitoring systems (multiple videos system used on fishing vessels to observe discard and by-catch) and GoPro cameras are some ideas. There might be resistance to "spying" like this, but on the other hand it is less intrusive than a human observer and would have high practical advantages, e.g. not having to take out a human observer and no language issues. The reading of the tapes could be performed by the observers and would provide them with occupation on their many "off" days. The Norwegian blue box seems to have been well accepted so maybe something like this would be feasible for some hunts.

#### *Recommendations*

- Define more precisely the objective (desired goal of achievements) and scope of the Observation Scheme for procuring better guidance to defining the appropriate level of coverage and the appropriate budget.
- An evaluation procedure should be developed, including a periodicity and a set of criteria. A day observation rate would be for example a better measure for on-board observation activity than the fleet observation rate, as it would reflect the fact that the vessels are observed only part of the season and would account for the time lost in transit.
- Observers and Parties should collect the data necessary for evaluating the Scheme. The data should be delivered annually by the parties for inclusion in a database at the Secretariat, thus facilitating any review of the Scheme.
- Define the units of observation for the different hunts and make sure that the relevant information is collected and submitted to the Secretariat, so a more precise evaluation is possible in the future.
- Consider being more flexible by not implementing observations activities every year and making a bigger effort possible in a certain year. The budget of the observation Scheme is limited, and this could allow more comprehensive effort on some hunts in some years, giving a better cost-efficiency.
- In relevant cases the setup of the scheme should be able to compare the observation rate between the different categories.
- Develop more standardised templates for observer and member countries reports for each type of hunts so the Secretariat is provided with the data allowing for a quantitative assessment of the implementation of the Scheme.
- For all regions, consider the possibility of the observer doing other tasks when no hunting takes place.

- That the Secretariat keep a precise and updated record of hunting activities in NAMMCO countries, also in years where there is no observation, to facilitate future evaluations of the Scheme.
- The observation mandate should be better defined through the control lists (drive hunts and sealing activities, should encompass the observation of the kill of individual animals to gain some information on the compliance to the legal killing procedure).
- Compare results of the NAMMCO observation and that of the national inspection for specific hunts and season, to see whether they differ and thus indicating some possible issues.
- Encourage that observers are placed on different platforms in one season.
- Implement a random check of whether on-board observers are aware of safety issues and safety measures.

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## APPENDICES

**Appendix 1.** NAMMCO 2018. Overview of Marine Mammal Hunting Methods and Monitoring/Observation in NAMMCO Member Countries

**Appendix 2.** Data (excel tables) from the Observation Scheme implementation 1998-2017.

## ANNEXES

**Annex 1.** Provisions of the Joint NAMMCO Control Scheme for the Hunting of Marine Mammals, 1997.

**Annex 2.** NAMMCO. 2005. Review of the NAMMCO Observation Scheme. Document NAMMCO I&O-2005-03.

**Annex 3.** NAMMCO International Observation Scheme Report of Observation.

Country	Species / stocks	Type of hunt	Platform*1 and conditions	Dispatching mean	Years observed *2
Faroes	Pilot whale	drive	boats, killing from beach	spinal lance	1999-2001*, 2002, 2007, 2012, 2015
	Dolphins	drive	boats, killing from beach	spinal lance	
	Harbour porpoise	recreational	boat	shotguns with pellets cartridges	
	Grey seal	reduction purposes around fish farm	boat/land	rifle	
Greenland*3	Bowhead whale	professional	3 boats	harpoon cannon	
	Fin whale	professional	2 boats or larger boat	harpoon cannon	2006
	Humpback whale	professional	1 boat	harpoon cannon	
	Minke whale	professional	1 boat	harpoon cannon	2002, 2004, 2006, 2011, 2014
	Minke whale - collective	professional	minimum 5 skiffs/open motor boats	rifle	2011
	Bottlenose whale	professional/recreational	open motor boats - collective	rifle	
	Killer whale	professional/recreational	open motor boats - collective	rifle	
	Pilot whale	professional/recreational	open motor boats - collective	rifle	
	Harbour porpoise	professional/recreational	open motor boats - collective	rifle	2004, 2006, 2014
	Dolphins	professional/recreational	open motor boats - collective	rifle	
	Beluga (North -Qaanaaq)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Beluga (Central)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Beluga (South)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Beluga (East GL)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Narwhal/Beluga	professional/recreational	open water/under sea ice	net	
	Narwhal (Inglefield Bredning and Smith Sound)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Narwhal (Melville Bay)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Narwhal (Uummanaq and Disko Bay)	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Narwhal East Greenland	professional/recreational	open motor boats/kayaks - collective	harpoon and rifle	
	Walrus (Qaanaaq) Baffin Bay stock	professional	open water-from floe edge	harpoon, rifle, lance	
	Walrus (West Greenland) Southeast Baffin Island	professional	open water-from floe edge	harpoon, rifle, lance	
	Walrus (East Greenland)	professional	open water-from floe edge	harpoon, rifle, lance	
	Harp seal	professiona/recreational	boat	rifle	2011, 2014
	Hooded seal	professiona/recreational	boat	rifle	
	Bearded seal	professiona/recreational	boat	rifle	
	Ringed seal	professiona/recreational	on the ice	rifle	
Ringed seal	professiona/recreational	from ice edge (with kayak or small boat to haul out)	rifle		
Ringed seal	professiona/recreational	ice	net		
Harbour seal	protected 2010			2006	
Iceland	Fin whale	professional	boat	harpoon cannon	2010, 2013
	Minke whale	professional	boat	harpoon cannon	2010, 2011, 2013, 2017
	Grey seal	reduction purposes around fish farm	land, in rivers' mouth	rifle & club	
	Harbour seal	reduction purposes around fish farm	land, in rivers' mouth	net	
Norway	Minke whale	boat	boat	harpoon cannon (penthrith grenade)/back-up rifle	1998-2001*, 2002, 2003, 2009, 2013, 2016
	Harp seal	boat - ice	Main vessel, small boat or ice	rifle + hakapik (adults) rifle + hakapik/slagkrok (pups)	1998-2001*, 2005, 2008
	Hooded seal	protected 2007			1998-2001*, 2005
	Grey seal	recreational	hunter laying on land, animal on land or in water	rifle	
	Harbour seal	recreational	hunter laying on land, animal on land or in water	rifle	
	Ringed seal (Svalbard)	recreational	hunter laying on land, animal on ice, land or in water (16.08 - 30.11)	rifle	
	Bearded seal (Svalbard)	recreational	hunter laying on land, animal on land, ice or in water	rifle	

\* Before 2002, observations are land based only

\*1 Platforms mentioned is sometimes mandatory or the most usual platform used for that hunt

\*2 Covers the whole hunting process (the chase, the kill) and not all observations resulted in successful catch

\*3 1998-2001; only landbased observations, 2002 onwards a combination of land based and out at sea

## Appendix 2. Data (excel tables) from the Observation Scheme implementation 1998-2017.

YEAR 1998					
Member State and hunt	Norway Harp & Hooded seal	Norway Minke whale	Greenland	Faroe Islands	Iceland
<b>1. Observer</b>	Jakob Sørensen (GL)	Atil Konradsson (IS)	Lars Kleivane (NO)	x	x
1.1. Observer's report available	yes; short, in norwegian language	yes; detailed	yes; detailed, in norwegian	x	x
<b>2. Observation period</b>	24 - 30 April - 6 days	02 - 08 June - 6 days	27 August - 14 September	x	x
2.1. Observation days utilized	6 days	6 days		x	x
2.2. Total target hunting days	Harp seal: 10 April - 30 June; hooded seal 20 March - 10 July	mid May - end of August		x	x
<b>3. Location</b>	Tromsø, Rieber Port	Lofoten/Land Based - delivery of catch	Nuuk	x	x
3.1. Observed events	n/a	8		x	x
3.1.1. Total target events	n/a	n/a		x	x
3.2. Observed vessels	boarded 3 vessels in the port	8 vessels boarded in the port		x	x
3.2.1. Total number of vessels	4 active sealing vessels	n/a		x	x
<b>4. Observation price</b>	n/a	n/a	n/a	x	x
YEAR 1999					
Member State and hunt	Norway Harp & Hooded seal	Norway Minke whale	Greenland - Sealing and Whaling	Faroe Islands - Pilot Whaling	Iceland
<b>1. Observer</b>	Atil Konradsson (IS)	Jakob Sørensen (GL)	Bjarni Mikkelsen (FO)	Hedvig Johanne Rud (NO)	x
1.1. Observer's report available	no	no	no	no	x
<b>2. Observation period</b>	22 - 24 April - 2 days	31 May - 08 June - 12 days		19 Jul - 2 August	x
2.1. Observation days utilized	2	n/a			x
2.2. Total target hunting days	Harp seal: 10 April - 30 June; hooded seal 20 March - 10 July	mid May - end of August			x
<b>3. Location</b>	Tromsø - Rieber Port; catches from West Ice and East Ice in spring	Lofoten/Land Based - delivery of catch	West Greenland		x
3.1. Observed events	n/a	n/a			x
3.1.1. Total target events	n/a	n/a			x
3.2. Observed vessels	3 vessels boarded	n/a			x
3.2.1. Total number of vessels	4 active sealing vessels	n/a			x
<b>4. Observation price</b>	n/a	n/a	n/a	n/a	x
YEAR 2000					
Member State and hunt	Norway Harp & Hooded seal	Norway Minke whale	Greenland - Sealing and Whaling	Faroe Islands - Pilot Whaling	Iceland
<b>1. Observer</b>	Bjarni Mikkelsen (FO)	Hans Svendsen Molgaard (GL)	Tore Tollersrud (NO)	Atil Konradsson (IS)	x
1.1. Observer's report available	no	no	no	no	x
<b>2. Observation period</b>	29 May - 3 June - 6 days	3 - 9 June - 6 days	10 - 19 October	31 Jul - 21 Avg	x
2.1. Observation days utilized	6	6 days			x
2.2. Total target hunting days	Harp seal: 10 April - 30 June; hooded seal 20 March - 10 July	mid May - end of August			x
<b>3. Location</b>	Tromsø - Rieber Port	Lofoten/Land Based - delivery of catch	The Godthåb Fjord and Nuuk	Islands of Suduroy and Vidoy	x
3.1. Observed events	n/a	4 vessels boarded		Two pilot whale drives observed	x
3.1.1. Total target events	n/a	487			x
3.2. Observed vessels	2 vessels	4 vessels boarded			x
3.2.1. Total number of vessels	n/a	33			x
<b>4. Observation price</b>	n/a	n/a	n/a	n/a	x
YEAR 2001					
Member State and hunt	Norway Harp & Hooded seal	Norway Minke whale	Greenland - Sealing and Whaling	Faroe Islands - Pilot Whaling	Iceland
<b>1. Observer</b>	Bjarni Mikkelsen (FO)	Hans Svendsen Molgaard (GL)	Tore Tollersrud (NO)	Atil Konradsson (IS)	x
1.1. Observer's report available	no	no	no	yes (a very good one)	x
<b>2. Observation period</b>	3-7 May - 4 days	11 - 18 June - 7 days	3 - 19 August	3 - 19 August	x
2.1. Observation days utilized	4	7 days			x
2.2. Total target hunting days	Harp seal: 10 April - 30 June; hooded seal 20 March - 10 July	mid May - end of August			x
<b>3. Location</b>	Tromsø - Rieber Port	Lofoten/Land Based - delivery of catch	Qaqortoq and Narsaq regions	Island of Eysturoy	x
3.1. Observed events	n/a	4 vessels boarded			x
3.1.1. Total target events	n/a	552			x
3.2. Observed vessels	2 vessels	4 vessels boarded			x
3.2.1. Total number of vessels	n/a	33			x
<b>4. Observation price</b>	n/a	n/a			x
YEAR 2002					
Member State and hunt	Norway Harp & Hooded seal	Norway Minke whale	Greenland - Sealing and Whaling	Faroe Islands - Pilot Whaling	Iceland
<b>1. Observer</b>	x	Bjarni Mikkelsen (FO)	Siri K. Knudsen (NO)	Hans Svendsen Molgaard (GL)	x
1.1. Observer's report available	x	no	no	no	x
<b>2. Observation period</b>	x	22 May to 7 June - 16 days	28 August to 7 September	25 July to 11 August	x
2.1. Observation days utilized	x	n/a	n/a	n/a	x
2.2. Total target hunting days	x	mid May - end of August			x
<b>3. Location</b>	x	Vessel off coast of Finnmark	n/a	n/a	x
3.1. Observed events	x	5 minke whales (3 on vessel and 2 onland)	n/a	n/a	x
3.1.1. Total target events	x	634	n/a	n/a	x
3.2. Observed vessels	x	one vessel on the sea, 2 on land	2 boat trips - Whaling observations	n/a	x
3.2.1. Total number of vessels	x	34	n/a	n/a	x
<b>4. Observation price</b>	x				x
YEAR 2003					
Member State and hunt	Norway Minke whale				
<b>1. Observer</b>	Atil Konradsson (IS)	Hans Molgaard (GL)	Per Nukaraaq Hansen (GL)	Bjarni Mikkelsen (FO)	
1.1. Observer's report available	no	no	no	no	
<b>2. Observation period</b>	23 May - 06 July - 44 days				
2.1. Observation days utilized	29 days				
2.2. Total target hunting days	mid May - end of August				
<b>3. Location</b>	Vessel based: the North Sea, Spitsbergen, Vestfjorden and off the coast of Finnmark				
3.1. Observed events	25 minke whales				
3.1.1. Total target events	647				
3.2. Observed vessels	4 vessels				
3.2.1. Total number of vessels	34 vessels				
<b>4. Observation price</b>	145359				
YEAR 2004					
Member State and hunt	Greenland - Sealing and Whaling				
<b>1. Observer</b>	Bjarni Mikkelsen (FO)	Tore Tollersrud (NO)	Vilhjálmur Svansson (IS)		
1.1. Observer's report available	no	no	no		
<b>2. Observation period</b>	3 August - 18 September				
2.1. Observation days utilized					
2.2. Total target hunting days	Sealing - year round; Harbour seal - 1 October - 30 April; Whaling - year round; minke whales 1 April - 31.12				
<b>3. Location</b>	Three different regions, one in South-West Greenland mainly in Qaqortoq and Narsaq, one in Nuuk and one in Sisimiut. The last one also travelled to Ilulisat and Maniitsoq; observations were predominantly land based due to bad weather				
3.1. Observed events	n/a				
3.1.1. Total target events	n/a				
3.2. Observed vessels	n/a				
3.2.1. Total number of vessels	n/a				
<b>4. Observation price</b>	196860				

YEAR 2005	
Member State and hunt	Norway Harp & Hooded seal
<b>1. Observer</b>	Atil Konradsson (IS)
1.1. Observer's report available	yes - very detailed and organized
<b>2. Observation period</b>	10 March - 2 May; ca 50
2.1. Observation days utilized	ca 50
2.2. Total target hunting days	24 March to 27 April
<b>3. Location</b>	West Ice; vessel: Havsel
3.1. Observed events	n/a
3.1.1. Total target events	n/a
3.2. Observed vessels	1
3.2.1. Total number of vessels	n/a
<b>4. Observation price</b>	<b>92 469</b>
YEAR 2006	
Member State and hunt	Greenland Whaling
<b>1. Observer</b>	Atil Konradsson (IS)
1.1. Observer's report available	yes
<b>2. Observation period</b>	15 July to 11 August
2.1. Observation days utilized	
2.2. Total target hunting days	
<b>3. Location</b>	
3.1. Observed events	
3.1.1. Total target events	
3.2. Observed vessels	seven days on board a vessel
3.2.1. Total number of vessels	
<b>4. Observation price</b>	<b>90 771</b>
YEAR 2007	
Member State and hunt	Faroe Islands - Pilot Whaling
<b>1. Observer</b>	Vilhjálmur Svansson (IS)
1.1. Observer's report available	yes
<b>2. Observation period</b>	15 til 31. august
2.1. Observation days utilized	
2.2. Total target hunting days	year round, but mostly July - September, 67% of all hunting in August.
<b>3. Location</b>	
3.1. Observed events	
3.1.1. Total target events	
3.2. Observed vessels	
3.2.1. Total number of vessels	
<b>4. Observation price</b>	<b>45 326</b>
YEAR 2008	
Member State and hunt	Norway Harp & Hooded seal
<b>1. Observer</b>	Vikars Jan Danielsson (SE)
1.1. Observer's report available	yes, in swedish
<b>2. Observation period</b>	30 mars - 28 april- ca31
2.1. Observation days utilized	ca 31
2.2. Total target hunting days	Harp seal: 10 April - 30 June; hooded seal 20 March - 10 July
<b>3. Location</b>	on board Havsel, West Ice
3.1. Observed events	n/a
3.1.1. Total target events	n/a
3.2. Observed vessels	1
3.2.1. Total number of vessels	3-4 bg vessels
<b>4. Observation price</b>	<b>123 172</b>
YEAR 2009	
Member State and hunt	Norway Minke whale
<b>1. Observer</b>	Vikars Jan Danielsson (SE)
1.1. Observer's report available	yes, in swedish
<b>2. Observation period</b>	27 June to 19 July
2.1. Observation days utilized	21 days on board the vessel
2.2. Total target hunting days	mid May - end of August
<b>3. Location</b>	Spitsbergen and Bjørnøya (vessel based)
3.1. Observed events	21 minke whales hunt
3.1.1. Total target events	484 minke whales caught
3.2. Observed vessels	1 vessel
3.2.1. Total number of vessels	21 vessel
<b>4. Observation price</b>	<b>66 782</b>

YEAR 2010		
Member State and hunt	Iceland - Fin and	Minke Whaling
<b>1. Observer</b>	Bjarni Mikkelsen (FO) - Fin Whaling	Vikars Jan Danielsson (SE) - Minke Whaling
1.1. Observer's report available	yes (norsk)	
<b>2. Observation period</b>	12-19 Jul	12-16 Jul
2.1. Observation days utilized		
2.2. Total target hunting days		
<b>3. Location</b>		
3.1. Observed events	observed at the land base during the delivery and flensing of 10 animals	observed at the delivery station in Kópavogur
3.1.1. Total target events	148	60
3.2. Observed vessels	2 whaling vessels and observed the taking of 3 fin whales	was onboard one day and observed the taking of 2 minke whales
3.2.1. Total number of vessels		
<b>4. Observation price</b>		<b>56816</b>
YEAR 2011		
Member State and hunt	Greenland Sealing and Whaling	Iceland Whaling (focus on minke whales)
<b>1. Observer</b>	Eythor Thordarson (IS)	Bjarni Mikkelsen (FO)
1.1. Observer's report available	yes - detailed	yes (norsk)
<b>2. Observation period</b>	15th of August to 8th of September	15 - 18 juli
2.1. Observation days utilized		
2.2. Total target hunting days		
<b>3. Location</b>	Illulissat, Qeqerarsuaq, Aasiaat and Aknaaq	
3.1. Observed events	two seal hunts, three minke whale hunts (two harpoon hunts and one communal rifle hunt involving 10 boats), flensing sites, the local markets and on one occasion he observed the landing and delivery from a boat that had been out hunting. In total 6 seals were hunted of which 2 were struck and lost and 3 minke whales of which 1 was struck and lost.	one hunting trip with a minke whale boat and observed the taking of two minke whales.
3.1.1. Total target events		58
3.2. Observed vessels		1
3.2.1. Total number of vessels		
<b>4. Observation price</b>		<b>109 028</b>
YEAR 2012		
Member State and hunt	Faroe Islands - Pilot Whaling	
<b>1. Observer</b>	Eythor Thordarson (IS)	
1.1. Observer's report available	yes - detailed	
<b>2. Observation period</b>	13 August to 3 September - 22 days	
2.1. Observation days utilized	8 days	
2.2. Total target hunting days	year round, but mostly July - September, 67% of all hunting in August.	
<b>3. Location</b>	FO, several grind beaches and places	
3.1. Observed events	one slaughtering - 61 animals; two unsuccessful drives	
3.1.1. Total target events		
3.2. Observed vessels	n/a	
3.2.1. Total number of vessels	n/a	
<b>4. Observation price</b>	<b>64,252</b>	
YEAR 2013		
Member State and hunt	Norway Minke whale	Iceland Whaling
<b>1. Observer</b>	Björgvin Guðmundsson (IS)	Hogni Arnbjarnson (FO)
1.1. Observer's report available	yes, in norwegian	yes, very brief
<b>2. Observation period</b>	09 to 20 June - 12 days	08 to 20 June - 14 days
2.1. Observation days utilized	n/a	n/a
2.2. Total target hunting days	mid May - end of August	
<b>3. Location</b>	5 days on board one vessel, 7 days on land	9 days on board one vessel, 9 days on land, Vesterålen
3.1. Observed events	4	5
3.1.1. Total target events	593 minke whales	
3.2. Observed vessels		5
3.2.1. Total number of vessels	17 vessels	
<b>4. Observation price</b>		<b>260,508</b>
YEAR 2014		
Member State and hunt	Greenland Sealing and Whaling	
<b>1. Observer</b>	Kristian Franer (NO)	
1.1. Observer's report available	yes - detailed and organized!	
<b>2. Observation period</b>	15.aug-05.Sept	
2.1. Observation days utilized	different observations, but almost every day was utilized	
2.2. Total target hunting days		
<b>3. Location</b>	West Coast	
3.1. Observed events	hunts for minke whales, flensing of the whale, seal hunt on the board of vessel, monitored sales of product on the market	
3.1.1. Total target events		
3.2. Observed vessels		
3.2.1. Total number of vessels		
<b>4. Observation price</b>	<b>94 664</b>	

YEAR 2015		
Member State and hunt	Faroe Islands - Pilot Whaling	
1. Observer	Ado Holm (GL)	Björgvin Guðmundsson (IS)
1.1. Observer's report available	yes, in Norwegian	yes - detailed
2. Observation period	3 – 24 August (22 days charged)	7 – 28 September (22 days charged)
2.1. Observation days utilized		
2.2. Total target hunting days	year round, but mostly July - September, 67% of all hunting in August.	
3. Location	Torshavn	
3.1. Observed events	n/a	none
3.1.1. Total target events	6 drives; 501 pilot whales were taken	
3.2. Observed vessels		
3.2.1. Total number of vessels		
4. Observation price	174,508	
YEAR 2016		
Member State and hunt	Norway Minke whale	
1. Observer	Ingibergur Sigurðsson (IS)	Høgni Arnbjarnarson (FO)
1.1. Observer's report available	no, only overview of observation activities	no, only overview
2. Observation period	8 to 31 May - 24 days	18 April to 13 May - 25 days
2.1. Observation days utilized	17 days actively utilized; 10/5-17-5 Bad weather - no sailing On board: 9/05-10/5 and 17/5-31/5;	23 days actively utilized
2.2. Total target hunting days	Hunting period: 1. April – 7. September	
3. Location		
3.1. Observed events	20 whale hunts were observed of which 18 whales were landed and two were struck and lost	
3.1.1. Total target events	Total catch, including struck and lost: 591 minke whales	
3.2. Observed vessels	One vessel during the whole period	One vessel - Sørøyfisk observed during the whole period
3.2.1. Total number of vessels	Active hunting boats: 16 vessels	
4. Observation price	163,338	
YEAR 2017		
Member State and hunt	Iceland Whaling	
1. Observer	Signar Petersen (FO)	
1.1. Observer's report available	no, only overview of activities	
2. Observation period	27 Jun - 18 July (around 21 days)	
2.1. Observation days utilized	6 days (The observer spent 11 days on shore not observing due to bad weather)	
2.2. Total target hunting days		
3. Location	Vessel based	
3.1. Observed events	0	
3.1.1. Total target events		
3.2. Observed vessels	2 vessels: Hrafnreydur 28/6-30/6 and Rorrarin 01/7-02/7; 03/7-05/7; 11/7	
3.2.1. Total number of vessels		
4. Observation price	70301	

	YEAR 1999	YEAR 2000	YEAR 2001	YEAR 2002	YEAR 2007	YEAR 2012	YEAR 2015
Member State and hunt	Faroe Islands - Pilot Whale	Faroe Islands - Pilot Whale	Faroe Islands - Pilot Whale	Faroe Islands - Pilot Whale	Faroe Islands - Pilot Whale	Faroe Islands - Pilot Whale	Faroe Islands - Pilot Whale
1. Observer	Hedvig Johanne Rud (NO)	Atil Konradsson (IS)	Atil Konradsson (IS)	Hans Svendsen Mølgaard (GL)	Vilhjálmur Svarsson (IS)	Eythor Thordarson (IS)	Ado Holm (GL) Björgvin Guðmundsson (IS)
2. Observation period	19 Jul - 2 Avgust	31 Jul - 21 Avg	3 - 19 August	25 July to 11 August	15 til 31. august	13 August to 3 September - 22 days	3 – 24 August (22 days charged) 7 – 28 September (22 days charged)
2.1. Observation days utilized				n/a		8 days	
2.2. Total target hunting days	year round, but mostly July - September, 67% of all hunting in August.						
3. Location		Islands of Suduroy and Vidoy	Island of Eysturoy	n/a		FO, several grind beaches and places	Torshavn
3.1. Observed events	1	2 pilot whale drives observed	1	0	1	1	0

	YEAR 1998	YEAR 1999	YEAR 2000	YEAR 2001	YEAR 2002	YEAR 2004	YEAR 2006	YEAR 2011	YEAR 2014
<b>Greenland, observed hunt</b>	Land Based observation	Land Based observation	Land Based observation	Land Based observation	Greenland - Seal and Whale hunt		Greenland whale hunt	Greenland - Seal and Whale hunt	
<b>1. Observer</b>	Lars Kleivane (NO)	Bjarni Mikkelsen (FO)	Tore Tollersrud (NO)	Tore Tollersrud (NO)	Siri K. Knudsen (NO)	Vilhjalmur Svansson (IS)	Atli Konradsson (IS)	Eythor Thordarson (IS)	Kristian Franer (NO)
<b>2. Observation period</b>	27 August - 14 September		10 - 19 October	3 - 19 August	28 August to 7 September		15 July to 11 August	15th of August to 8th of September	15.aug-05.Sept
<b>2.1. Observation days utilized</b>							26		low effectiveness - bad weather
<b>2.2. Total target hunting days</b>	Sealing - year round; Harbour seal - 1 October - 30 April; Whaling - year round; minke whales 1 April - 31.12								
<b>3. Location</b>	Nuuk	West Greenland	The Godthåb Fjord and Nuuk	Qaqortoq and Narsaq regions	Qaqortoq		Nuuk and in Sisimiut	Ilulissat, Qeqersuaq, Aasiaat and Akmaaq	Ilulissat
<b>3.1. Observed events</b>	Minke whale; fin whale; grenade harpoon hunt and flensing		Seals, small whales; delivery of catch and hunt	minke whale on board, seal and whale catch delivery	land based observation seal and whale hunt and catch delivery	two minke whales, harbour poeipoises and seals	one successful minke whale hunt, one minke whale carcass at the flensing place, • four unsuccessful minke whale hunts, • one unsuccessful fin whale hunt, • one unsuccessful harbour seal hunt and • two successful hunts of seals and several unsuccessful seal hunts	two seal hunts, three minke whale hunts, landing places and local markets	seals and harbour porpoises. Minke whale hunt,

	YEAR 2010	YEAR 2011	YEAR 2013	YEAR 2017
<b>Member State and hunt</b>	Iceland - Fin whale	Iceland - Minke whale	Iceland - Minke whale	Iceland - Fin whale and Minke Whale
<b>1. Observer</b>	Bjarni Mikkelsen (FO) - Fin Whaling	Vikars Jan Danielsson (SE) - Minke Whaling	Bjarni Mikkelsen (FO)	Anthor Hegelund (GL)
<b>2. Observation period</b>	12-19 Jul	12-16 Jul	15 - 18 juli	11. June- 2. July - ca 21 days
<b>2.1. Observation days utilized</b>				ca 21
<b>2.2. Total target hunting days</b>	Whaling season in Iceland for both fin and minke starts when the first animal is taken and closes 6 months later.			
<b>3. Location</b>				
<b>3.1. Observed events</b>	observed at the land base during the delivery and flensing of 10 fin whales	observed at the delivery station in Kópavogur; was onboard	two minke whales.	8 minke whales hunts; on land observation
<b>3.1.1. Total target events</b>	148	60	58	49 minke whales were caught by 3 boats and no struck and lost was reported. 134 fin whales were caught by 2 vessels and 5 struck and lost had been reported.
<b>3.2. Observed vessels</b>	2 whaling vessels and observed the taking of 3 fin whales	one day on board vessel and observed the taking of 2 minke whales	1	2
				2 vessels: Hrafnreydur 28/6-30/6 and Rorrarin 01/7-02/7; 03/7-05/7; 11/7

	YEAR 1998	YEAR 1999	YEAR 2000	YEAR 2001	YEAR 2002	YEAR 2003	YEAR 2009	YEAR 2013	YEAR 2016
<b>Member State and hunt</b>	Norway Minke whale	Norway Minke whale	Norway Minke whale	Norway Minke whale	Norway Minke whale	Norway Minke whale	Norway Minke whale	Norway Minke whale	Norway Minke whale
<b>1. Observer</b>	Atli Konradsson (IS)	Jakob Sørensen (GL)	Hans Svendsen Mølgaard (GL)	Hans Svendsen Mølgaard (GL)	Bjarni Mikkelsen (FO)	Atli Konradsson (IS)	Hans Mølgaard (GL)	Per Nukarazq Hansen (GL)	Bjarni Mikkelsen (FO)
<b>2. Observation period</b>	02 - 08 June - 6 days	31 May - 08 June - 12 days	3 - 9 June - 6 days	11 - 18 June - 7 days	22 May to 7 June - 16 days	23 May - 06 July - 44 days	27 June to 19 July	09 to 20 June - 12 days	08 to 20 June - 14 days
<b>2.1. Observation days utilized</b>	6 days	n/a	6 days	7 days	n/a	29 days	21 days on board the vessel	n/a	n/a
<b>2.2. Total target hunting days</b>	mid May - end of August								
<b>3. Location</b>	Lofoten/Land Based - delivery of catch	Lofoten/Land Based - delivery of catch	Lofoten/Land Based - delivery of catch	Lofoten/Land Based - delivery of catch	Vessel off coast of Finnmark	Vessel based: the North Sea, Spitsbergen, Vestfjorden and off the coast of Finnmark	Spitsbergen and Bjørnøya (vessel based)	5 days on board one vessel, 7 days on land	9 days on board one vessel, 9 days on
<b>3.1. Observed events</b>	8	n/a	4 vessels boarded	4 vessels boarded	5 minke whales (3 on vessel and 2 onland)	25 minke whales	21 minke whales hunt	9	20 whale hunts were observed of
<b>3.1.1. Total target events</b>	n/a	n/a	487	552	634	647	484 minke whales caught	593 minke whales	Total catch, including struck
<b>3.2. Observed vessels</b>	8 vessels boarded in the port	n/a	4 vessels boarded	4 vessels boarded	one vessel on the sea, 2 on land	4 vessels	1 vessel	1	1
									One vessel during the whole period. One vessel - Sørfisk observed

	YEAR 1998	YEAR 1999	YEAR 2000	YEAR 2001	YEAR 2005	YEAR 2008
<b>Member State and hunt</b>	Norway Harp & Hooded seal	Norway Harp & Hooded seal	Norway Harp & Hooded seal	Norway Harp & Hooded seal	Norway Harp & Hooded seal	Norway Harp & Hooded seal
<b>1. Observer</b>	Jakob Sørensen (GL)	Atli Konradsson (IS)	Bjarni Mikkelsen (FO)	Bjarni Mikkelsen (FO)	Atli Konradsson (IS)	Vikars Jan Danielsson (SE)
<b>2. Observation period</b>	24 - 30 April - 6 days	22 - 24 April - 2 days	29 May - 3 June - 6 days	3-7 May - 4 days	10 March - 2 May; ca 50	30 mars - 28 april - ca 31
<b>2.1. Observation days utilized</b>	6 days	2	6	4	ca 50	ca 31
<b>2.2. Total target hunting days</b>	Harp seal: 10 April - 30 June; hooded seal 20 March - 10 July					
<b>3. Location</b>	Tromsø, Rieber Port	Tromsø - Rieber Port; catches from West Ice and East Ice in spring	Tromsø - Rieber Port	Tromsø - Rieber Port	West Ice; vessel: Havsel	on board Havsel, West Ice
<b>3.1. Observed events</b>	n/a	n/a	n/a	n/a	n/a	n/a
<b>3.1.1. Total target events</b>	n/a	n/a	n/a	n/a	n/a	n/a
<b>3.2. Observed vessels</b>	boarded 3 vessels in the port	3 vessels boarded	2 vessels	2 vessels	1	1

**Annex 1.**

**NAMMCO**



**PROVISIONS OF THE  
JOINT NAMMCO CONTROL SCHEME  
FOR THE  
HUNTING OF MARINE MAMMALS**

Please cite this report as:

Provisions of the Joint NAMMCO Control Scheme for the Hunting of Marine Mammals, 1997

Sections A and B adopted by Council in 1996

Guidelines to Section B adopted in 1997

Amended in 2006

All text revised in 2009

**NAMMCO**

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# PROVISIONS FOR THE JOINT NAMMCO CONTROL SCHEME FOR THE HUNTING OF MARINE MAMMALS

The Scheme contains the following sections:

- Section A** Common elements for national inspection schemes for coastal whaling in NAMMCO member countries; this part of the scheme concerns hunting of whales from vessels with a harpoon gun on board, and
- Section B** An international observation scheme with the participation of NAMMCO member countries; this part of the scheme relates, in principle, to all hunting of marine mammals.
- Appendix 1** Items for inclusion in whaling logbooks
- Appendix 2** Guidelines to Section B – International Observation Scheme

Section B is administered by the NAMMCO Secretariat hereafter called the Secretariat.

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## SECTION A

### COMMON ELEMENTS FOR NATIONAL INSPECTION SCHEMES FOR COASTAL WHALING IN NAMMCO MEMBER COUNTRIES

#### A.1 Introduction

The national inspection schemes include national inspectors who either

- i) remain permanently on-board whaling vessels or at landing/receiving places during the hunting season, or
- ii) carry out random control of hunting vessels and landing/receiving places,

or a combination of i) and ii).

The aim of these regulations is to establish a standard of common elements, which shall be a minimum requirement in the random control, included in national inspection schemes. In addition to these elements, the individual member countries may include new elements as considered appropriate in relation to national laws and regulations for their specific whaling activities.

The national authorities decide the extent of inspection within their own jurisdiction.

#### A.2 Near-coast whaling operations

A.2.0 In these provisions, near-coast whaling operations is defined as whaling from vessels which bring their catch fresh to land.

A.2.1 The relevant authorities in each NAMMCO member country (hereafter called "the national authorities") design and publish a whaling logbook. The captain on board vessels equipped to carry out whaling must keep the logbook continually updated during the hunting season. A minimum requirement for the whaling logbook is that it includes the information listed in Appendix 1- *Items for inclusion in whaling logbooks*.

A.2.2 In addition to the logbook the national authorities may develop and implement regulations for the electronic monitoring of information to enable the controlling authorities to ascertain the vessel's position and activities etc.

The electronic monitoring system shall as a minimum sample the following types of data:

- i) *Vessel activity* - by continuous logging of time, position and speed of vessel
- ii) *Catching activity* - by continuous logging of data on the use of the harpoon gun, hauling of whales etc

A.2.3 The national authorities implement an arrangement whereby national inspectors carry out random checks on whaling vessels and at landing/receiving places. The national authorities compile a set of provisions for this arrangement, which specify requirements for the inspectors' qualifications and competence, duties, rights, etc.

A.2.4 One of the duties of the inspectors, as required by the national authorities, (cf. item A.2.3), shall be to examine the whaling logbook in order to check whether it has been filled in correctly, and in general to control that national regulations have been followed. If an electronic monitoring system is mandatory, the inspector shall check the system certificates, that the seals of amplifiers and control boxes are not broken and that the system is activated. Sealed components shall not be broken by the inspector.

Inspectors shall

- i) draw attention to violations of regulations on board whaling vessels or at landing/receiving places, and in these instances demand changes according to the regulations in effect;
- ii) collect samples and record data in accordance with national and international requirements;
- iii) report to their national authorities, and
- iv) have access to the logbooks of the vessel, check the electronic monitoring system (see A.2.4) and have the right to communicate with the national authorities through the communication equipment of the vessel.

The national authorities develop a reporting form for use by the inspectors.

A.2.5 The national authorities develop and implement regulations for storage of the catch on board a vessel. Meat, blubber and "mattak" (hide, including a thin layer of blubber) from individual animals caught must be stored on board separately from other catches. Separation of these parts shall occur within a minimum of six hours after the catch report is made.

### A.3 Off-coast whaling operations

A.3.0 In these provisions, off-coast whaling operations is defined as whaling where the whale is flensed on board vessels which are equipped to handle and store meat and blubber either frozen or chilled with ice, or preserved by other means, in connection with transport/storage.

A.3.1 The requirements referred to under A.2.1 and A.2.3 - A.2.5 also apply to off-coast whaling operations.

A.3.2 The national authorities may develop and implement regulations for the electronic transmission of information to enable the controlling authorities to ascertain the vessels position etc.

The regulations shall require the following types of reports:

- i) *Report of commencement of activity* - report on time and place when leaving port or when weighing anchor
- ii) *Report of position* - regular daily report on position.
- iii) *Report of catch* - report on the time and position of the catch, and subsequent treatment of catch (i.e. flensing).
- iv) *Report of termination of activity* - report on time and place when arriving at port or when anchoring



## **SECTION B**

### **INTERNATIONAL OBSERVATION SCHEME**

#### **B.1 Introduction**

The purpose of establishing an international observation scheme among NAMMCO member countries is to provide a mechanism for NAMMCO to monitor whether decisions made by the Commission are respected. For this purpose, NAMMCO appoints observers who oversee hunting and inspection activities in NAMMCO member countries.

#### **B.2 Duties and competence**

B.2.1 Observers are responsible for overseeing hunting activities and for observing whether or not these are carried out in accordance with decisions made through NAMMCO and national regulations. Observers have no authority of jurisdiction, and consequently cannot intervene in the hunting, or other activities connected with the hunting.

Observations can take place on board a vessel, or on shore, in connection with flensing, storage and landing/delivering of the catch.

B.2.2 The observer shall be allowed to check licences and relevant certificates, logbooks/whaling logbooks, all rooms on board or on land, hunting equipment, and communication equipment, etc., which are relevant for his/her work. If an electronic monitoring system is mandatory, the observer shall check the system certificates, that the seals of amplifiers and control boxes are not broken and that the system is activated. Sealed components shall not be broken by the observer.

B.2.3 The observer shall report any violation of the regulations in a given area, and as soon as possible, send a report of such to the Secretariat, with a copy to the authorities in the country in question, as well as to the owners of the vessel. The captain, those in possession of the licence, and, if present, the inspector, shall be given the opportunity in a special paragraph of the report, to record their comments.

B.2.4 The observer is required to prepare a report of the observations made, and send it to the Secretariat.

B.2.5 The observer shall carry out his/her duties on the basis of the guidelines adopted by the Council (see Appendix 2 - Guidelines to Section B).

B.2.6 The observers are responsible to NAMMCO, and can neither seek nor receive instructions from any other person or authority.

#### **B.3 Appointment of observers**

B.3.1 The Council appoints observers for one year at a time. Appointments are made through a procedure that ensures member countries the opportunity both to nominate candidates as well as to oppose the appointment of candidates. The appointment procedure is described in Appendix 2: guidelines to Section B.

NAMMCO can invite non-member countries to nominate candidates.

B.3.2 An observer shall only in exceptional circumstances be appointed to observe in the country - or on a vessel registered in the country - of which he or she is resident.

#### B.4 Qualifications and safety issues

B.4.1 The Council has compiled guidelines for requirements for the competence, training, etc., of observers. These guidelines are found in Appendix 2.

B.4.2 As a general rule, observers must have at least the same level of professional competence as that required of inspectors in the country where the observations are to take place. In special circumstances, exemption from this requirement can be given.

B.4.3 For safety reasons, the language competency of observers must be taken into consideration. An observer on board a hunting vessel must be able to communicate spontaneously with the crew. For communication on land, a translator may be used.

B.4.4 When out at sea, the observer must ensure that he or she acquires the necessary information and knowledge related to safety issues and how to behave in an emergency situation. As a minimum the observer must know where to find survival suits and be familiar with how the suits work, where to evacuate, emergency exits, life boats etc.

#### B.5 Scope of activities

B.5.1 The Council identifies annually priorities for the scope of observation activities for the coming year, within the budget adopted by the Council. The Secretariat is responsible for the practical administration and co-ordination of these activities.

#### B.6 Integrity

B.6.1 The authorities in the country where observations take place shall take appropriate measures to ensure the safety, freedom and dignity of the observer, and shall, in addition, be of assistance in both word and deed, so that the duties of the observer can be carried out properly and efficiently.

B.6.2 Neither the owner or the captain of a vessel, nor the owner or the manager of a landing/receiving place that is to be observed, can oppose observation by a person appointed by NAMMCO according to guidelines referred to in B.3.1.

#### B.7 Administration and Costs

B.7.1 The International Observation Scheme is administered by the Secretariat, in accordance with guidelines set down by the Council (Appendix 2).

B.7.2 The Secretariat prepares an annual report of the observation scheme, in which the implementation of the scheme is described, for the review of the Council. The document shall include reports of any violations, as well as other relevant comments.

B.7.3 The Secretariat shall send a copy of the observer report to the authorities in the country in which the observations have taken place.

B.7.4 Costs in connection with the activities of NAMMCO observers are covered by the NAMMCO budget in cases where different arrangements have not been agreed by NAMMCO and the country which sends the observer. The Council may give guidelines for such arrangements.

## ITEMS FOR INCLUSION IN WHALING LOGBOOKS

### **I Vessel, whaling equipment and formalities**

- 1 Registration number of the vessel
- 2 Call sign.
- 3 Name of captain/licence holder
- 4 Name(s) of gunner(s)
- 5 Number of licence
- 6 Calibre of harpoon gun
- 7 Type of grenade used
- 8 Calibre of rifle
- 9 Number of grenades and propellant charges (and their serial numbers) on board at end of last whaling trip
- 10 Number of grenades and propellant charges (and their serial numbers) taken on board in connection with present whaling trip
- 11 Number of grenades and propellant charges (and their serial numbers) on board at end of present whaling trip

### **II Activities**

- 1 Port of departure
- 2 Date and time of departure from port or weighing anchor
- 3 Port of landing or position of anchoring
- 4 Time catch landed
- 5 Location catch landed

### **III The hunt**

- 1 Species hunted
- 2 No. of whales caught in the season
- 3 Time first harpoon fired
- 4 Number of harpoons fired
- 5 Number of hits
- 6 Time of catch
- 7 Position of catch
- 8 Sex
- 9 Caught / lost
- 10 Location of flensing (flensing site)

In addition the following items may be included:

#### Research data

- 1 Length
- 2 Sex
- 3 Foetus
- 4 Time search started
- 5 Time of first sighting of whale (species to be reported)
- 6 Position of sighting
- 7 Number of whales and groups of whales sighted (species to be reported)
- 8 Samples taken

### **IV Other**

- 1 Comments
- 2 Date and signature (captain)

**GUIDELINES TO SECTION B**  
**INTERNATIONAL OBSERVATION SCHEME -**  
**OF THE JOINT NAMMCO CONTROL SCHEME FOR**  
**THE HUNTING OF MARINE MAMMALS**

**AD B.2.5 - DUTIES AND TASKS OF THE OBSERVER**

1. According to article B.2.1 of the Joint NAMMCO Control Scheme, the observer is responsible for the observation of marine mammal hunting activities in NAMMCO member countries. The observer shall control whether these activities are carried out in accordance with decisions made by NAMMCO and relevant national regulations.

**Control objects<sup>1</sup>**

2. In connection with observation of whale hunting with harpoon guns in which the catch is taken to land and flensed/processed at a permanent installation, the observation shall, if it has not been carried out on board, take place at the flensing site. To the extent that such are required by regulation, the following shall, where possible, also be observed:
  - i) Hunting permit<sup>2</sup>
  - ii) Vessels logbook
  - iii) Whaling logbook/report of catch (cf. Control Scheme, art. A.2.1 & art. A.3.1). The observer checks whether it has been kept correctly. In connection with controlling the number of whales on board in relation to the records of the logbook in off-coast whaling operations, where the products are stowed on ice or frozen on board, the observer shall only be concerned with those products which are kept separately according to the provisions set out in the Control Scheme, art. A.3.1, cf. art. A.2.5. The entire catch is controlled according to point 4 of these guidelines.<sup>3</sup>
  - iv) Electronic monitoring system where such equipment is mandatory<sup>4</sup>
  - v) Hunting equipment and its use<sup>5</sup>

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1 Observation activities can be carried out in four areas:

- 1) observation of whaling carried out with the use of a harpoon gun or of flensing of whales taken with a harpoon gun;
- 2) observation of sealing or forms of whaling other than with harpoon guns, or the flensing of animals from such hunting;
- 3) observation of the landing/delivery of marine mammal catches; and
- 4) observation of national marine mammal inspection activities.

2 The term hunting permit refers to the permit which in some countries is issued as proof of the vessels authorisation for hunting. The term also includes any licences and certificates of training required to hunt marine mammals.

3 According to article A.2.5 of the Control Scheme, meat from individual whales shall be kept separate for at least six hours after the catch has been reported. When individual animals are no longer stored separately, observation is not relevant, as the number of whales caught can no longer be accurately determined. Control of catches chilled and stowed on board, will occur upon landing (as described in point 4 of these guidelines).

4 The observer shall check that the system is certified, correctly sealed and activated. Sealed components shall not be broken by the observer or unauthorized personnel. The control consists of checking system certificates and checking the seals of components like amplifiers and control boxes.

5 The term hunting equipment covers all equipment that is directly connected to the hunting or the flensing process.

- vi) Hunting procedures
  - vii) Killing methods
3. In connection with observation of hunting or flensing of whales and seals not covered by point 2 of these guidelines, the observer shall, to the extent that such are required by regulation, control the following<sup>6</sup>:
    - i) Hunting permit
    - ii) Whaling logbook / report of catch
    - iii) Hunting equipment and its use
    - iv) Hunting procedures
    - v) Killing methods
  4. If the observation cannot be carried out during hunting or flensing, it may be done in connection with the delivery of catch, which is understood to be the physical and legal transfer to a third party. In this connection the items mentioned under 2 and 3 above, as well as documents necessary for the sale and production of the catch, can be controlled.<sup>7</sup>
  5. In cases where a national inspector is also present during hunting activities, the observer shall report whether the national inspection is carried out in accordance with existing regulations.

### **Reports<sup>8</sup>**

6. No later than one month after the end of the employment period the observer must submit a report on activities (cf. the Control Scheme art B.2.4). The report shall be sent to the NAMMCO Secretariat (hereafter called the Secretariat) on a NAMMCO observer report form. The language of the report shall be either English or a Scandinavian language.
7. In case of infringements of regulations, the observer shall send a written report on the specified form as soon as possible to the Secretariat, with a copy to relevant authorities in the flag state and to the owner of the vessel (cf. the Control Scheme art. B.2.3). The report shall contain all relevant information regarding the nature of the infringement, including date, position at the time of violation, which regulations have been violated, and how the infringement occurred. The captain, the licence holder and the national inspector shall have the opportunity of making their own remarks to the report.
8. In cases where a national inspector is not present, and where an infringement involves the catch of a protected species/stock, the exceeding of a quota, hunting in restricted areas, hunting without a license where such is a requirement for hunting, or the use of unauthorised equipment, the observer shall at once inform the control authorities of the flag state through the Secretariat.

### **General conduct of observers**

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6 This point refers to all other forms of marine mammal hunting besides whaling with harpoon guns, such as the hunting of pilot whales and other small whale species, and all forms of sealing, whether opportunistic near-coast hunting or Norwegian sealing in the West and East Ice.

7 Observation should take place at one or more of the following stages: 1) On board the hunting vessel; 2) in connection with flensing, whether this takes place at a permanent flensing place or elsewhere; 3) in connection with delivery of the catch (both in physical and legal terms). Once the catch is delivered, the observer will be precluded from further control. By both physical and legal delivery of the catch is meant that observation can take place as long as it is practically possible, and even if, for example, the catch has been sold while still on a vessel. Once the catch is sold and delivered to the buyer, observation shall no longer take place.

8 It is at all times the responsibility of the authorities in the observed country to assess and act on any reports of infringements. In cases where regulations are broken by accident and where the infringement is reported correctly and at once, there will in general be no basis for the observer to prepare a specific report on the occurrence, although reference should be made to it in the general observation report.

9. During the exercise of their duties, observers shall conduct themselves with appropriate tact and respect. Upon arrival at a vessel, a landing/receiving station or other place where observation duties are carried out, the observer shall always display his/her authorisation and identification card to the person in charge.

### **Confidentiality**

10. Observers shall ensure the confidentiality of their duties and shall not report on observations carried out under the NAMMCO Control Scheme to any other parties than the Secretariat or those institutions determined by the Secretariat (see also point 6-8 of these guidelines).

### **AD B.3.1 - APPOINTMENT OF OBSERVERS**

11. Member countries develop a list of candidates for the following year and send it to the Secretariat by 15 November. The list shall include information on the qualifications of the candidates. The Secretariat circulates a combined list of suggested candidates to member countries for approval. In the event that a member country wishes to make a reservation to any candidate, this must be done before 15 December<sup>9</sup>. The Secretariat then circulates the list of candidates approved by all member countries to the Council for appointment.

### **AD B.4.1 - COMPETENCE, TRAINING ETC. OF OBSERVERS**

12. The requirements for the professional, linguistic and safety at sea qualifications of the observers are set out in the Control Scheme, articles B.4.2, B.4.3 and B 4.4. If, due to special circumstances, a member country wishes to make use of the exemption clause under article B.4.2, priority shall nevertheless be given to the following qualifications: experience with similar inspection activities, hunting experience, with administration of hunting and biological studies, with an emphasis on the killing of animals and/or management.<sup>10</sup>
13. In order to ensure that the persons appointed as observers are sufficiently informed about the relevant hunting regulations and the duties of national inspectors, observers shall participate in whatever annual training courses are compulsory for inspectors in the flag state. If such courses are not held, or if the observer is unable for other reasons to participate in such courses, the observer must receive other relevant training, developed in co-operation between the authorities of the flag state and the Secretariat.

### **AD B.5.1 - ADMINISTRATION OF INTERNATIONAL OBSERVATION SCHEME**

#### **Plans for observation and activities**

14. By October each year the Secretariat develops a proposal for the Council for the scope and range of observation activities during the following year in accordance with budgeted funds for these activities. The Council shall approve this proposal and appoint the observers by 1 January. The Secretariat, in co-operation with control authorities in respective member countries, then develops a specific plan for observation activities. The plan shall, among other things, define the time frame for observation activities and shall specify the observation areas for each observer. The Secretariat may for practical reasons, and in co-operation with the authorities of the relevant member countries, make changes in the plan if necessary. The detailed plan of observation activities shall only be known to the control authorities in the relevant member countries and the Secretariat.

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<sup>9</sup> It is understood that a reservation to the appointment of a particular candidate is a reservation to his/her appointment as a NAMMCO observer in any area of activity.

<sup>10</sup> As the duties of national inspectors vary from member country to member country due to the differences in the activities which they control, it is expected that the exemption clause in Control Scheme art. B.4.2 will be applied to some extent. The notes to the Control Scheme outline which areas of competence are considered most important in relation to the application of art. B.4.2. To this has also been added biological studies, with an emphasis on the killing of animals and/or management.

### **Appointment of observers**

15. When a detailed plan of observation activities for the year is finalized, those observers who will be called upon for active observation will receive an employment contract from the Secretariat. When both parties sign this, the observer will receive an identification card, as well as other relevant documentation necessary for his/her duties. The observer shall return his/her identification card to the Secretariat together with the final report of activities, and shall then receive a letter from the Secretariat confirming his/her completion of duties according to the Scheme.



## **Annex 2.**

### **REVIEW OF THE NAMMCO OBSERVATION SCHEME**

Prepared for the CIO January meeting 2005

At its last meeting in January 2004 the Sub-Committee on Inspection and Observation asked the Secretariat to review and recommend improvements to the implementation of the Observation Scheme. The evaluation should only consider the implementation process and not the actual Provisions and Guidelines texts. The Management Committee in its deliberations at its meeting in March 2004 endorsed this recommendation from the Sub-Committee.

In 2003 the Secretariat had prepared a document outlining the experiences with the Observation Scheme. The document was two-folded, and part one gave statistical data such as where and for which period observations had taken place, observation targets and land of origin of the observer. The second part summarised earlier recommendations made by the then Working Group on Inspection and Observations.

Updated to include the 2004 season the statistical information is as follows:

The Scheme came into force in 1998 and has been in operation for seven seasons.

No violation of national or hunting related regulations has occurred during these seven seasons. In 2001 there was a violation of the regulations laid down by the NAMMCO Inspection and Observations Scheme when the observer was denied access to one vessel in Norway. The incident was a result of communication failure between the observer and the skipper, and perhaps also grounded in too little knowledge of the observation scheme on behalf of the skipper. However, the national inspector reported no infringements or violations of the Norwegian laws and regulations on the same vessel.

Until 2003, with the exception of 1998 when no observer was sent to the Faroe Islands, observers were each season placed in all three member countries engaged in hunting activities (the Faroe Islands - pilot whaling, Norway - sealing and minke whaling and Greenland - sealing and whaling). In 2003 observation activities were limited to Norway only, and three observers were placed on board different whaling vessels. In 2004, following the good experience with focusing the observation effort to one region and/or activity, three observers were active in Greenland.

Until 2001 all observations had been land-based. In 2001 the observer in Greenland went out to sea with the hunters and from 2002 observers on the Norwegian minke whale hunt have been placed on board vessels for a duration of more than one day and up to several weeks.

Below is given a very brief outline of some of the characteristics of the hunts having an impact on the implementation of the observation scheme in Greenland, the Faroe Islands and Norway. Iceland is not being described as no observations have taken place here yet.



## Norway

Commercial hunt of both minke whales and seals (harp and hooded seals).

Whaling: approx. 35 hunting-vessels, five hunting areas of which four involves hunting-trips of a duration of more than a day, some like in the Jan Mayen and Svalbard area involve several weeks out at sea.

Sealing: between 3 – 4 big vessels hunting in the west and east ice involving being away for 6 to 8 weeks.

Both the whaling and sealing seasons are restricted to certain periods of the year whaling usually from mid May to end of August, sealing harp seal 10 April – 30 June, hooded seal 20 March – 10 July.

The nature of the Norwegian hunt both with regards to whaling and sealing makes the implementation of the observation scheme relatively simple. When the actual hunting seasons commence several factors are defined like number of vessels, quotas and which hunting areas a certain vessel will operate in and to a certain extent the approximately time-period.

There are however uncontrollable/unpredictable factors in the implementation of the Observation Scheme, among which weather conditions play a major role. As an example one observer was contracted for a total of 16 days of which he was landed for 14 days due to bad weather. Another observer changed vessels out in open sea. This was possible because the weather was calm, one vessel was waiting for instructions from local authorities and could not hunt and the other vessel was not moving because the crew was cutting up and processing a whale. Under normal circumstances calm weather means vessels are fully occupied in hunting operations and probably not very eager to assist an observer in changing vessels and in rough weather changing vessels is not feasible due to safety reasons.

The whaling fleet in Norway consists largely of small vessels, and has it not always been possible to find accommodation for the NAMMCO observer i.e. additional bed. With the introduction of the Blue box this element will be greatly reduced.

In Norway all sales of meat from the whaling vessels are sold through “Salgslag” of which Norges Råfiskelag is the biggest. When deemed necessary they will issue regulations with respect to the landing of catches i.e. when they see that the markets are not able to process the volume. This may create unforeseen halt in the hunt which can have implications for the observer scheme. For instance in 2003 Norges Råfiskelag had prior to the season issued a regulation pertaining to the landing of catches. The rationale for the regulation was to spread the distribution of the catches throughout the season and thereby avoiding a pile up of meat at the end of the season as had been the case in previous years. The regulation meant that as a minimum the vessels had to land their catches twice during the season, and the first landing had to be before or when half of the quota was taken. Nice weather and good accessibility in May/June led to unusually large catches and the receiving plants did not have the required capacity to handle the catches. Further regulations were therefore issued in late June ordering all vessels to land their catches after 7 animals were taken and then to stay on shore in 7 days before returning to the hunting grounds. The implication for the



observation scheme was that the observer who was contracted to work late in the season only stayed on board one vessel. When the allowed 7 animals were taken the vessel had to return and stay on shore for 7 days and because no other vessels were hunting in this area there was no reason to prolong the observers stay.

### **Greenland**

Sealing can take place all year round with the exception of adult and breeding Harbour seal in the period 01.10-30.04. Seals are predominately hunted with rifles. Whaling (fin whales, minke whales, beluga and narwhals, pilot whales and harbour porpoises) all year round except minke whales which can only be hunted in the period 01.04-31.12. Quotas exist on minke and fin whales, beluga and narwhal. Larger whales (fin and minke) should predominately be harpooned (approx. 75% of the quota), but some joint rifle hunt is allowed with respect to minke whales. There are special flensing areas for whales around the villages and towns. Walrus may be hunted north of 70 degrees 30/N in Western Greenland and south of the National Park in East Greenland all year round, otherwise it is not allowed. There is a regulation stipulating that reallocation of the remaining quotas for fin and minke whales must take place before 15 October each year. While this takes place there is full stop in hunting activities for these species. In 2004 the stop had a duration of 4 days.

In order to go hunting a person needs a “jagtbevis” and a license for species that are quota regulated issued by the Department of Fisheries and Hunting. In order to sell the products from the hunt a “ervervsjagtbevis” is required. The whalers do not write a “logbok” but have to fill out and submit a “fangstrapport” to the community office before they can sell their products at the market. At the same time their license is stamped. It is the community office that reports to the Department of Fishing and Hunting. The whalers are not obliged to report a hunt to the regional “jagtbetjenter”. Every year all hunters must fill out and submit a “årsregistreringskema” to the Department of Fishing and Hunting.

The total annual catch of all important species is published in the information booklet PINIARNEQ. This publication gives information on hunting seasons, laws and regulations, registration forms and hunting statistics and is distributed to every person receiving the “Jagtbevis” for the following year.

The hunting of marine mammals in Greenland is an opportunistic hunt. With respect to whaling, most boats are fishing boats, which are also licensed to go whale hunting. The boats are usually out fishing and when spotting a whale they terminate the fishing activity and go after the whale if they believe this to be the most lucrative option. The joint rifle hunts is by nature more organised in the sense that if the weather conditions are good the parties to the hunt will go out primarily with the aim of hunting whales. Most boats are small with limited space for accommodation. Most boats seem to operate fairly close to their home-place, going out to sea in the morning and returning in the evening. Most boats do not have freezers onboard and consequently need to sell the products as soon as possible. Seals are hunted from dinghies and from the ice and happen on an individual basis.

Weather is by far the most decisive factor when considering to go hunting or not. Other important factors to consider seems to be market conditions, i.e. the possibilities of getting the products from the hunt sold. This again is depended upon people’s supply of money.



Judging from observer's reports it seems to be a connection between the official pay-days and incitement for the hunters to go hunting. When you use a harpoon you naturally want to know that you have the money to replace it plus some surplus. Most of the marine mammal hunters in Greenland also hunt reindeer, musk ox and birds. The hunting season for these terrestrial mammals is fall and winter. These hunts have implications for the marine mammal hunt with respect to time and market possibilities. Products from both hunts compete in the market place.

### **The Faroe Islands**

An opportunistic hunt. Schools of pilot whales may arrive all year round, but the period July – September with a peak in August has accounted for 67 % of all hunting in the period 1584 – 1999. The drive and killing of pilot whales may only take place at authorised whaling bays, today there are 24 such authorised whaling bays. Everybody may participate regardless of occupation and the returns from the hunt are divided after specific rules between the participating hunters and households in the “grinde” district. The processing takes place at home. No quotas exist, but Sysselmannen may close a certain area when he/she realises that it is enough pilot whale meat and blubber in that area for a period. In other words the underlying assumption is that the hunt should only take place when there is a need for the products.

A majority (58%) of the sightings of schools of pilot whales is from fishing boats and one third of these happen on Friday or Saturdays. The reason for this is that then the Faroese have time to go out fishing.

From the point of view of the implementation of the observer scheme to observe in the Faroe Islands is relatively easy. The only thing the observer has to make sure of is to have good communication lines to the Sysselmann (in reality this means the local police) because he/she is always notified of sightings of grinds and gives the formal go ahead for the drive to begin. Another factor may be transportation to the actual whaling bay.

### **General comments and points for improvement**

The observation “scene” is more “unorganised” in Greenland compared to Norway and the Faroe Islands. Although very different by nature the hunting activities are more easily accessible in Norway and the Faroe Islands than in Greenland. In Norway, and especially so after the introduction of the blue box, the main obstacle will be to locate possible whaling vessels and make a decision as to which area the observers should work from. With respect to sealing in Norway the main obstacle is the time period needed in order to have an observer on board a vessel. The observer in question will need to be away from his job up to 8 weeks. In the Faroes the main elements will be to decide the observation period and establishing well functioning communication lines with the various Sysselmenn. In Greenland the hunting takes place more or less throughout the whole year, but in a very random fashion. Sealing is conducted from small dinghies or on the ice and it will probably be difficult to observe the actual chase and kill without interrupting the hunt itself. Documents like Fritidsjagtbevis and ervervsjagtbevis are both required documents in order to go hunting and these are easily controllable, and land based observations are fairly easy to conduct given that there are hunting taking place. From the point of view of the Secretariat it would be beneficial to keep focusing on activities in Greenland in order to gain a better understanding of the overall situation.



How should the success of the observation scheme be assessed? It seems important to remember that it is not necessarily a high number of actual observations during a period that makes the scheme successful but the fact that an observer is present and able to conduct his or her job without interference's of any sort. A consequence of this is that an observer may be active for a long period without actually witnessing any hunt.

*Nomination process:* member countries to keep deadlines and nominate more than one observer candidate. In this connection remember the possibility of nominating observers from other countries. In such a case the nominating country is obliged to cover the possible extra expenses incurred due to for instance longer travel. The procedures governing the nomination and appointment of observers are somewhat time-consuming and bureaucratic. It is never the less very important that these procedures are followed as they secures the legitimacy of the scheme and also guarantee transparency of the system.

*Information flow to the Secretariat:* detailed information on time frames, quotas and places for the most optimum areas of observation, names of contact persons etc. To have updated information in the Secretariat is very important for the smoothly running of the observation scheme. By focusing on one region the Secretariat has gained valuable information on how the different hunts are being organised in the different countries. It would be beneficial to continue this practice especially with regards to Greenland.

*The language and cultural barrier:* The Scheme stipulates that the observer should not come from the country in which he/she is doing observations. This poses a special problem for observations in Greenland as most foreigners do not speak or understand greenlandic. Furthermore a majority of hunters in Greenland do not speak English or may not have a good understanding of a Nordic language. The implication of this is that the observer needs to be accompanied by an interpreter or the national "jagtbetjent". To be able to communicate well is of the outmost importance when being on board a hunting vessel due to security reasons. The same problem arises to a certain extent with observations out at sea in Norway. Although Norwegian and Danish are similar languages it still may be difficult to understand each other due to dialect differences. Another aspect of the observation scheme is cultural differences. It is not necessarily a problem, but it is an element of the scheme that should be kept in mind.

*Budget:* The budget of NOK 200 000 will never allow for more than partial coverage. In order to observe all activities the whole season the budget would go sky high something that is not feasible or desirable.

*Duration of the observation period:* Especially with respect to observations of sealing in Norway it might be a problem to get observers who can actually be away for such a long period of time as is required. The vessels are out at sea for 6 – 8 weeks. Most observers have jobs and will not easily be able to take off for two months on a relatively short notice. The sealing fleet leaves Norway around the middle of March which means that the observer in question will have a maximum of two months but more likely one month to arrange his leave from work etc. A possibility could be to nominate two years ahead.



CS/Report 1

NAMMCO INTERNATIONAL OBSERVATION SCHEME

**OVERVIEW OF OBSERVATION ACTIVITIES**

Country in which observation took place .....

Observation period (date/time): From \_\_\_\_\_ To \_\_\_\_\_

Observation objects (specify objects and periods):

Infringements: Infringement Report no:

- a. ....  Yes  No .....
- b. ....  Yes  No .....
- c. ....  Yes  No .....
- d. ....  Yes  No .....
- e. ....  Yes  No .....

Was the national inspection carried out in accordance with national regulations, cf. Guidelines to Section B of the Joint NAMMCO Control Scheme for the Hunting of Marine Mammals, item 5?  Yes  No If no, specify

.....  
.....

Other comments

.....  
.....  
.....

Number of attachments .....

Observers name .....

Date and signature .....



CS/Report 2

**NAMMCO INTERNATIONAL OBSERVATION SCHEME**

**REPORT OF OBSERVATION**

1. Observation object (vessel (name and call sign), flensing place (locality or position), production plant (name and address), other (type and position)) .....  
.....  
.....
2. Observation period: From (date) \_\_\_\_\_ To (date) \_\_\_\_\_
3. Observation area (ICES-/NAFO- or IWC-codes) .....
4. Name of person in charge .....
5. Name of national inspector .....
6. Infringements (attach completed form CS/Report 3) .....
7. Could observation be carried out in accordance with the provisions of Section B of the Joint NAMMCO Control Scheme for the Hunting of Marine Mammals (The International Observation Scheme)?       Yes       No  
If no, specify .....  
.....  
.....
8. Name of observer .....
  
- Date and signature .....



INTERNATIONAL OBSERVATION SCHEME  
INFRINGEMENT REPORT

- 1. A) Observation object (vessel, name and call sign).....
- B) Flensing place (locality or position).....
- C) Production plant (name and address).....
- D) Other (type and position).....

2. Date, time (UTC), position .....

3. Type of infringement .....

4. Description of infringement .....

.....

.....

(Attach extra sheets if necessary)

5. Name of person in charge of observation object .....

6. Remarks from person in charge of observation object .....

.....

.....

7. Name of national inspector .....

8. Remarks from national inspector .....

.....

.....

9. Name of observer .....

Person in charge ..... Date .....

Inspector ..... Date .....

Observer ..... Date .....