

European Commission,
Directorate-General Environment

Assessment of the potential impact of a ban of products derived from seal species

April 2008



COWI

COWI A/S

Parallelvej 2
DK-2800 Kongens Lyngby
Denmark

Tel +45 45 97 22 11
Fax +45 45 97 22 12
www.cowi.com

European Commission
Directorate-General Environment

Assessment of the potential impact of a ban of products derived from seal species

April 2008

Report no. 1
Issue no. final
Date of issue 09-04-08

Prepared COWI-team
Checked AR
Approved PGM

Table of Contents

Executive Summary	1
1 Introduction	6
1.1 Background and contribution from the study	6
1.2 Types of seal hunting	8
1.3 Ethical concerns of seal hunting	9
1.4 Concerns for Inuit people	10
1.5 Community legislation	13
2 Study approach and methodology	17
2.1 Study process	17
2.2 Study limitations	18
2.3 Describing seal hunt management systems	19
2.4 Handling different information sources	20
3 Range state seal hunt management systems	22
3.1 Canada	22
3.2 Finland	35
3.3 Greenland	44
3.4 Namibia	52
3.5 Norway	61
3.6 Russia	71
3.7 Sweden	78
3.8 United Kingdom (Scotland)	87
3.9 Overview and identification of best practices	92
4 Measures to improve animal welfare aspects of seal hunting	97
4.1 Overview	97
4.2 Legislative measures	97
4.3 Non-legislative measures	100

5	Impact assessment of measures	101
5.1	Coverage of impacts	101
5.2	Baseline	103
5.3	Impact of prohibition of placing on the market of skins of seals and products derived therefrom	117
5.4	Impact of prohibition of imports into the Community of skins of seals and products derived therefrom	119
5.5	Impact of labelling system	121
5.6	Impact of other measures	122
6	Public perception of seal hunt	124
6.1	Questionnaire results	125
6.2	Observations from e-mails submitted to the Commission	130
6.3	Conclusions for public consultation	131
7	Conclusions and recommendations	133
7.1	Conclusions	133
7.2	Recommendations	136

Table of Appendices

Appendix 1: References

Executive Summary

Pressure to improve animal welfare aspects of seal hunting

EU Member States and European Parliament consider legislative measures

Several EU Member States are considering, or have already introduced, national legislative measures to ban the import and use of all seal skins and seal products. Furthermore, in autumn 2006, the European Parliament adopted a declaration requesting the European Commission to regulate the import, export and sale of all harp and hooded seal products, while ensuring that this regulation would not have an impact on traditional Inuit seal hunting.

European Commission undertakes analysis of animal welfare aspects

The European Commission (EC) has as response to this pressure undertaken to conduct an objective, in-depth analysis of existing information relating to the animal welfare aspects of seal hunting in all respective range states ("range states" are to be understood as all territories where seals are present and are (or could be) hunted, i.e. including EU Member States and Overseas Territories).

Assessment of seal hunt management systems in range states

Contribution of COWI study

A possible EU ban of products derived from seal species will affect seal hunting activities and thus the extent of animal welfare aspects. However, before considering any new measures aiming to ensure high levels of animal welfare during seal hunting activities, the European Commission has asked COWI, Denmark, to look at the regulatory frameworks and the management practices for seal hunting in the different range states: Canada, Finland, Greenland, Namibia, Norway, Russia, Sweden and United Kingdom (Scotland). The COWI study documents - for the first time - the extent to which seal hunt management systems differ between range states, hereunder according to the conditions under which the hunt is carried out and the size of the hunt.

Assessment of legislative and enforcement provisions

The study assesses the seal hunt management systems according to ten dimensions of legislative and enforcement provisions - i.e. *legislation*: 1) animal welfare principles; 2) hunting tools; 3) assuring death by monitoring; 4) bleeding-out of animals shot or struck; 5) environmental factors; 6) training of the hunters; and *enforcement*: 7) independent monitoring; 8) ability of third party to monitor; 9) reporting requirements; and 10) sanctions and compliance. The assessments are based on desktop study research and information provided during an overall consultation process - but the study team did not visit the range states. Hence, the assessments of enforcements in practice are limited by this scope of the study.

Seal hunt management systems differ between range states

A first conclusion from the study is that the seal hunt management systems differ between range states - and that within all systems improvements can be made. Seals are hunted within substantially different contexts signifying the type and size of the hunt, and the hunts are taking place within different regulatory environments. Some range states have implemented comprehensive management systems aimed at minimising the conflict between production and animal welfare, whereas other range states' management systems are less well-developed and to a lesser degree indicate concern of animal welfare. This insight can help the EU Commission when considering whether any restrictions should be imposed selectively upon seal products that are produced within the context of weakly developed national seal hunt management systems, or whether any labelling systems can be based on best practices.

Three groups of range states

The range states can roughly be grouped into three groups. Seal hunting is comprehensively regulated in Norway and it has the most developed management system. A second group is made up of Canada, Finland, Greenland, Namibia and Sweden - all of these range states have relatively well-developed legal frameworks. There are, however, pronounced insufficiencies particularly regarding enforcement and training requirements. A third group consists of Russia and the UK. For both of these, data are insufficient to make sound conclusions.

Identified best practices

Measured against the recommendations in the EFSA scientific opinion (EFSA, 2007), there seems to be room for improvements within many dimensions for almost all the range states covered by the study. In order to stimulate the policy learning from and between the range states the study has formulated the following best practices:

- On animal welfare principles: Animal welfare principles are highlighted in the applicable hunting legislation - whether this targets seal hunting specifically or hunting in general.
- On hunting tools: The characteristics of the weapons used to kill seal are specified. It is made explicit in the legislation which weapons are allowed for stunning and/or killing pups and which are allowed for stunning and/or killing adult seals. The requirements to the weapons are made in accordance with the recommendations of the EFSA scientific opinion.
- On assuring death by monitoring: Legislation should specifically outline requirements for monitoring and thereby oblige the hunter to assure that the seal is irrevocably unconscious before bleeding it out and before continuing to the next seal.
- On bleeding-out animals shot or stunned: Bleeding-out of all animals is required directly following adequate stunning i.e. before proceeding to stun another seal.
- On environmental factors: Requirements are specified as to secure that the seal and/or the hunter is sufficiently stable and that the target can be properly visualised. Other environmental factors, relevant for the hunt in question, are also regulated.

- On training of hunters: A defined level of knowledge and ability of the hunter regarding seal biology, hunting methods and the three step procedure, hereunder practical use of the hunting tools, e.g. shooting tests are required.
- On independent monitoring: A system for monitoring and observation of the hunt, securing regular supervision of the hunt and that secures independency of the inspectors is provided for.
- On ability of third party to monitor: Third party monitoring of the hunt is possible, with a minimum of administrative or logistic barriers.
- On reporting requirements: Clear requirements for reporting targeting both hunters and inspectors. There are requirements to where and when animals are killed and weapons and ammunition used. Also the range of relevant environmental factors (weather conditions, etc.) should be reported.
- On sanctions and compliance: Statistical information on the hunt should be compiled and systemised.

Assessment of the impact of different policy measures

Legislative and non-legislative measures - linked-to or not-linked-to management systems	The study considers in the assessment of impacts both legislative and non-legislative policy measures. Furthermore, policy measures that are not linked directly to the management systems - such as a total prohibition of placing on the market or of imports/exports, as well as measures that could be linked to the good or bad practices of the seal hunt management systems are analysed.
Environmental, economic and social impacts	The environmental dimension of the assessment is limited to discussing the impacts of animal welfare aspects for seals, and the discussion builds to a large extent upon the EFSA scientific opinion. The assessment does thus not address biodiversity issues such as the impacts on others parts of an ecosystem of a possible increase in the number of seals. Furthermore, economic impacts are delimited to those of trade and local economy, while the social dimension touches upon the conditions for the Inuit population.
Limitations to local economy and Inuit assessments	The study emphasises the limitations to local economy and Inuit assessments - of changing production and sales of seal products. Firstly, there is no unambiguous definition of local economy - although for the seal hunt issue the interest is centred around often small coastal communities. Secondly, to reach at widely-accepted analyses for such local economies it is beneficial to base the analyses on official data. However, the availability of such data is - not surprisingly - somewhat discouraging. However, this fact is in itself valuable for the policy makers - i.e. that not all envisaged impacts can be fully assessed, and so any policies will have to be based on limited information.
Prohibition of placing on the market	A total prohibition of placing on the market of seal products is assessed to have minor impacts on the EU Member States. This minor impact assumes, however, that transshipments of sealskins and other seal products and imports of sealskins for further processing and exports continue. The impacts are assessed to be slightly higher for the non-EU range state. This is merely a result of that the sizes of the seal hunt in these countries are much larger than in the EU range

states, and that the EU market - apart from for Russia - is of some importance. A focus in the regulation on harp and hooded seals only will relieve the negative impacts for Namibia and somewhat for Greenland. In contrast, the measure will almost fully affect the Canadian and Norwegian hunts.

Prohibition of imports and exports

A total prohibition of imports and exports will have medium impacts on the EU Member States, although the impacts are considered significant for Finland and Germany if such ban is extended to also cover transit trade, while the impacts are assessed to be slightly higher for the non-EU range state. This is again merely a result of that the sizes of the seal hunt in these countries are much larger than in the EU range states, and that the EU market - apart from for Russia - is of some importance. However, if the ban is extended to transit trade Canada will in particular suffer unless this trade can be shifted away from Germany and Finland to outside the EU e.g. Norway. Hence, Norway may actually strengthen its position as a transit trader.

Denmark and Italy are by far the two largest EU importers of raw furskin from seal for further processing/sales on the EU market, and will thus also be affected by such regulation. Denmark absorbs the raw furskins directly coming from Canada and Greenland (that are not categorised as goods in transit), while Italy absorbs the raw furskins from Russia, Finland and the UK (Scotland) - where many of the skins from the latter two originates from outside the EU borders. Greece also has a noticeable share of the skins coming from the two latter range states.

Labelling system

It is envisaged that benefits from a labelling system might include a price mark-up on the consumer market and at the same time help to increase the image of seal hunting in general. If the system is voluntary it might encourage a natural self-selection process regarding compliance and thus maintain the balance between the environmental, economic and social dimension - i.e. those who pursue the label might benefit more than it costs, and the welfare of the seals is enhanced. Furthermore, it is assessed that the impact will be largest if it is a widespread international labelling system rather than a specific EU system.

Bi-/multilateral agreements

Bi-/multilateral agreements between the EU and one or more range states could be made, which could enlarge the geographical area not to be covered any legislative measures. The impact will be similar to that of a limited ban that allows trade if the hunting of the seals complies with some established standards as discussed above. The assessment - which must be taken with a grain of salt - points to minor positive impacts for the range states that via agreements are 'included in the EU' and thus excluded from any EU actions against non-EU countries. Greenland could be the largest beneficiary, while Namibia and Russia are likely to experience the lowest positive impacts of such favouritism.

Public consultation

73,153 answers

A public consultation was conducted in the period 20th of December 2007 to the 13th of February 2008 via the Commission's Interactive-Policy Making (IPM) tool. The consultation provided the possibility of EU citizens as well as non-EU citizens to express their view on regulation of seal hunting - as an input

to the policy process of the European Commission. 73,153 answers were received from citizens in 160 different countries worldwide. They reveal that:

Massive dissatisfaction with current seal hunting practices	There is a massive dissatisfaction with current seal hunting practices - and a clear majority of respondents in nearly all the geographical areas analysed would prefer a ban. However, it is also clear that the majority of respondents reside in the Anglo-Saxon countries UK, US and Canada, and when looking at the results from respondents in other countries, the results are somewhat less stringent.
Acceptability of seal hunting is influenced by how it is managed	The results show that many respondents are against seal hunting for principal reasons - which again may be rooted in a certain perception of the human-nature relation. However, the results also show that for some respondents the level of acceptability of seal hunting is influenced by how the seal hunt is managed and undertaken - and for what reasons.
Knowledge gap	It is important to also highlight a knowledge gap on hunting methods - i.e. public perception vs. scientific knowledge (EFSA findings) and linked thereto the attitudes towards animal welfare vs. local communities. These are quite striking and underline clearly the complexity of the seal hunting issue from an animal welfare perspective.

Recommendations to the European Commission

Pursuance of good practices and avoidance of bad practices	The Commission should recognize the value of the new insight into the differences between the range states' seal hunt management systems. Hence, the designs of policy measures should aim to pursue good practices and avoid bad practices.
Labelling schemes or prohibitions should be targeted	This implies that any labelling schemes or prohibitions on imports or on placing on the market of seal products should address such good and/or bad practices and so should be targeted - also in the sense that the economic and social impacts as far as possible are limited to the areas where the targeted hunting practices take place.
Information campaigns	However, it must be acknowledged that the public perception of seal hunting at large is against seal hunting for principal reasons - which again may be rooted in a certain perception of the human-nature relation. Hence, extensive information campaigns will be needed to obtain public acceptance of a distinction between 'good' and 'bad' seal products.
Setting of deadline	In any case, the Commission should establish a deadline for range states regarding the fulfilment of the criteria of being covered by a labelling scheme or being exempted from any prohibitions - for example of three years.
Policy makers will have to base their decisions on incomplete information	Finally, the Commission should accept that assessments of the impacts of policy measures are connected with much uncertainty - in particular because of a lack of data to analyse the consequences for local economies. Hence, the policy makers will have to base their decisions on incomplete information.

A pressure to improve animal welfare aspects of seal hunting

1 Introduction

1.1 Background and contribution from the study

The European Commission (EC) has undertaken to conduct an objective, in-depth analysis of existing information relating to the animal welfare aspects of seal hunting in all respective range states ("range states" are to be understood as all territories where seals are present and are (or could be) hunted, i.e. including EU Member States and Overseas Territories). In this regard, the study looked at the following countries: Canada, Finland, Greenland, Namibia, Norway, Russia, Sweden and United Kingdom (Scotland).

Several EU Member States are considering, or have already introduced, national legislative measures to ban the import and use of all seal skins and seal products. Furthermore, in autumn 2006, the European Parliament adopted a declaration requesting the European Commission to regulate the import, export and sale of all harp and hooded seal products, while ensuring that this regulation would not have an impact on traditional Inuit seal hunting. All the measures introduced and/or being considered are mainly based on concerns over the welfare of those seals belonging to hunted populations.

Existing Community legislation already prohibits the importation into the EU Member States of skins of whitecoat pups of harp seals and of pups of hooded seals (Council Directive 83/129/EEC)¹. Also to be noted is the fact that, in the EU, all seal species benefit from protection under European Community legislation, in particular the Habitats Directive (Council Directive 92/43/EEC)². This directive allows – under strict conditions – the hunting of seals belonging to specific seal populations; provided that the conservation status of the seals is monitored to ensure that they are maintained at a favourable conservation status.

¹ Council Directive 83/129/EEC of 28 March 1983 - OJ No L 091, 09/04/1983, as amended by Council Directive 89/370/EEC of 8 June 1989 – OJ No L 163, 14/06/1989 concerning the importation into the Member States of skins of certain seal pups and products derived therefrom.

² Council Directive 92/43/EEC of 21 May 1992, OJ L 206, 22/07/1992, on the conservation of natural habitats and of wild fauna and flora.

A study that assesses the regulatory frameworks for and the management practices in the different range states ...

A possible EU ban of products derived from seal species would affect seal hunting activities and thus the extent of animal welfare aspects. However, before considering any kind of additional measures aiming to ensure high levels of animal welfare during seal hunting activities, the European Commission has asked COWI, Denmark, to look at the regulatory frameworks and the management practices for seal hunting in the different range states. The study also assesses the impact of any possible EC measures on trade and other socio-economic aspects.

... while acknowledging that seal hunting takes place for different reasons

The study acknowledges that seal hunting takes place for different reasons within and in between the different range states, and that the scale of seal hunting differs. Hence, the seal hunt management systems hereunder legislative acts and their historical developments will reflect the nature of the seal hunting. Section 1.2 below provides a brief introduction to the different types of seal hunting, while each of the range state presentations in Chapter 3 commences with an overview of the respective seal hunting in order to set the scene for the presentation and the discussion of the management system.

A study that addresses ethical concerns and the situation for the Inuit people

Any seal hunt management systems and changes to these will entail an element of ethical concern - e.g. is it necessary or is it luxury to hunt seals at all? How much pain is acceptable to inflict on seals? Such ethical concerns of seal hunting are introduced in Section 1.3 below and addressed further in the analysis of a public consultation on this issue carried out as a part of the present study (see Chapter 6). The situation for the Inuit people is also a matter of much concern when changes to the markets for seal products are taking place. This concern is addressed in Section 1.4. Conservation concerns are not part of this study.

... while building upon the EFSA 2007 scientific opinion

This study builds upon the scientific opinion on animal welfare aspects of the killing and skinning of seals adopted by the European Food Safety Authority (EFSA, 2007). The EFSA scientific opinion evaluates the animal welfare aspects of the methods currently used for the killing and skinning seals in the range states. It also assesses whether seals can be killed rapidly and effectively without causing avoidable pain, distress, fear and other forms of suffering, and if so which methods are most likely to achieve that. The present study therefore provides the link between the assessment of the animal welfare aspects of killing and skinning methods and seal hunt management.

Contribution from the study

The contribution from the study in addition to the remainder of this chapter is as follows. Firstly, Chapter 2 provides insight into how the results have been obtained - i.e. the study approach and methodology adopted. A wealth of information from documents, websites and stakeholder consultations has been digested to produce the results, and it is valuable to understand this digestion process. Chapter 3 must be acknowledged to comprise the major contribution from the study. It contains detailed presentations of the current seal hunt management systems in each of the analysed range states. The presentations cover the magnitude of seal hunting and the practices applied, the legislation guiding the seal hunt management system and the enforcement practices in place. Furthermore, they comprise a description of the socio-economic context in which the hunting takes place, hence the basis for assessing how legislative and non-legislative measures will affect local economies and trade patterns. Chapter 4

presents the development of policy measures to improve the animal welfare aspects of seal hunting, while Chapter 5 provides assessments of the impacts of such measures. Chapter 6 presents the analysis of a public consultation on this issue carried out as a part of the present study. Finally, Chapter 7 presents the conclusions and the recommendations from the study.

1.2 Types of seal hunting

Table 1.2.1 Types of seal hunt, their main characteristics and the focus in management systems

Types of seal hunting	Characteristics of the hunt	Focus in seal hunt management system
Commercial non-indigenous hunt	Industrialised hunt Large quotas and catches Organised Often supplementary income for fishermen or other workers	Provision of a basis for a viable industry Employment creation in sealing regions Sustainable use of the marine resources Hunting organisation
Personal non-indigenous hunt - individual small scale	Source of income and contributes to the subsistence of the hunter Dispersed	Sustainable use of the marine resources Hunting methods
Indigenous hunt	Hunt integrated part of the culture and the identity of the members of the society Source of income and contributes to the subsistence of the hunter One-man based activity Opportunistic Dispersed	Maintaining and protecting hunting traditions of indigenous societies Income creation in sealing regions Hunting tools
Recreational hunt	Small scale Activity supplementing primary occupation Comparable to other kinds of spare time activities/hunts Opportunistic Dispersed	Hunt is small scale often aims to reduce the seal population Contribute to pest control Samples from the catch contributes to research Sustainable use of the marine resources
Pest control*	Random or organised Minimise damage of seals on fishing gear Minimise damage to fish stocks	Limit population growth as to reduce damage to fishing gear and potential spreading of infection to other species
By-catch*	Random Seals caught in fishing gear	Invention and use of fishing gear that is seal proof hence reducing the number of seals caught in the gear Compensation to fisheries sector for damage inflicted by seals

* Included though it is not a hunt per se but man-induced killing of seals.

Different reasons lead to different management systems

The purpose of this section is to underline that there are different types of seal hunting with different characteristics and motivations, both within and among range states. This leads to different seal hunt management systems. In other words, the content and comprehensiveness of the systems will reflect the type and size of the seal hunting. Table 1.2.1 provides a brief introduction to the different types of seal hunting. It should be noted that the different focuses of the different range states will be returned to in Chapter 3, where each of the range state presentations commences with an overview of the respective seal hunt in order to set the scene for the presentation and the discussion of the management

system. The table thus also provides a tool for classifying the hunt and the general management objectives governing this type of hunt.

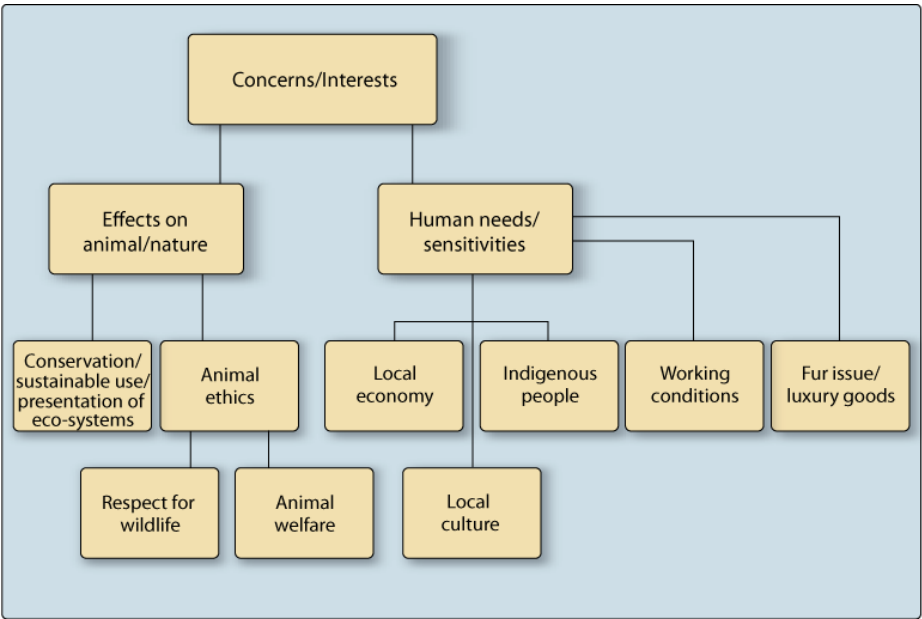
1.3 Ethical concerns of seal hunting

Ethical concerns as a frame not an add-on

What drives the whole discussion about seal hunt and seal hunt management systems are ethical concerns. However, it is important to acknowledge that an ethical concern is not an add-on to the assessment of the impacts of changes to seal hunting practices and trading in seal products. On the contrary, ethical concerns set to a large extent the frame for the assessments. An attempt to illustrate this is provided in Figure 1.1. It shows how in the light of ethical concerns/interests, broadly construed, it is possible to view effects on animal/nature as well as human needs/sensitivities.

The aim of the following sketchy overview of ethical concerns is certainly not to make judgements about rights and wrongs regarding seal hunt. Rather it is to define the wider context into which the findings of this report belong.

Figure 1.1 Ethical concerns of seal hunting



Effects on animal/nature

In discussions about effects on animal/nature it is customary to distinguish between conservation issues - hereunder the preservation of eco-systems and sustainable use; and animal ethical issues.

The former, which is focussed at the level of populations and species, deals with the issue of endangered or even recently delisted populations or species; and it looks into factors such as population trends, distribution, abundance, area importance, and threats. The widely held view is that the extinction of a local population of seals and even more a whole species is something to be deplored not only because of its consequences for the welfare of humans, or indeed the

animals concerned, but as something that is in itself bad. If a seal species becomes extinct this will not as such be a problem for the welfare of specific animals - the seals do not suffer from being extinct (even though they may suffer in the process leading to extinction). But it is appropriate to regret the loss of a species because the existence of species in itself is considered morally valuable. This suggests that one has duties to species, not just to individual animals.

Issues of animal ethics can in practice be further divided into respect for wildlife and animal welfare. The first concern is somewhat similar to the conservation issue in the sense that it takes interest in seals as wild animals. It focuses on the integrity of a species line such as defending a form of life, resisting death, and securing regenerations that maintains the identity of the species or population over time. The second concern - which is central to the present study - deals with our duties to individual animals. Different views or comprehensions of these duties by different stakeholders can - as it appears to be the case for seal hunting - give rise to disputes between the stakeholders. Reasons for such differences can be found by consulting different ethical theories such as the contractarian view where only one's own (the humans) long term interest count, via the utilitarian view where one should seek to produce the greatest total fulfilment of interests - i.e. the strongest interests will prevail, to the animal rights view which ascribes right, including the right not to be killed, to individual animals.

Human needs/
sensitivities

The ethical concerns which relate to human needs and interests in relation to seal hunting also play a significant role in controversies relating to seal hunt. The concerns for indigenous people and local culture here constitutes an important issue (see Section 1.4 below for further). Also the socio-economic impacts - mostly of local-economy character - are also often brought into discussions about seal hunt. Such socio-economic impacts are addressed further in Chapter 4.1 in this report.

Furthermore, it is a concern raised by many of those with a critical stance to seal hunt whether it is necessary to produce and use seals products or whether it is luxury - in particular to produce and trade fur. Finally, the working conditions of the people engaged in seal hunting and seal product manufacturing could be a topic of further scrutiny.

1.4 Concerns for Inuit people

EU focus on the Inuit

Concerns for the Inuit are currently taken account of by existing EU legislation. Inuit are mentioned separately in the Seal Pup Directive (83/129/EEC). The preamble of the Directive states that:

"[...] whereas hunting, as traditionally practiced by the Inuit people, leaves seal pups unharmed and it is therefore appropriate to see that the interests of the Inuit people are not affected."

Moreover, article three of the Directive states that:

"[t]his Directive shall only apply to products not resulting from traditional hunting by the Inuit people"

Furthermore, the written declaration by the European Parliament (0036/2006) states that the regulation, i.e. a ban, that they recommend should:

"not have an impact on traditional Inuit seal hunting which, however, only accounts for 3% of the current hunt"³

Hence, Inuit have a particular status at EU level, both within the European Parliament and the Commission. This gives rise to several questions, two of which are addressed in the following: Who are the Inuit? - i.e. how are they distinguished from other hunters; and what is traditional hunting? - i.e. how is it distinguished from other types of hunting?

The 3% that the European Parliament Declaration (0036/2006) refers to is a figure that stems from an attempt to calculate the Canadian Arctic, regarding the number of harp seals in Canada that was landed one year (EFSA, 2007, p. 12). This is thus not a number reflecting the total Inuit population. If say Greenland's Inuit summer harp seal hunt was included the number would amount to some 20% of the total harp seal hunt. Inuit moreover, count for a significant share of the worlds hunt for e.g. ringed seal. This implies that Inuit hunting constitutes a significant share of the overall seal hunt.

Who are the Inuit?

According to the Inuit Circumpolar Council (ICC), Inuit means "indigenous members of the Inuit homeland recognized by Inuit as being members of their people and shall include the Inupiat, Yupik (Alaska), Inuit, Inuvialuit (Canada), Kalaallit (Greenland) and Yupik (Russia)." (ICC, 1998a, Charter §1)

The ICC is an international organisation representing 160,000 Inuit living in the Arctic regions of Alaska, Canada, Greenland and Chukotka, Russia and aim to strengthen unity among Inuit and defend and promote the interest of Inuit as well as the international recognition of indigenous people (ICC, 2008i).

There are many definitions of "indigenous" (Cunningham, 2003), a definition has been discussed within the United Nations (UN) with many diverging opinions (UN, 2008i)

In 2004, a UN working definition stated that:

"Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves

³ Inuit hunt is substantially larger than 3% of the total seal hunt as stated in the EP written declaration. This number covers only a limited part of Inuit hunt in Canada. This is returned to below.

distinct from other sectors of the societies now prevailing on those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal system."

Source: UN, 2004

In the European Commission documents dating from the introduction of the seal pup directive, there is no definition of the term "Inuit". It is however the working understanding, as of 2002, of DG ENV that "Inuit people within the scope of the Directive [83/129/EEC] are aboriginal people affected by the implementation of the above directive, as far as they live in the countries part of the distribution area of the harp seals and hooded seals and hunt whitecoat pups of harp seals and pups of hooded seals (blue-backs) under the conditions as specified in the Directive" in article three and the preamble as referred to above⁴.

This implies that, within the scope of Directive 83/129, Inuit are:

- Aboriginals,
- living in countries that are affected by the implementation of the directive, and
- who are part of the distribution area of the harp and hooded seals.

The Canadian Inuit Relations Secretariat states that it is difficult to define Inuit specifically. Canada has four claim agreements with Inuit: Makivik Corporation in Nunavik; Inuvialuit Regional Corporation; Nunavut Tunngavik Incorporated in Nunavut; and Labrador Inuit Association, and each agreement state that "Inuit are best able to define who are Inuit and beneficiaries under the agreement" (Indian and Northern Affairs Canada, 2007a). Canada therefore uses the principle of self-identification and in the last census, there were 45,000 Inuit in Canada, most of which live in the four above mentioned claims areas and 15-20% living elsewhere (Indian and Northern Affairs Canada, 2007a).

⁴ Harp seal does not breed in the area where most Inuit lives in Canada but further south in Newfoundland and Labrador, frequently referred to as the "Front" and in the Gulf of St. Lawrence, referred to as the "Gulf" (EFSA, 2007, p.22). The whitecoats have thus moulted into beaters before they reach the northern areas where most Inuit resides and hunts. Therefore, Canadian Inuit does thus not hunt whitecoats as they are not in the same geographic area (IFAW, 2008a). In regards to Greenland, and the population referred to as the "Greenland Sea population", seals whelp near the Norwegian island of Jan Mayen off the east coast of Greenland (EFSA, 2007, p. 22). Bluebacks, the pups of hooded seal, is born in the area of the Northwest Atlantic and the Greenland Sea (EFSA, 2007, p. 24).

What is traditional hunting?

The discussion on traditional hunting is twofold. One side of the hunt is the hunting methods used, and the other side is the hunt as an integrated part of the subsistence of the people. Both the European Commission and the European Parliament refer to traditional hunting. The Commission refers to "traditional hunting by Inuit" and the Parliament to "traditional Inuit seal hunting".

According to Canadian authorities, all Inuit hunt is to be considered traditional. What constitutes traditional hunt does not depend on the methods used:

"The tools or the methods used by Inuit may have changed, but are not determinative of whether a hunt is a traditional hunt or a non-traditional hunt. Hunting is a way of life that has been handed-down through the successive generations of Inuit elders for thousands of years (Indian and Northern Affairs Canada, 2007b)."

In Greenland there is no official definition of what traditional hunt constitutes. Most of the hunters in Greenland use small boats with an outboard motor and shoot the seal by rifle. This is not regarded a traditional hunting method as it is introduced within the last hundred years. About 85% of the seals killed in Greenland are shot by rifle, the rest is caught by net, during the dark month of the year in the North of Greenland where it is essential to get supply of skin and meat, both for human consumption and feed for sled dogs (DFHA, 2007f).

Hence, it is clear that there are diverging opinions on who the Inuit are and what constitutes traditional hunting methods. This study will not go further into the discussion of defining Inuit, but just acknowledge that it is clear that seal hunting, irrespective of the methods used, is a part of the cultural inheritance of certain people and certain regions.

1.5 Community legislation

Outset in two EU key documents

Last but not least the study takes an outset in two key documents: the Council Directive 83/129/EEC of 28 March 1983 concerning the importation into Member States of skins of certain seal pups and products derived there from, referred to as the Seal Pup Directive, as amended by 89/370/EEC; and the Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora, referred to as the Habitats Directive (43/92).

Seal Pup Directive

The Directive establishes an import ban on "raw furskins and furskins, tanned or dressed, including furskins assembled in plates, crosses and similar forms [of] whitecoat pups of harp seals [and] of pups of hooded seals (blue-backs)" (83/129/EEC article 1 and Annex). According to the preamble of the Directive, the introduction of the ban was motivated by studies raising "doubts concerning the population status of the harp and hooded seals and especially as to the effect of non-traditional hunting on the conservation and population status of hooded seals" as well as different measures already existing in the Member States on import of these products. As mentioned above, the directive is only applicable

"to products not resulting from traditional hunting by Inuit" (83/129/EEC art. 3).

Habitats Directive

The Directive has two main pillars. Firstly, it establishes Natura 2000, a European ecological network that provides for "special areas of conservation" to be established in the Member States. Secondly, it requires the establishment of a system of species protection on all territory of Member States. The aim of the Directive is to "promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements" while contributing to the general objective of sustainable development (92/43/EEC preamble). Article 2 of the Directive (92/43/EEC) moreover states that the "Directive shall contribute to ensuring biodiversity through the conservation of natural habitats and of wild fauna in the European territory of the Member States where the treaty applies" and that "measures taken ... shall maintain or restore, at favourable conservation status, natural habitats and species".

The following range states covered by this study are committed under the Directive: Finland, Sweden and the UK (Scotland). Greenland, which is a part of the Kingdom of Denmark, is not part of the European Communities and is not committed by the legislation.

Other seals in EU waters - in particular in the Baltic Sea - are also protected via the Habitats Directive. The grey seal in the Baltic Sea area are mainly found in the Swedish, Finnish, but also in Estonian waters (HELCOM, 2008a). Furthermore, there are 1,400 Baltic ringed seals counted in the Gulf of Riga (HELCOM, 2008b).

In order to maintain or restore a favourable conservation status of species and habitats of community interest (as listed in the annexes of the Directive), Member States shall:

- establish and manage the Natura 2000 network;
- monitor the conservation status of the habitats and species;
- establish systems of strict protection for those animal and plant species which are particularly threatened (those species are listed in Annex IV);
- ensure that the taking/exploitation of species is compatible with being maintained in a favourable conservation status and prohibit the use of all indiscriminate methods of taking, capturing or killing certain animal and plant species (those species are listed in Annex V); and
- encourage the management of features of the landscape which are essential for the migration, dispersal and genetic exchange of wild species (in order to ensure ecological coherence of Nature 2000 network).

For species listed in Annex II of the Habitats Directive, special areas of conservation need to be designated. Listed seal species are: *Monachus monachus* (Mediterranean monk seal), *Phoca hispida saimensis* (Saimaa ringed seal),

Halichoerus grypus (grey seal), *Phoca hispida bottnica* (ringed seal), *Phoca vitulina* (common seal).

Species listed in Annex IV are strictly protected and the directive prohibits "all forms of deliberate capture or killing of specimens of these species in the wild" (92/43/EEC art. 12.1.a). Listed seal species are *Monachus monachus* (Mediterranean monk seal) and *Phoca hispida saimensis* (Saimaa ringed seal).

Species, under Annex IV may though be hunted under certain circumstances as specified in articles 16.

Species listed in Annex V are species of Community interest. Listed seal species are: all seal species with the exception of those listed in Annex IV. In accordance with Article 14 of the Habitats directive, exploitation of seal species is allowed under strict conditions, provided that the conservation status of these seals is monitored to ensure that they are maintained at a favourable conservation status.

These relevant Articles are seen in Text-box 1.1 below.

Text-box 1.1 Habitats Directive Articles 14, 15 and 16

Article 14

1. If, in the light of the surveillance provided for in Article 11, Member States deem it necessary, they shall take measures to ensure that the taking in the wild of specimens of species of wild fauna and flora listed in Annex V as well as their exploitation is compatible with their being maintained at a favourable conservation status.
2. Where such measures are deemed necessary, they shall include continuation of the surveillance provided for in Article 11. Such measures may also include in particular:
 - regulations regarding access to certain property,
 - temporary or local prohibition of the taking of specimens in the wild and exploitation of certain populations,
 - regulation of the periods and/or methods of taking specimens,
 - application, when specimens are taken, of hunting and fishing rules which take account of the conservation of such populations,
 - establishment of a system of licences for taking specimens or of quotas,
 - regulation of the purchase, sale, offering for sale, keeping for sale or transport for sale of specimens,
 - breeding in captivity of animal species as well as artificial propagation of plant species, under strictly controlled conditions, with a view to reducing the taking of specimens of the wild,
 - assessment of the effect of the measures adopted.

Article 15

In respect of the capture or killing of species of wild fauna listed in Annex V (a) and in cases where, in accordance with Article 16, derogations are applied to the taking, capture or killing of species listed in Annex IV (a), Member States shall prohibit the use of all indiscriminate means capable of causing local disappearance of, or serious disturbance to, populations of such species, and in particular:

- (a) use of the means of capture and killing listed in Annex VI (a);
- (b) any form of capture and killing from the modes of transport referred to in Annex VI (b).

Article 16

1. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):

- (a) in the interest of protecting wild fauna and flora and conserving natural habitats;
 - (b) to prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property;
 - (c) in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;
 - (d) for the purpose of research and education, of repopulating and re-introducing these species and for the breeding operations necessary for these purposes, including the artificial propagation of plants;
 - (e) to allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of certain specimens of the species listed in Annex IV in limited numbers specified by the competent national authorities.
2. Member States shall forward to the Commission every two years a report in accordance with the format established by the Committee on the derogations applied under paragraph 1. The Commission shall give its opinion on these derogations within a maximum time limit of 12 months following receipt of the report and shall give an account to the Committee.
3. The reports shall specify:
- (a) the species which are subject to the derogations and the reason for the derogation, including the nature of the risk, with, if appropriate, a reference to alternatives rejected and scientific data used;
 - (b) the means, devices or methods authorized for the capture or killing of animal species and the reasons for their use;
 - (c) the circumstances of when and where such derogations are granted;
 - (d) the authority empowered to declare and check that the required conditions obtain and to decide what means, devices or methods may be used, within what limits and by what agencies, and which persons are to carry out the task;
 - (e) the supervisory measures used and the results obtained.

2 Study approach and methodology

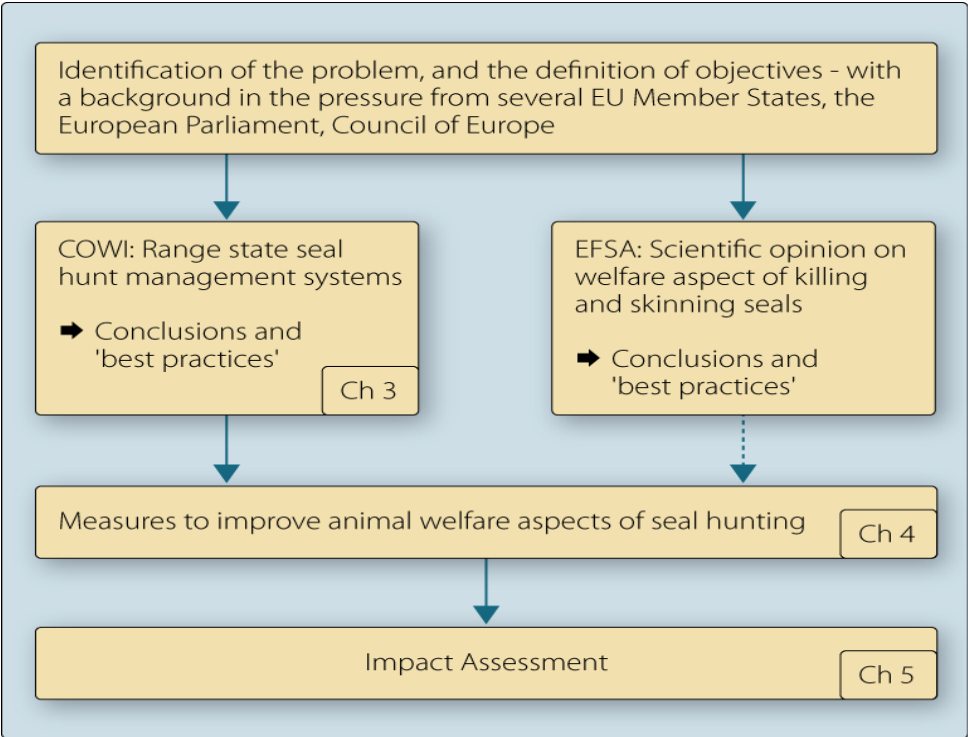
Purpose of chapter

The results, conclusions and recommendations presented in this report build upon a wealth of information from documents, websites and stakeholder consultations. The purpose of this chapter is to show the study process, to explain how the results have been derived and to define the study limitations.

2.1 Study process

The study process is shown in the figure below.

Figure 2.1 The study approach



Towards 'best practices' in seal hunting

It appears that the logic of the study process has been the following: In view of the fact that animal welfare concerns about seal hunting practices have been a key issue for several years in Europe, and have intensified over the last two years, various initiatives addressed regarding whether possible measures to restrict trade in seal products should be launched – such as national initiatives;

the adoption of a resolution by the Council of Europe, and the adoption of the written declaration by the European Parliament as previously mentioned. In reply to all those concerns expressed, the Commission undertook the task to make a full objective assessment. The present study is part of this analysis having the purpose to acquire a better knowledge and understanding of the regulatory frameworks for and the management practices of the different seal hunts.. The description of the national seal hunt management system - and taking into account the conclusions and results of the EFSA scientific opinion - would then make it possible to identify measures and 'best practices' in seal hunt management that aim at improving the animal welfare situation of seals. Hence, a further outcome of the review of the regulatory frameworks for and the management practices of the different seal hunts would be to provide the factual basis for the formulation of options for policy measures upon which the impact assessment can be built.

2.2 Study limitations

The study does only partly analyse the practice of seal hunting

Ideally, a study of national seal hunt management systems should cover legislation and practices - comprising implementation on the ground and enforcement. The latter is highly important in the context of seal hunting as it is often disputed to what degree legislative requirements are fully implemented in practice. However, it should be noted that with regard to these practices, the findings are based on desktop study research and information provided in the overall consultation process. The limitations of the study are thus the following:

- The study describes in detail the range states' legislation on killing methods, hunting procedures and conditions for hunting as well as legislation on enforcement requirements.
- The study describes the practices in the countries as well as the level of law enforcement based on the many interviews that have been conducted, the many viewpoints that have been submitted to the study team and various types of written materials that have been reviewed. The study contains references to practices of seal hunting as well as to the broader socio-economic contexts in which the seal hunts takes place.
- The study team did not visit the range states because this was not within the scope of the study.

Figure 2.2 summarises in this context, what the COWI study covers - and does not cover.

Figure 2.2 What the COWI study covers - and does not cover

Legislation - on killing methods, procedures and conditions Covered by the COWI-study? yes Data sources (prioritised) <ul style="list-style-type: none"> the range states' relevant legislation (primary source) national experts (to provide a fuller understanding of the legislation) secondary sources 	Practices - on killing methods, procedures and conditions Covered by the COWI-study? partly <ul style="list-style-type: none"> as the report provides references to viewpoints on practises related to killing methods, etc. but which is based on desktop study research and information provided in the overall consultation process.
Legislation - on monitoring and enforcement Covered by the COWI-study? yes Data sources (prioritised): <ul style="list-style-type: none"> the range states' relevant legislation (primary source) national experts secondary sources 	Practices - on monitoring and enforcement Covered by the COWI-study? partly <ul style="list-style-type: none"> as the report provides references to viewpoints on practises related to killing methods, etc. but which is based on desktop study research and information provided in the overall consultation process.

Description - on the basis of 10 dimensions

2.3 Describing seal hunt management systems

With a view to consistency and comparability, the national seal hunt management systems have been described at the basis of the following methodology:

- The EFSA scientific opinion contains recommendations on killing methods. It also touches on the training of sealers and enforcement as far as the actual killing process is concerned. These recommendations have been used as the basis for describing the national seal hunt management system.
- This means that the descriptions consists of 10 dimensions or elements, namely:
 - Legislation*: 1) Animal welfare principles; 2) Hunting tools; 3) Assuring death by monitoring; 4) Bleeding-out of animals shot or struck; 5) Environmental factors; 6) Training of the hunters.
 - Enforcement*: 7) Independent monitoring; 8) Ability of third party to monitor; 9) Reporting requirements; and 10) Sanctions and compliance.

In the previous section the limitations of the study were made clear; first and foremost that the study can only provide brief references to viewpoints on seal hunting practices related to monitoring and enforcement based on desktop study research and information provided in the overall consultation process. Therefore, the study cannot on the basis of empirical evidence document a positive correlation between legislation and practice: that a well-developed legislative framework leads to practices which from an animal welfare perspective are favourable to others.

The assumption: legislation has an impact on practices

Instead it is the *general assumption* of the study that there is a positive correlation between legislation (killing methods and procedures as well as regulation on monitoring and enforcement) and animal welfare; i.e. that it is better to have a well-developed legal framework reflecting animal welfare concerns than not to have such a framework.

While the assumption is plausible therein that it merely represents a condensed description of the nature of rule-of-law societies, it should also be recognised that there can be examples of range states not having a well-developed legal framework but at the same time in practice are undertaking the seal hunt with deep concern over animal welfare. Exactly of that reason we summarise the description of each range state in a *summary assessment section* where we for each of the above-mentioned 10 dimensions describe if the legal requirements are in place - meaning that they are in line with the best practices (such as they are described in the EFSA scientific opinion), and we moreover put the findings into context by referring to the socio-economic characteristics and we reflect briefly on the level of law enforcement for the given country. It goes within saying that this summary assessment is kept in a cautious tone. We also seek to put a given country's legislation into the context of the size of its seal hunt, as it is obviously more likely to find comprehensive legal frameworks in large-scale seal hunting countries than in countries with a limited and non-commercialised hunt.

2.4 Handling different information sources

To continue from the above discussion - the study thus handles a number of different information sources where the hierarchy of the sources ranges from factual descriptions via assessments to perceptions.

Factual descriptions

Factual descriptions provide as accurate information as feasible on how the situation is. The descriptions are thus valuable for any stakeholder requiring a basis for further analysis or actions. Sources used to provide these include:

- Official statistics - from Eurostat as well as national sources
- Relevant EFSA materials
- Materials received from the countries - such as official documents
- Documents provided by the NGOs and other stakeholders

Factual descriptions comprise a major part of the presentations of the range state seal hunt management systems in Chapter 3 of this report.

Assessments

Assessments can in the context of the present study be divided into two types - both made by COWI:

- Firstly, interpretations of the factual descriptions are made. These concern, for example, the strengths and weaknesses of the management systems - hereunder the quality of the legislation and the robustness of enforcement systems, and the level and importance of the local-economic contexts.

These assessments are not straightforward as for most cases universally-accepted criteria for making the assessments do not exist.

- Secondly, assessments of measures to improve seal hunt management systems are made in Chapter 5.

Perceptions

Finally, a questionnaire was launched on the Commission's Interactive-Policy Making (IPM) tool; and the consultation was open for eight weeks, from 20th of December 2007 to the 13th of February 2008. The questionnaire was available in English only. The objective of the consultation was to invite the citizens to express their opinion on seal hunt. The consultation was primary targeted at EU citizens, as it is an EU policy tool, but has also been open to citizens residing in non-EU countries.

3 Range state seal hunt management systems

The national seal hunt management systems are described in this chapter. Each of the range state descriptions starts with an overview of the type and extent of seal hunting and the socio-economic context in which the hunting takes place. With this in mind the legislation and its enforcement are presented in detail. The descriptions are completed with a summary assessment sheet.

3.1 Canada

Three types of hunts

Seal hunting in Canada is divided into three main types: organised commercial seal hunting, personal use hunt, and traditional aboriginal/Inuit seal hunting (DFO, 2008b). The commercial seal hunting and personal use seal hunting are regulated by law, whereas Inuit seal hunting is not regulated to the same extent. However, the general prohibitions in regard to seal hunt regulated in the Marine Mammal Regulations apply to aboriginal hunting, if not otherwise specifically provided.

Furthermore, Inuit land claims agreements provide for seal hunt. These agreements generally contain provisions respecting the disposition (including trade, sale and barter) of harvests in accordance with the agreements. Aboriginal and treaty rights, including rights set out in land claim agreements, are protected under Section 35 of the Canadian Constitution Act, 1982. When discussing Canadian seal hunt it is important to be aware of the different characteristics of these two hunts. This study includes both these hunt although the focus will be on the commercial large scale hunt. Inuit hunt will only be addressed when specifically mentioned.

Long traditions for hunt

The Canadian seal hunting dates back to mid-1500 when French explorers found Labrador Inuit hunting seals in the Strait of Belle Isle. Settlers from the North Shore of the St. Lawrence and the northeast coast of Newfoundland began hunting seals commercially in early-1700 and offshore hunting began in the late-1700. In early-1900 the light wooden steamers used in the seal hunt were replaced by large steamships that could break through the ice. After World War II, around 250-300,000 seals were landed each year. Quota management was introduced in Canada in 1971. A decline in harp seal landings followed in 1972. This may be caused by the introduction of the quota management as well as the introduction of the US Marine Mammal Protection Act in 1972, preventing

Canada from exporting seal products to the United States (DFO, 2007ii, see also The Report of the Royal Commission, 1986, Vol. 2 Part 2).

In 1987, a policy was adopted to prohibit the hunt of whitecoat and blueback seals for commercial purposes. Two years later, in 1989, conditions for licenses were used to apply a policy to prohibit the commercial hunt of whitecoat and blueback seals. In 1993, the Marine Mammal Regulations were adopted and the commercial hunting of whitecoat and blueback seals was prohibited by regulation (DFO, 2007a).

Commercial hunt is mainly of harp and hooded seal, primarily on the Front

Six species of seals are found off the Atlantic coast of Canada - the harp, hooded, grey, ringed, bearded, and harbour seal, (*Pagophilus groenlandicus*, *Cystophora cristata*, *Halichoerus grypus*, *Pusa hispida*, *Erignathus barbatus*, *Phoca vitulina*). Seals are being harvested for food, fuel, shelter, fur and other products for hundreds of years. Mainly harp seals and hooded seals are hunted commercially (DFO, 2007i) although as seen in the table below, the actual catch consists mainly of harp seal.

The majority of the seal hunt occurs on the Front, an area off the north and east coast of Newfoundland and off southern Labrador (DFO, 2003). The season for the commercial hunt of harp and hooded seals is from November 15 to May 15 (MMR). The season may be altered by a Variation Order to deal with circumstances that may arise. The timing of the hunt largely depend on the movement of ice floes on which seals are located, however, the majority of the seal hunt occurs between early March and May (DFO, 2003). The season for the hunt of ring seals in Labrador is from April 25 to November 30 (MMR). Grey seal hunt is set by Variation Order to reflect the presence of seals (DFO, 2003).

The current estimation of the harp seal population is around 5.5 million. The hooded seal population is estimated to between 547,000-603,000 animals. The grey seal population was surveyed in 2004 and estimated to about 260,000 animals (DFO, 2007iv). 2006 was the first year in a five year management plan in which the TAC will be set annually.

Table 3.1.1 Commercial quotas and officially reported harvest levels

Seal species	Commercial quotas (Total Allowable Catch - TAC)	Harvest levels
Harp seal	270,000 (2007) 325,000 (2006)	225,725 (2007)* 354,344 (2006)
Hooded seal	8,200 (2007) 10,000 (2006)	Less than 400 seals have been harvested annually since 1999
Grey seal	2,000 (2007, in the Gulf of St. Lawrence) 7,000 (2007, in the Scotian Shelf) 2,100 (2006, in the Gulf of St. Lawrence) 8,300 (2007, in the Scotian Shelf)	777 (2006)

Source: DFO, 2007i, confirmed by DFO, 2008b; * DFO, 2008b.

There are no TACs or allocations set on ringed, harbour and bearded seals. Licenses and permits are used to control any commercial harvest of these seals (DFO, 2006b).

3.1.1 Socio-economic context

The context differs considerably according to the type of hunt

The socio-economic context of seal hunt in Canada varies. The context and the impact of the hunt differ considerably depending on the type of hunt engaged in. Furthermore, the socio-economic impact of the sealing industry in Canada is highly debated and information from different sources provides diverging conclusions on the importance of the industry for the local communities.

Commercial seal hunting

Most sealers are commercial fishermen and seal hunt supplements the income from fisheries (Fagan, T., in Greenland home Rule, 2001, p. 58). Seal hunting is mainly undertaken in late-March to mid-April, when there is little other fishing activities. Every year, around 15,000 seal hunting licences are issued, however, only between 5,000 and 6,000 of these licenses are used. The high number of issued licences can be explained by the fact that in order to get a licence, it must be renewed every year, independently of whether it is used or not (DFO, 2008b).

According to the Canadian government, sealing is considered to be a vital source of income for the local communities, and it encourages the fullest possible use of seals, in form of leather, oil, handicrafts - and in recent years, meat for human and animal consumption. All seal pelts undergo some processing within Canada (DFO, 2007iii). Around 90% of the harp seals are taken in the Province of Newfoundland and Labrador. Seven coastal communities derived 15-35% of their total earned income from sealing, and about 37 communities report that above 5% of their income originates from sealing in 2006. There are though a large number of communities participating in the hunt where the share is considerably lower. According to information provided by the province of Newfoundland, there are around 150 communities with incomes directly come from sealing (Province of Newfoundland, 2007a p.6).

As mentioned, the socio-economic impact is much debated. According to Humane Society International, the economic significance of the hunt for the local societies is considerably lower. They estimate that the average income per hunter was around \$2,000 (i.e. \$Cdn) in 2007 (HSI, 2008). This amount is based on the landed values from 2007 as seen in Table 3.1.2, \$11.4 million divided with the number of active hunters, 5,500 (HSI, 2008). The degree to which this actually reflects the importance of seal hunting may though be questioned. The number does not include effects of the hunt on the broader economy, for instance increased demand for hunting gear or fuel or the increased buying power of the hunter due to the increased income. It must also be seen in relation to the overall income of the hunter. Some sealers have rather low annual incomes, around \$20,000 and the relative value of the sealing may thus be substantial (DFO, 2008a).

During the sealing season 2006, ten facilities processing seal products generated part-year employment for roughly 500 individuals. The estimated export value of seal products in 2006 in this region was \$55 million (Province of Newfoundland, 2007). The 2006 value of export was though abnormally high due to high pelt prices as indicated by the table below. The data include all species of seals, however, harp seals account for virtually the entire commercial hunt values in Atlantic Canada.

Table 3.1.2 Commercial Seal Landings in Atlantic Canada, 2002-2007

		2002*	2003*	2004	2005	2006	2007**
Seal pelts	number	301,820	283,145	361,576	316,308	348,566	210,424
	value (\$Cdn)	\$18,063,429	\$12,970,192	\$16,022,103	\$17,317,872	\$33,957,268	\$11,114,507
Seal meat	kg	20,385	148,810	176,479	6,726	27,002	51,153
	value (\$Cdn)	\$15,018	\$96,280	\$131,367	\$4,097	\$8,596	\$23,341
Seal fat	kg	68,842	583,512	756,617	491,162	465,914	519,579
	value (\$Cdn)	\$30,075	\$260,253	\$333,418	\$217,144	\$306,481	\$283,529
Other products	value (\$Cdn)	\$60,323	\$81,429	\$94,457	\$37,884	\$100,926	\$145,666
Total landed value		\$18,168,845	\$13,408,154	\$16,581,345	\$17,576,997	\$34,373,271	\$11,567,043

Sources: DFO, 2007c. * 2002 and 2003 landings for Quebec (approximately 10% of harvest) base on Resource Management Files, with estimated prices. ** Preliminary.

In 2006, Canada exported sealskins for a total of \$16.4 million to Norway (61%), Finland (18%), Germany (6%) and China (6%). The same year, Canada exported \$1.5 million marine mammal oil (House of Commons, 2007). However, as mentioned above, the 2006 value of landed seal skins was abnormally high.

Inuit seal hunting

The Inuit Relations Secretariat, Indian and Northern Affairs Canada, estimates that there are currently around 45,000 Inuit in Canada (Inuit relations Secretariat, Indian and Northern Affairs Canada, 2007a). Canada has four land claim agreements with Inuit: Nunavik in Northern Quebec, Inuvialuit in the Mackenzie Delta area of the Northwest Territories, Nunavut in that territory (formerly part of the Northwest Territories), and Nunatsiavut in Labrador (the mainland element of the province of Newfoundland and Labrador). Inuit committees determine who meet the criteria of being Inuit and these lists are updated annually. The Canada government does not have a role in determining whether an individual meets the criteria established by the Inuit.

According to the Nunavut wildlife harvest study, around 30,000 seals were killed by Nunavut communities in 2004 (Nunavut Wildlife Board, 2004, p. 779). This includes Ringed seals, which constitutes the majority of the seals killed, bearded, harp, harbour and a small number of unspecified seals (Nunavut Wildlife Board, 2004, p. 779). The Standing Committee on Fisheries and Oceans stated in its Report in 2007 (House of Commons, 2007) that a consider-

able number of sealskins from the Northern hunt are sold on international markets, and that in 2006 over 6,000 sealskins were exported from Nunavut providing a total income of \$530,000 to Inuit hunters in Nunavut alone. Finally, according to the Department of Indian and Northern Affairs, Nunavut's sealing industry (production of meat and skins for garments and arts and crafts) currently contributing about \$1,000,000 annually to Nunavut's economy. The income generated from the sale of sealskins helps to finance the hunt, which has become more and more expensive due to higher capital and operating costs, as well as the need to travel greater distances to hunt (Indian and Northern Affairs Canada, 2007b).

3.1.2 Legislation

International commitments

Canada is signatory to both the Bern Convention and the Bonn Convention. Furthermore, Canada is signatory to CITES, although it currently has no bearing on the management of seals as the relevant species hunted in Canada are not listed under the CITES Convention. Canada is also an observer at NAMMCO (DFO, 2008c).

National legislation

The Department of Fisheries and Oceans (DFO) is the overall responsible authority for fisheries and aquaculture management in Canada, hereunder sealing. Seal hunt is managed under:

- The Fisheries Act
- The Marine Mammal Regulations, SOR/93-56
- 1995 Canadian Firearms Act, and
- The Penal Code

The Fisheries Act governs the management of fisheries resources and habitats and sets out the rules and penalties for day-to-day conservation and management.

Seal hunt is specifically regulated in the Marine Mammal Regulations, SOR/93-56 (hereinafter MMR), adopted on the basis of the Fisheries Act. Part IV of the MMR specifically regulates seals. The MMR apply to commercial seal hunting and seal hunt conducted under "personal use" licenses. There is no definition of "personal use" license per se. However the Atlantic Seal Hunt 2003-2005 Management Plan explains that "the personal use hunt is allowed of Newfoundland, Labrador south of 53° N latitude and off Quebec's North Shore, the Gaspé Peninsula and the Magdalen Islands". The season is the same as the commercial season and is established by the period of validity on licenses.

Furthermore, the MMR contain provisions for aboriginal fishing for seals for food, social or ceremonial purposes (Section 6 of the MMR). Except where specifically provided, fishing for seals for food, social or ceremonial purposes under Section 6 of the MMR is subject to the general prohibitions in the MMR.

Conditions for hunting

According to Section 5 of the MMR, no person shall fish for marine mammals except under the authority of a license issued under these Regulations or under the Aboriginal Communal Fishing Licences Regulations. Three types of licenses may be issued under the MMR (Section 26.1):

- a fishing license for seal - personal use (non-aboriginal use sealing)
- a fishing license for seal - commercial use; or
- a fishing license for nuisance seal⁵.

Furthermore, an operator of a collector vessel⁶ shall hold a collector vessel license (MMR Section 26.2). This provision was introduced in 2003 in order to prevent large vessels being used as seal hunting platforms and as a possible safe haven during bad weather (DFO, 2003).

Each year, a total allowable catch (TAC) is announced by the Minister of Fisheries and Oceans. When the annual quotas have been reached, this shall be publicly announced and persons affected or likely to be affected shall be notified according to MMR Section 12 and Section 7 of the Fishery (General) Regulations.

Hunting may be conducted either from land or from a boat or vessel at sea. There are currently no legal requirements concerning environmental factors in the hunt.

Training of the hunters

There are no requirements under MMR regarding the competence of the staff involved with seal hunting. According to the Seal Licensing Policy for Eastern Canada (made under the authority of the Fisheries Act and its Regulations), new sealers must hold an assistant sealers licence and work under the supervision of a professional sealer for two years (Section 33 (3)). There are, however, no training required to hold a professional sealer licence.

In the 2003-2005 Atlantic Seal Hunt Management Plan - which is no longer in force - sealers were encouraged to take a training course on proper hunting techniques, product preparation and handling. Personal use sealers (issued to applicants with residences adjacent to sealing areas, allowing them to take up to six seals for personal consumption) must have a hunter's capability certificate or big game license, and attend mandatory training sessions before a license can be issued. The management plan currently in force has not been available to the study team (not publicly available).

Riflemen are required to take a Firearms Safety Course and to register their firearms (1995 Canadian Firearms Act). Personal use sealers must also have a

⁵ MMR Section 2: "nuisance seal" means a seal that represents a danger a) to fishing equipment despite deterrence efforts, or b) based on scientific recommendation, to the conservation of anadromous or catadromous fish stocks because it inflicts great damage to them along estuaries and in rivers and lakes during the migration of those species; (phoque nuisible).

⁶ MMR Section 2: "collector vessel" means a vessel greater than 19.8 m in length that is used to collect, transport or process seals or seal parts fished from vessels 19.8 m in length or less; (bateau de récupération).

hunter's capability certificate or big game license and attended mandatory training sessions before a license can be issued (1995 Canadian Firearms Act).

Animal welfare aspects

According to the MMR (Sections 7-10), no person shall disturb a marine mammal except when fishing under the authority of the Regulations. The marine mammal shall be killed in a manner that is designed to kill it quickly. Furthermore, the hunter must have on hand the equipment that is necessary to retrieve the marine mammal. In addition, the hunter must make reasonable effort to retrieve the killed or wounded marine mammal without delay. The marine mammal may not be abandoned or discharged.

Killing methods

According to the MMR Section 28 (1) hakapiks and clubs as well as rifles complying the specified requirements may be used in the commercial seal hunt and personal use hunt (Section 28 (1) of the MMR) as seen from Text-box 3.1 below.

Text-box 3.1 Section 28 (1) of the MMR - regulating hunting tools

MMR Section 28 (1):

(1) No person shall fish for seals, for personal or commercial use, in any of Sealing Areas 4 to 33 except with

(a) a round club made of hardwood that measures not less than 60 cm and not more than 1 m in length and that, for at least half of its length, beginning at one end, measures not less than 5 cm and not more than 7.6 cm in diameter;

(b) an instrument known as a hakapik, consisting of a metal ferrule that weighs at least 340 g with a slightly bent spike not more than 14 cm in length on one side of the ferrule and a blunt projection not more than 1.3 cm in length on the opposite side of the ferrule and that is attached to a wooden handle that measures not less than 105 cm and not more than 153 cm in length and not less than 3 cm and not more than 5.1 cm in diameter;

(c) a rifle and bullets that are not full metal jacketed that produce a muzzle velocity of not less than 1,800 feet per second and a muzzle energy of not less than 1,100 foot pounds; or

(d) a shotgun of not less than 20 gauge and rifled slugs.

The use of net is not allowed in the commercial hunt, although they are permitted north of 54°N as a traditional method for subsistence purposes by aboriginal hunters (EFSA, 2007). Section 28 referred to above is only applicable for Sealing areas 4 to 33.

If a club or a hakapik is used, the sealer shall manually check the skull or administer a blinking reflex test⁷ to confirm that the animal is dead⁸ before proceeding to strike another seal. When a firearm is used, the person who shoots the seal or retrieves it should administer a blink reflex test as soon as possible after it is shot. According to the MMR "no person shall start to skin or bleed a

⁷ MMR Section 2 (1): "blinking reflex test" means a test administrated to a seal to confirm that it has a glassy-eyed, staring appearance and exhibits no blinking reflex when its eye is touched while the eye is in a relaxed condition; (test de réflexe de clignement).

⁸ EFSA points out in its report that the word "dead" used in the MMR does not mean dead as defined in various EFSA documents, viz. "a physiological state...where respiration and circulation have ceased". In the MMR context, seals clubbed should be irreversibly or terminally unconscious (or "brain dead") but the heart will continue to beat.

seal until a blinking reflex test has been administrated, and it confirms that the seal is dead" (MMR Section 29).

The Canadian government is in the process of proposing amendments to the MMR with respect to bleeding-out, in order to include the three-step procedure recommended by both the Independent Veterinarians' Working Group - IVWG (2005) and the EFSA Journal (DFOv, DFO 2008b). The proposed amendments are intended to enter into force before the 2009 hunt. In the meantime, the Minister of DFO has included the requirements to bleed-out the animals following the checking procedure, outlined in MMR Sections 28 (2), (3) and (4) and in accordance with Section 29 of the MMR as a licence requirement for the 2008 hunt, as a licence condition. If these licence conditions are not complied with, this can lead to administrative sanctions such as the withdrawal of hunting licences and confiscations of bags and equipment (DFO, 2008b).

3.1.3 Enforcement

Organisation

The body responsible for monitoring and enforcing the seal hunt in Canada is the Department of Fisheries and Oceans (DFO). The Minister of Fisheries and Oceans appoints fishery officers who are responsible for monitoring catches, ensuring humane hunting practices, and enforcing regulation and licence conditions (Section 5 (1) - (2) of the Fisheries Act). There are around 650 fishery officers in Canada (DFO, 2008a). The powers of the Fishery Officers are specified in a Certificate issued by the Minister (Section 5 (2) of the Fisheries Act) according to Sections 49-56:

- Enter and inspect any place, including any premises, vessels or vehicles, in which the officer believes on reasonable grounds there is any work or undertaking or any fish or other thing in respect of which the Fisheries Act or the regulations apply.
- Open any container that the officer believes on reasonable grounds contains any fish or other thing in respect of which this Act or the regulations apply.
- Examine any fish or other thing that the officer or guardian finds and take samples of it.
- Conduct any tests or analyses and take any measurements.
- Require any person to produce for examination or copying any records, books of account or other documents that the officer or guardian believes on reasonable grounds contain information that is relevant to the administration of this Act or the regulations.

Sea fisheries observers are furthermore used in the Front and Gulf areas of the seal hunt to augment the more traditional and ongoing monitoring and enforcement efforts of DFO (regulated in Section 39 of the Fishery General Regulations). The observers are employees of private sector fisheries observer com-

panies, contracted with DFO. They are trained by their companies, in cooperation by DFO, according to national standards for training and certification. They are working under the authority of the DFO. The responsibilities of the observers are to ensure that the sealing vessels to which they are deployed are operating within the regulations as applicable to the seal fishery (observe, record, and report on all aspects of the sealing operation including the monitoring of landings data, humane sealing practices, weapons, licences, area of capture regulations are respected). There were 23 registered observers during the 2007 hunt, adding an additional 150 days monitoring activity to the DFO seal enforcement capability, directly on board sealing vessels (DFO, 2007b).

Canada also allows for independent observation of seal hunt. Under the MMR, the Minister may issue a Seal Fishery Observation License if such issuance does not cause disruption to a seal fishery (MMR Section 32 (1)). The Minister shall consider:

- the period and geographical area for which the license is being sought;
- the number of seal fishery observation licenses previously issued for that period in that area;
- the number of seal hunters operating in that area; and
- whether the applicant has a stated aim of disrupting the seal fishery or has been convicted, in the five years preceding the application for the license, or tagging, marking or moving a live seal or approaching within one-half nautical mile of a person who is on the ice fishing for seals (MMR Section 32 (2)).

DFO has launched consultations on proposed amendments to sections 32 and 33 of the MMR proposing amendments to Section 32 of the MMR (DFO, 2007 vi).

Veterinarians who would like to do research are granted permission from DFO and no observer licence is required, and thus the veterinarian is not bound by the restrictions of an observer licence, i.e. in regards to distance of the seal and hunter (DFO, 2008d).

Reporting requirements

Inspections by DFO fishery officers are recorded as part of a daily report to the officer. Suspected irregularities are documented in more detail for additional follow-up action (warning or possible charges being laid) (DFO, 2007a). At sea, fishery observers shall transmit collected information to DFO, "in a timely manner" (Section 39.1 of the Fisheries (General) Regulations).

Seal hunters are required to keep records, logbooks and other relevant documents in regard to the seal hunt and report to fishery officials upon request. According to Section 61 of the Fisheries Act, there is an obligation to keep information on time and place of catch, purchase, vessels, gear and methods used, number of persons employed for the purpose, and any other matter relating to

the proper management and control of fisheries or the conservation and protection of fish.

Sanctions

Sealers who fail to observe humane hunting practices, licensing conditions, and catch requirements are penalised. The consequences of such illegal actions could include court-imposed fines and the forfeiting of catches, fishing gear, vessels and licences (Sections 78, 79 1-2 and 79.7 of the Fisheries Act).

MMR infractions examples have seen as high as \$10,000 worth of seal pelts forfeited for area/time infractions; 3 year prohibition from seal fishing for illegal transportation of seal pelts; and probationary terms imposed and prohibition from any hunting activity or fishing activity until fines are paid (DFO, 2007b).

Most fishery offences, including offences under the MMR, are strict liability offences. This means that the Crown does not need to prove intent, only the doing of the prohibited act. The defence of due diligence is provided for under Section 78.6 of the Fisheries Act.⁹

3.1.4 Information on the hunting in practice

Conditions for hunting

EFSA has reviewed four recent reports by veterinarians that examine the animal welfare aspects of Canada's commercial seal hunt. EFSA argues that the conclusions of the various independent reports are in conflict, and different observers have come to different conclusions based on the same data. The uncertainty of the data interpretation is high as well as the uncertainty in obtaining relevant and representative data. All reports, however, indicate that methods other than those prescribed in the MMR are used in the stunning, killing and skinning of harp seals during Canada's commercial seal hunt, and that the sealers do not comply with the MMR in relation to checking reflexes and bleeding-out on a significant number of occasions (EFSA, 2007).

The large scale commercial Canadian seal hunt is in general carried out over a few weeks from the end-March to mid-April, albeit the season being much longer (IVWG, 2005, p. 2). In Newfoundland, the large vessels, i.e. over 35', in general only participate in the hunt from 5 to 10 days, whereas the smaller vessels, i.e. under 35', hunt up to two months (DFO, 2008c). The hunt is highly competitive in its nature - each vessel competing for their share of the quota (IVWG, 2005, p. 11). According to the IVWG (2005, p. 13), reducing the competitive nature of the hunt can lead to "improved animal welfare, better compliance and enforcement, and a safer working environment. The competitive nature of the hunt may induce the hunters to take shortcuts, which again may reduce animal welfare".

Training of the hunters

IFAW expresses concern about the lack of qualifications of the seal hunters. IFAW states that since there is no training required to hold a professional sealer licence, there is no guarantee that best practices are being taught to new sealers

⁹ This defence is available to a person who establishes that he or she exercised all due diligence to prevent the commission of the offence or that he or she reasonably believed in the existence of facts which, if true, would render that person's conduct innocent.

(IFAW, 2007a). Personal use seal hunters must have completed a firearms safety course and a hunter education course. It is the opinion of the IFAW that neither of these courses requires the demonstration of an ability to accurately discharge a firearm, or "humanely" kill an animal.

Killing methods and animal welfare

There are diverging viewpoints of the degree to which the seal hunt legislation is complied with in Canada. The Government and NGOs make diverging conclusions. The EFSA Journal also stresses that "without adequate sampling [...] it is not possible to establish reliably the exact proportion of animals that are killed outright [...]", and continue that "uncertainty is high in obtaining relevant and representative data for a specific seal hunt" (EFSA, 2007, p. 93). There is, however, evidence that some seals do "suffer pain and distress at different stages of the killing process" (EFSA, 2007, p. 94).

In 2007, animal welfare aspects of the Canadian seal hunt were examined based on three sources of information: (1) 17 post mortem harp seal pups; (2) video footage from IFAW and HSUS from 2003 to 2007; and (3) outputs from Expert Opinion Analysis from 133 experts' opinion on 30 randomly selected sequences of seal kills (Butterworth et. al. 2007). The video shots were gathered in different ice and weather conditions. The report concludes that there are "considerable welfare concerns about how the hunt is conducted" due to high wounding rates, both when seals are shot and clubbed. In regards to shooting, the report concludes that it is unclear if the high number of wounded seals is caused by "inappropriate weapons and/or ammunition, lack of skills/raining of the sealers or the difficulties of shooting from a boat". The analysis also concludes that there is "widespread evidence of disregard for the Marine Mammal Regulations and non-statutory regulations published by sealers' professional bodies".

The IVWG also analysed video clips supplied by IFAW, and found also that bleeding-out did not take place after stunning and before hooking and skinning (IVWG, 2005, p. 10).

Enforcement and inspection

Enforcement - hereunder inspection and observation - is a challenge in Canada due to the environment in which the hunt takes place (IVWG, 2005, p. 12). According to the IVWG, the Front, which accounts for around two thirds of the hunt, is "generally considered not to be well monitored". However, according to DFO (2008a and 2008b) there are over 100 fishery officers available for deployment to the seal fishery each year. As sealing is taking place outside the fishing season, extra resources are available for inspecting the seal hunt and the monitoring on a continuous basis. Monitoring and enforcement are also carried out by the Royal Canadian Mounted Police (RCMP) and the Quebec provincial police, as well as the Canadian Coast Guard (2008a and 2008b). Over the last four years, the number of (contracted) at-sea observers has steadily risen to 23 observers during the 2007 seal hunt - adding an additional 150 days of monitoring activity to the DFO seal enforcement capability, directly on board sealing vessels. At-sea observers conduct random sampling of seal skulls post mortem to assess the extent to which the skulls are damaged (DFO, 2008a). During the 2006 seal harvest in NL Region, fishery officers also conducted 1,100 inspections of sealing vessels and 2,350 sealers (DFO, 2008a).

Nevertheless, concern was raised by the independent Veterinarians' Working Group, IVWG in 2005 in regard to the independence of the Canadian inspection. IVWG stated that there may be an element of conflict in DFO both being an advocate for the seal hunt and its regulator. According to IVWG, seal hunt enforcement officers typically reside in sealing communities and are reluctant to press charges against community members (IVWG, 2005, p. 14). From 2002 to January 2008, 800 seal fishery violations have been detected by DFO Fishery Officers; a total of 180 charges have been laid, resulting in 100 convictions. 31 charges under MMR related to humane killing (illegal gear or gear used illegally).

Canada allows for third party monitoring of the seal hunt. IFAW, however, finds monitoring licenses are extremely difficult to get. In addition to the licensing requirements of the DFO, logistics of accessing the hunt are difficult (a helicopter or boat is required). DFO requires a minimum of 48 hours prior to the applicant's arrival in the sealing jurisdiction to conduct a background security check. Upon arrival in the sealing region, each prospective observer must conduct a personal interview with a representative of the DFO.

If a hunt observation permit is granted, it is valid for one day only, and must be renewed, and signed by a DFO official (according to the Seal Hunting Observation License). In addition, a separate form identifying each vessel carrying observers must be filled out and submitted to DFO no more than 2 hours before the vessel departs. Observers must maintain a 10m distance from sealing activity, and are not permitted to disrupt a seal hunt. Seal hunters, on the other hand, are not required to keep a minimum distance from observers, and regularly approach observers, putting observers at risk of breaching the 10m rule and presenting a significant threat to safety (IFAW, 2007a).

According to IFAW, third-party observers routinely report apparent violations of the MMR, including the apparent use of illegal weapons (IFAW, 2007a). Failure to conduct blink reflex test or skull palpation is also routinely reported (Burdon et al, Daoust et al, and Butterworth et al, referred by IFAW, 2007a). Charges have been laid against seal hunt observers for various reasons (17 charges laid in 2005 and 2006); some of these are currently before the courts. Overruns of quotas are said to be frequent, and it has also been said that hunt closure dates have been extended to allow further hunting, even after the Canadian government was aware that quotas had been exceeded (IFAW, 2007a).

3.1.5 Summary Assessment

The below table summarises the description of the Canadian legislation and enforcement system and provides a brief description of the practices and context of the hunt.

Table 3.1.3 Assessment Summary Sheet, Canada

Canada			
Legislation	Are national legislation requirements in place?⁽ⁱ⁾		
	Yes	No	Comment
Animal welfare principles			<u>Inconclusive</u> - although there are principles and statements on animal welfare mentioned in §§7-10 of the Marine Mammal Regulations (SOR/93-56), particularly §8 stating that it shall be killed quickly - but there is no reference to avoiding unnecessary pain or distress.
Hunting tools			<u>Inconclusive</u> - as the conditions to get a Yes is only partially there. Characteristics of the tools allowed are prescribed in §28 (1) of the Marine Mammal Regulations (SOR/93-56). This is applicable for personal and commercial use. However, §28 is only applicable in sealing areas 4 to 33, i.e. the areas for commercial hunting. Outside these areas, i.e. areas 1 to 3 covering the Arctic areas, there are no restrictions.
Assuring death by monitoring ⁽ⁱⁱ⁾	X		A blinking test is required to confirm that the seal is death according to Sections 28 (2)-(4) and Section 29 of the Marine Mammal Regulations (SOR/93-56).
Bleeding-out of animals shot or struck ⁽ⁱⁱ⁾	X		No requirements in the applicable legislation, however it is incorporated as a licence requirement and non-compliance may thus be sanctioned.
Environmental factors		X	No requirements in the applicable legislation.
Training of the hunters			<u>Inconclusive</u> . Training takes form of apprenticeship - i.e. learning from experienced hunters. There are no requirements to any specific skills being taught or curriculum to be studied according to the Seal Licensing Policy for Eastern Canada Section 33, and the 1995 Canadian Firearms Act.
Enforcement	Are national enforcement requirements in place?⁽ⁱ⁾		
	Yes	No	Comment
Independent monitoring			<u>Inconclusive</u> - without further analysis the independency of inspectors. Monitoring is undertaken by fisheries officers from DFO and by at-sea fisheries observers - designated according to 5 (1)-(2) of the Fisheries Act and §39 (1) and §1 of the Fisheries Regulations.
Ability of third party to monitor	X		Seal Fishery Observation Licenses may be issued by the Minister if such issuance does not cause disruption to a seal fishery according to Section 32 (1)-(2), MMR (SOR/93-56).
Reporting requirements			<u>Inconclusive</u> - although inspections by DFO fishery officers are recorded daily. At-sea fishery observers shall transmit collected information to DFO. Seal hunters are required to keep records, log books and other relevant documentation, documenting their seal hunt (Section 39.1 (2) of the Fisheries (General) Regulations and Section 61 of the Fisheries Act). However, there are no requirements to report on environmental factors.
Sanctions and compliance	X		Data from the reporting of inspectors and sealers are gathered.
Are animal welfare recommendations carried out in practice?⁽ⁱⁱ⁾			
Legislation in practice (implementation and application) The Canadian hunt is highly disputed and there are different opinions on the degree to which the legislation is complied with. The competitive nature of the hunt may lead to hunters taking shortcuts that may reduce animal welfare. Without further information it cannot be concluded to which degree the legislation is complied with. However, as bleeding-out is not required by legislation but is as of 2008 a part of the licence requirement, and so administrative sanctions might be the consequence if these are not complied with.			
Enforcement in practice Enforcement is challenged by the characteristics of the hunt, with a large number of relatively small boats operating in a challenging environment. That said, i.a. IVWG (2005) stated that the independence of the enforcement and loyalties of inspectors can be questioned. The DFO has, however, increased focus on enforcement since 2005 and increases the number of inspectors. NGOs stress that there are administrative barriers to get an observers licence in spite of the procedure being rather simple and straightforward according to the legislation.			
Contextual factors of importance for understanding legislation and enforcement			
There are three kinds of hunt in Canada: commercial hunt, personal use hunt and Inuit hunt. This study targets first and foremost the commercial hunt which is the largest - landing 200,000-300,000 seals a year. The commercial hunt mainly takes place in coastal communities in Newfoundland and Labrador, where professional fishermen supplement their income in the fisheries off season. Most seals are killed from late-March to mid-April. The Inuit hunt is further north in Canada and is both for subsistence and commercial purposes as Inuit also sell their products on the commercial market. This hunt is mainly for ringed seals.			
Notes			
⁽ⁱ⁾ Yes - implies that legislation/enforcement requirements are in place and contain provision in accordance with animal welfare recommendations for seal hunt. No - implies that legislation/enforcement requirements are not in place or not in accordance with animal welfare recommendations for seal hunt. No X - if the information available is inconclusive.			
⁽ⁱⁱ⁾ This assessment by the study team is solely based on written information obtained - hence not on observations of the hunt in practice. Furthermore, the description is not claimed to be complete.			

3.2 Finland

3.2.1 Overview of seal hunting

Traditional hunting and protection of fisheries

The seal hunt in Finland is primarily recreational - having a strong traditional and cultural value (MMM, 2008). However, reducing the negative implication of seals on fisheries is also an important factor. Ringed seal (*Phoca hispida botnica*) and grey seal (*Halicoerus grypus*) are game species in the Baltic Sea region of Finland. However, only grey seal is hunted, while no licences are issued for ringed seal (Game Management District of Swedish Osterbithnia, 2008). The hunt mainly takes place when hunting is possible on the ice in the spring. The grey seals occur on the ice in small herds or alone. The hunter looks for seals that are lying on ice and tries to approach them in a small boat between the ice-blocks. When the hunter is close enough (10-150m) the hunter crawls onto another ice-block and shoots the seal from a steady support (Game Management District of Swedish Osterbithnia, 2008).

Recent increase in population

Due to decreasing populations, the seal hunt was closed in the 1980s. In 1998, the hunting was reintroduced as a result of an increasing grey seal population (MMM, 2007a, p. 44). This has led to a new era for the traditions and culture of seal hunt. Information on the stock of Baltic ringed seal is relatively uncertain. The size of the population cannot be divided by country, only by marine area, and the only well-documented area is the Bothnian Bay, where the majority of the population lives. In 2002, a census counted 4,500 animals in this area (MMM 2007a, p. 29). More recent censuses indicate that the population consists of 6,000-7,000 animals (Härkönen cited in MMM, 2008).

Table 3.2.1 shows that there has been an increase of grey seals in the Baltic Sea of more than 100% from 2000 to 2006. The increase in Finnish waters is even higher now accounting for about 50% of the total grey seal population in the Baltic Sea. Grey seals are hunted in the Bothnian Sea, Kvarken area, the Archipelago Sea and the Gulf of Finland, whereas when hunt is allowed on Baltic ringed seal this occurs mainly in the Gulf of Bothnia and the Eastern Gulf of Finland (MMM, 2007a, p. 37).

Table 3.2.1 Baltic Sea grey seal census 2000-2006

		2000	2001	2002	2003	2004	2005	2006
Grey seal	Baltic sea	9,735	10,300	13,100	15,950	17,640	18,300	21,000
	Finnish Waters	3,000	3,600	5,080	6,285	8,075*	8,700	10,700

*Include Märket, where some of the islands belong to Sweden.

Source: MMM, 2007a, p. 31.

Limited hunt

Today, the hunt is rather limited; both in mainland Finland and in Åland. Table 3.2.2 shows the quotas are not filled. According to the Management Plan for the Finnish Seal Populations in the Baltic Sea the low catch compared to allocated quota may be due to adverse weather and poor ice conditions. Also the allocation system for the quotas may contribute to a low catch. Although increasing, the hunt in Åland is rather limited.

Table 3.2.2 Finnish grey seal hunt quota and catch for 1998-2006

		1998	1999	2000	2001	2002	2003	2004	2005	2006
Mainland Finland	Quota ¹⁰	30	100	100	180	230	395	490	635	675
	Catch	16	62	60	92	134	233	293	334	n.a.
Åland	Quota	n.a.	n.a.	84	89	203	203	293	250	390
	Catch	n.a.	n.a.	30	54	95	82	150	180	n.a.

Source: Ministry of Agriculture and Forestry 2007a, p. 38.

3.2.2 Socio-economic context

Recreational, traditional and cultural values

The seal hunt in Finland has recreational, traditional and cultural values - in particular for coastal communities - with respect to hunting methods and as well as products made from the seal blubber, meat, skin or fur and bone. It has, however, a limited commercial value only. The market for seal meat is though considered to be increasing (Game Management District of Swedish Osterbithnia, 2008). The products made of seals are exclusive and have coastal brands that attract tourists. The entire seal is used and sold: meat at restaurants, fur details in souvenirs, leather, whole pelts, blubber-made oil for eco-painting of buildings in the coastal area, and bones for jewellery.

Damage to fisheries

As mentioned above, an important motivation for the seal hunt is to reduce the negative impacts on fisheries, and in this context bounties were paid for seals from the early-1900s and until the mid-1970s. The seal hunt was for long time the main occupation of fishermen in the late winter, when fishing was minimal. At the end of the 1950s, professional hunt for seals ceased, but in some coastal communities fishermen did depend on incomes from sealing until the 1970s (MMM, 2007a, pp. 36-37). In some places, the challenge today is to handle the economic losses inflicted by seals. The conflict between the fishing industry and seals is twofold. Firstly, seals cause harm to fishing equipment and thus inflict extra cost on the industry. Secondly, seals and the industry compete for the same resources - i.e. fish.

Professional fishermen record their catch, and this record - hereunder information about damage inflicted by seals. In 2000, the reported damage to the catch amounted to 82 tonnes of fish, while it increased to 147 tonnes by 2005 (MMM, 2007a, p. 41). Only in the Kvarken area (a small part of Finland) the seals are said to have caused damages to fishing gear for over €800,000 in 2007 (Guy Svanbäck, Österbottens fiskeriförening cited in MMM, 2008).

3.2.3 Legislation

Different legislation for Finland and Åland

The hunt of seals in Finland is subject to legislation of mainland Finland. However the province of Åland has a separate legislation, and it is of the responsibility of the Government of Åland (MMM, 2007a, p.16). Both Baltic ringed seal and grey seals are considered game animals, but are also considered protected animals under §2 in the Decree of Åland on Wildlife Management (1998:13) and §15 of the Act of Åland Wildlife Management (1998:82) respec-

¹⁰ Maximum permitted number (1.8-31.7).

tively (MMM, 2007a, p.17). The legislation for Åland will not be touched upon further in this study.

International commitments

Being an EU Member State, Finland has implemented the Habitat Directive. Finland has also signed the Bonn and Bern Conventions as well as the Convention on the Protection of the Marine Environment of the Baltic Sea Area also called the Helsinki Convention or HELCOM. HELCOM recommendations are not legally binding, although they carry some political weight (MMM, 2007a, pp.12-14). In July 2006, HELCOM adopted recommendation 27-28/2 on conservation of grey seals in the Baltic Sea area. The first recommendation is presented in Text-box 3.2.

Text-box 3.2 HELCOM recommendation 27-28/2 – recommendation 1

HELCOM recommends the Contracting Parties to the Helsinki Convention to apply the General Management Principles and Management Units, and in conformity with these principles develop and implement National Management Plans* which will be the main management instruments to ensure that the favourable conservation status of the species is attained or maintained. In particular so that:

- for all populations below the Limit Reference Level (the Safe Biological Level), no allowances for deliberate killing should be issued;
- for populations between the Limit Reference Level (the Safe Biological Level) and the Precautionary Approach Level, licenses for anthropogenic removals can only be issued if in the population a significant positive long-term growth rate can be observed; and if licenses for anthropogenic removals are issued, special care has to be taken so that the positive long-term growth rate is not jeopardized;
- for populations between the Precautionary Approach and the Target Reference Levels, and for population above the Target Reference Level, licenses for anthropogenic removals can be issued provided that the long-term objectives of the General Management Principles are not compromised.

* NMP would also be the appropriate instrument for issuing any exemption from the General Management Principles for specific scientific purposes, animal welfare reasons and for removing identified individuals specialising on depredation of captured or farmed fish.

The recommendation implies that hunt can be carried out when the population is above the target reference level i.e. "the Minimum Viable Population Size, which is to be defined for each of the management units" (cf. the above Recommendation 27-28/2). It contains also recommendations regarding monitoring and prevention of illegal hunting and by-catches and cross country cooperation in seal management.

National legislation

The legislation regulating nature conservation and game species in Finland is a shared responsibility between the Ministry of Environment and the Ministry of Agriculture and Forestry. The former is responsible for conservation areas under the Nature Conservation Act whereas the latter is responsible for management and conservation of seal population. The organisation of seal management is shown in the table below.

Table 3.2.3 Organisation of seal management in mainland Finland

ACTOR		RESPONSIBILITY
Ministry of Agriculture and Forestry		Main responsibility for management and conservation of seal populations, delegation of tasks, overall control and functioning as the licence authority. International affairs. Updating of the management plan.
Finnish Game and Fisheries Research Institute		Main responsibility for monitoring the population, research, communication of findings, expert services.
Organisation of hunting and game management bodies	Hunters' Central Organisation	Information services, training, advice, statistics, expert services, coordination.
	Game management districts	Regional information services, training, advice, authority for issuing licences, regional responsibility for population management.
	Game Management Associations	Local information services, training, advice, and hunting surveillance.
Ministry of the Environment		Conservation areas established under the Nature Conservation Act. Updating of the classification of endangered species.
Police		Hunting surveillance.
Metsähallitus		Administration and management of state conservation areas. Hunting surveillance.
Border Guards		Hunting surveillance
Finnish Food Safety Authority Evira		Monitoring, research and information services relating to diseases transmitted to humans by seals. Meat inspection and guidance, training and advice on meat inspection.

Source: MMM, 2007a, p. 84.

There are 15 game management districts in Finland, and these in cooperation with the game management organisations play a key role in implementing hunting policy, hereunder enforcement of legislation - as will be returned to below.

Hunt in mainland Finland is regulated by the following legal acts, hereunder sealing:

- Hunting Act (615/1993)
- Hunting Decree (666/1993)
- Act on Game Management Fee and Hunting Licence Fee (616/1993)
- Guidelines for hunting by Ministry of Agriculture and Forestry (annually)
- Law on animal protection (247/1996)
- The Penalty Code (39/1889)

The Hunting Act "applies to hunting and to capturing and killing of unprotected animals as well as to game management, compensation for damage caused by game animals, and keeping of dogs" (§1), and defines both hunting (§2) and game management (§3). It specifically mentions Baltic ringed seal, harbour seal, grey seal as game animals (§5.1).

The Hunting Decree builds on and specifies certain provisions in the Hunting Act, for example conditions on licences to hunt and hunting equipment - which will be returned to below. Moreover, the decree specifies the hunting season for Baltic ringed seal and grey seal (§24.1.7). Harbour seal is always protected (§24.2) and hunt is not allowed.

The guideline stipulates quotas for the hunt for several hunted species hereunder grey seal. This is the only seal species that is hunted in 2007. Furthermore, the guideline states that there is an obligation to take samples from all seals killed that shall be submitted to the Finnish Game and Fisheries Research Institute. The law on animal protection (247/1996) is intended to protect animals from hurt, suffering and nuisance (§1) and is applicable to all animals (§2); while the Penalty Code provides the maximum penalties for infringing the legislation.

Moreover, the ministry of Agriculture and Forestry has issued an extensive Management Plan for Finnish Seal Populations in the Baltic Sea (MMM, 2007a). This plan has two parts. The first outlines the background for managing seal, hereunder current national and international legislation, the biology and development of seal populations as well as the relationship between man and seal. The second part provides for new management measures (MMM, 2007a).

Conditions for hunting

Hunting is only legal in the hunting season which is determined by the Hunting Decree (§24.1.7). Table 3.2.4 shows the hunting seasons for Baltic ringed seals and grey seals. The decree has no mentioning of a hunting season for harbour seal.

Table 3.2.4 Hunting season for Baltic ringed seal and grey seal

Species	Season
Baltic ringed seal (with license from the local game management district)	April 16 - May 31 and September 1 - October 15
Grey seal (with license from the local game management district)	April 16 - December 31

In order to participate in the hunt, holding a hunting licence must be required. According to the Hunting Act (Chapter 2), "the owner of an area is entitled to engage in hunting and make decisions on hunting" (§6). In public waters, persons permanently residing in Finland have right to hunt (§7), and a person has the right to hunt in the waters which "in whole or in part pertain or on which they border" to the municipality in which one lives (§7.2). Moreover, a hunting licence is required to participate in certain types of hunting (§10), hereunder seal hunting. The application for a hunting licence must be made in writing, and the granting of the licence is subject to the condition that the seal population is sustainable (§2).

Training of hunters

In order to hunt in Finland, hunting rights (615/1993 Chapter 2), and a hunting card and a firearms licence is required. To obtain a hunting card a test must be passed (616/1993 §2). The test consists of 60 questions, and 52 must be answered correctly in order to pass the test. The test includes the Hunting Act, hunt ethics, safety, hunting methods and knowledge about firearms (MMM, 2008). A voluntary training course is available and covers a range of the issues that is part of the test. It is recommended that seal hunters participate in an additional course targeting seal hunt and according to the Ministry of Fisheries and Agriculture, 80% of the seal hunters have attended this course (MMM,

2007b). A book is elaborated for the course, and the anatomy of the seal, preparations for the hunt, bleeding-out requirements and skinning are part of the curriculum. Breaches of the routines outlined in the book are considered an infringement of the requirement to avoid unnecessary pain, and the hunter may thus be convicted according to the Penalty Code (Game Management District of Swedish Osterbithnia, 2008).

A firearms licence is awarded by the police based on a judgment of the suitability of the person in question (MMM, 2007b). There are no requirements on shooting tests for seal hunters.

Animal welfare principles

Protecting animals from suffering is one of the main objectives of the Finish law on animal protection. The guiding principle (247/1999 §3) is that animals shall be treated well and without unnecessary suffering. Inflicting unnecessary harm or suffering on an animal is prohibited.

Animals shall be killed using appropriate tools that do not harm the animals unnecessarily (247/1999 §12). The process of killing the animal must be as fast and painless as possible (247/1999 §32). It is up to the Ministry of Forestry and Agriculture to decide which tools and the process that may be used (247/1999 §12 and §32). As seen above, such specification is made in both the Hunting Act and the Hunting Decree. The Hunting Act Section 20.1 provides general requirements for "the practice of hunting" states that " hunting must be practiced [...ensuring that...] game populations are not put at risk or animals are caused unnecessary suffering". As mentioned above, animal welfare is part of the general training of hunters and the Hunters Association has a booklet concerning hunting ethics that all hunters are expected to follow.

Killing methods

Rules on hunting methods are specified in Chapter 4 of the Hunting Act. The act restricts the use of motor vehicles in the hunt (§32) and prohibits a number of killing methods, hereunder killing traps that do not automatically kill the animal (§33.1.11). The Hunting Decree further specifies that a trap for the capture of animals alive or other similar hunting device may be used in the capture of Baltic ringed seal and grey seal (§11.1). These traps must not lead to the animal drowning. All traps that capture animals alive have to be checked at least once a day (§11). No trap that may cause an animal unnecessary suffering or pain can be manufactured, sold, imported, or be used (Law on animal protection (247/1993) §12).

Provisions on the characteristics and use of weapons and other permitted hunting means are issued by the Hunting Decree. The general rule is that "the bullet scoring energy of a rifled firearm to be used for the shooting of game must be - when measured 100m from the muzzle - at least 800 joules (E 100 > 800 J)". For certain species - including Baltic ringed, harbour and grey seal - it is furthermore specified that a "self loading weapon with magazine housing more than two cartridges" is prohibited. The bullet has to be of the kind that easily expands. Full metal jacket is not allowed to use when sealing (§16). Hunting with a handgun is not allowed (§16) nor is the use of shotgun and bow (§18 and §20).

3.2.4 Enforcement

Organisation

Enforcement of the regulations regarding hunting is regulated by the Hunting Act and the Hunting Decree. Moreover, the law on border control¹¹ (577/2003) and the Penalty Code provides relevant provisions concerning inspections and sanctions. The Ministry of Agriculture and Forestry is the “supreme authority” both regarding steering and controlling the hunt (615/1993 §56.2). There are also several organisations involved in the administration and enforcement of the legislation: Hunters' Central Organisation, Game Management Districts and game management organisations as indicated in Table 3.2.3 above. The Hunters' Central Organisation is responsible for supervising the activities of game management districts (615/1993 §57.2 and §57.3). The Game Management Districts on the other hand shall promote and assist in game management and shall direct and supervise the activities of game management associations.

The latter are also responsible for providing training and advisory services concerning hunting and game management, and promoting game management, and for supervising the hunt (615/1993 §63.1.1-3). A game management association may also appoint game wardens (§63.4). These wardens must sign an affirmation where the ward “solemnly affirm” to “diligently, conscientiously, impartially and without concern for personal gain [...]” will fulfil the responsibility of supervising the hunt and game management to the best of his/her capability and to avoid “injustice in the course of [his or her] duties” (666/1993, §44.1). Most reporting of infringements comes from the game management organisations (Game Management District of Swedish Osterbithnia, 2008).

Furthermore, the Hunting Act states that “[t]he police, the Frontier Guard, customs authorities and game wardens [...] are responsible for supervising the compliance with this Act in their respective jurisdictions” (§88). Moreover, provisions regarding supervision and control are issued by decree (§63.4). In practice, however, the supervision of the hunt is the responsibility of the coast guard (Game Management District of Swedish Osterbithnia, 2007a). The responsibilities of the coast guard are laid down in law on boarder control (577/2003). The coast guard is responsible to the Ministry of Internal Affairs (577/2003 §3).

The Ministry of Agriculture and Forestry states in the Management Plan for the Finnish Seal Populations in the Baltic Sea that the surveillance of seal hunt and the cooperation between the responsible entities will be improved. The coast guard, customs authorities, officials employed by the Metsällitus (the state forest service), and the hunting organisation are particularly mentioned. The management plan moreover states that concrete proposals will be drawn up. Following this, the Ministry of the Internal Affairs has established a working group, which elaborates a strategy for supervisions of hunt in general. The strategy will mainly be targeting the hunt of big predators, but will cover all hunt. Its primary objective is to enable improved cooperation and a clearer definition of roles between authorities (MMM, 2007b).

¹¹ Lag om gränsbevakningsväsenets förvaltning 15.7.2003/577.

Sanctions	The consequences of infringements are ruled by Chapter 10 of the Hunting Act, and the punishment for a hunting offence is laid down in Chapter 48a of §1 of the Penalty Code - stating that infringements, which are deliberately or grossly negligent, can be punished by fines or by imprisonment up to two years. With regard to the animal protection law (247/1996), breaches of §§3-6, hereunder the guiding principle on animal treatment (§3), §12 on killing equipment, as well §§32 and 33 on killing and slaughter of animals are considered as animal protection offences (djurskyddsförseelse), and are sanctioned according to the Penalty Code Chapter 17 §§14-15. Offenders can according to these paragraphs be sentenced to fines or imprisonment up to two years (39/1889).
Reporting requirements	The hunting licence holder is required to notify the game management association of the bag obtained (666/1993 §9.1). The notification must include information on both how many and where animals were killed (666/1993 §9.2). This information is forwarded to the Ministry of Agriculture and Forestry (MMM). The coast guard is required to report any “important circumstances” (577/2003), hereunder hunt infringements.

3.2.5 Information on hunting in practice

Lack of information	The management plan for the Finnish seal populations in the Baltic Sea (published 2007), which was drawn up through a broad participation both on a local and national level, states the policy for the seal management in Finland with all responsible actors involved. However, there is a lack of information on how the agreed activities in the plan are complied with in practice.
---------------------	--

3.2.6 Summary assessment

The below table summarises the description of the Finnish legislation and enforcement system and provides a brief description of the practices and context of the hunt.

Table 3.2.5 Assessment Summary Sheet, Finland

Finland			
Legislation	Are national legislation requirements in place?⁽ⁱ⁾		
	Yes	No	Comment
Animal welfare principles	X		Law on animal protection is applicable to all animals (§§3, 12 and 32 are particularly applicable here). The Hunting Act stresses that hunting must be not "cause unnecessary suffering".
Hunting tools	X		A range of tools are prohibited and the only legal method to catch and kill a seal is by trap, for the capture of animals alive, or by shooting. There are specifications for ammunition and weapons allowed.
Assuring death by monitoring ⁽ⁱⁱ⁾		X	Not required by the applicable legislation. However, the required rifle and ammunition do lead to immediate and obvious death of the seal as the skull is destroyed when the seal is shot in the neck or head.
Bleeding-out of animals shot or struck ⁽ⁱⁱ⁾		X	Not required by the applicable legislation.
Environmental factors			<u>Inconclusive</u> - as hunting is not legal in artificial lighting unless it is to put down an already wounded animal. No other provisions on environmental factors.
Training of the hunters			<u>Inconclusive</u> - although hunters must pass a rather extensive test to get the required hunting card. There is moreover a voluntary course targeting seal hunt (with 80% participation of seal hunters). However, there are no requirements on shooting tests for seal hunters.
Enforcement	Are national enforcement requirements in place?⁽ⁱ⁾		
	Yes	No	Comment
Independent monitoring			<u>Inconclusive</u> - although an extensive organisation for monitoring exists both within the Ministry of Forestry and Agriculture, hereunder the Game Management Districts and organisations. Also the police, frontier guard, the customs authorities participate in the monitoring and inspecting the hunt. Their independence are, however, uncertain.
Ability of third party to monitor	-	-	<u>Not applicable</u> - as the Finnish hunt is not large scale.
Reporting requirements	X		Hunters are required to report on their catch. The coast guard must report on "important circumstances" hereunder the hunt.
Sanctions and compliance	X		Information on infringements and suspected infringements are gathered by the police.
Are animal welfare recommendations carried out in practice?⁽ⁱⁱ⁾			
Legislation in practice (implementation and application) The hunt takes place in the spring when seals are on ice in herds or alone. The hunter shoots the seal in the head at a distance of 10-150 metres. When the seal is shot in the head or upper neck with the required ammunition, it is likely that the seal is immediately dead because of its impact power and the large ensuing wound. This does of course require the shots are placed correctly. The animal is in practice bled-out in order to secure the quality of the meat and skin which is used for food and manufacture, but this is not required by legislation. The hunt is only undertaken in stable weather conditions due to the character of the hunt and the danger that bad weather poses to the hunter.			
Enforcement in practice Inspection and control of the hunt is undertaken both by game wardens and by the hunters themselves. Within the hunting community there is a strict internal code of conduct and hunters breaching this are not allowed to take part in the hunting club or are reported to the authorities. Most of the reported incidents received by the authorities are reported by fellow hunters.			
Contextual factors of importance for understanding legislation and enforcement The seal hunt in Finland is small scale and is undertaken as a recreational activity. It is a part of the coastal culture of Finland and there are long traditions for hunting as an integrated part of society, particularly in the small communities. The hunt of seals is, however, also important for protecting fisheries - where costs are inflicted due to damages by seals.			
Notes			
⁽ⁱ⁾ Yes - implies that legislation/enforcement requirements are in place and contain provision in accordance with animal welfare recommendations for seal hunt. No - implies that legislation/enforcement requirements are not in place or not in accordance with animal welfare recommendations for seal hunt. No X - if the information available is inconclusive.			
⁽ⁱⁱ⁾ This assessment by the study team is solely based on written information obtained - hence not on observations of the hunt in practice. Furthermore, the description is not claimed to be complete.			

3.3 Greenland

3.3.1 Overview of seal hunting

Both commercial and recreational hunt

The Greenlandic seal hunt is both commercial and recreational, and it contributes to the subsistence of hunters, while being an important part of the cultural and social identity. In Greenlandic waters five different species of seals are found: harp seal, ringed seal, hooded seal, harbour seal and bearded seal. All five species have traditionally been hunted (Greenland Home Rule, 2006) and are still hunted today, although some species more than others.

The Greenlandic commercial hunt is of a different character than other commercial seal hunts like the Canadian and the Norwegian. The hunt is a full-year activity and is characterised by individual hunters going out with small boats and sled dogs to hunt. It can be characterised as opportunistic and dispersed rather than organised and concentrated.

Mainly harp and ringed seals are hunted

The hunt is mainly concentrated on harp and ringed seal, which in 2004 constituted 95% of the reported catch. Table 3.3.1 shows the annual catches from 1999-2005.

Table 3.3.1 Greenlandic seal hunt catches 1999-2005

	1999	2000	2001	2002	2003	2004	2005
Harp seal	50,017	99,801	86,763	67,725	67,607	72,169	90,351
Ringed seal	83,343	80,293	78,432	82,491	80,645	77,374	89,773
Hooded seal	7,455	5,844	6,503	4,806	6,336	5,853	4,096

Source: Greenland Home Rule 2006, p. 7

The annual catch of harp seal varies substantially from year to year, e.g. from 1999 to 2000 the hunt nearly doubled. These differences are inter alia caused by changing ice and weather conditions. There is also a correlation between the extent of hunt in Canada and the Greenlandic hunt as it is the same seal population which is hunted in the two countries (Aqqualu Rosing Asvid, cited by the DFHA, 2008). The majority of harp seals are caught along the western coast of Greenland, whereas ringed seals are caught primarily in the northwest and the East Greenland (Greenland Home Rule 2006, p. 7).

3.3.2 Socio-economic context

Contribution to subsistence of population

Until a couple of decades ago, the principal occupation on the winter ice in Greenland was sealing (Greenland Home Rule 2006, p. 1). The hunt still provides an important contribution to the livelihood in Greenland. The majority of commercial - i.e. full-time - hunters seek their livelihood from both fishing, mainly cod, halibut and redfish, and hunting, for example seals, but also other mammals and birds. What they catch depend on the time of the year and which region they live in.

Fishermen and hunters

The number of commercial fishermen and hunters, referred to as commercial hunters, is decreasing. From 1993 to 2000 the number of issued licences to un-

dertake commercial hunting was reduced from 6,560 to 3,083 licences (Rasmussen, 2005, p. 8). The decrease can be explained by the introduction of stricter requirements to obtain a full-time hunters licence. According to the Directorate for Fisheries, Hunting and Agriculture, from 1997 to 2006 the number of actual full time hunters has remained rather stable.

The number of recreational licences is increasing. It increased between 1993 and 2000 from 6,554 to 8,398 licences (Rasmussen, 2005, p. 8) of a population of around 56,000 inhabitants (Statistics Greenland, 2007). The number of hunting licences per household is the highest in the rural communities - in the Greenlandic *bygder*, where around 50% of the households hold two or more licences for commercial hunt (Rasmussen, 2005, p. 17).

Hunt of marine mammals, hereunder seal, is dominated by commercial hunters which bag 70% of the animals (Rasmussen, 2005, p. 9). 66% of commercial hunters in Greenland state that they have never had other occupation than fishing and hunt, and 24% state that they have another occupation in addition to hunt and fisheries (Rasmussen, 2005, p. 148)¹².

When describing the socio-economic context of seal hunt in Greenland, the dual nature of the Greenlandic economy must be kept in mind. A distinction must be drawn between the formal and the informal economy. The former refers to economic transactions where accounts can be obtained, such as information from the tax authorities. The informal economy on the other hand covers the use of the catch for own consumption, barter or sales that are not reported to tax authorities (Rasmussen, 2005, p. 38).

Formal economy

From 2000 to 2005, full time hunters have sold about 90,000 sealskins to the tanning industry with an average price around €40 per sealskin. This equals about €1300 per full time hunter. The income levels per household vary greatly according to region. North and East Greenland have substantially lower average incomes than the rest of Greenland, with an average income at €8,000-9,300 compared to €16,000-21,300 in the regions of Disco bay, Mid and South Greenland. This difference may be explained by the difficulty of finding employment outside fisheries and hunt, which reduces the possibilities for spouses to find employment. It also indicates that the North and East Greenland is more dependent on income from fisheries and hunt than other Greenlandic regions (Rasmussen, 2005, p. 45). On average, less than 50% of the household income of commercial hunters stems from hunt (Rasmussen, 2005, p. 37). For recreational hunters, income from the hunt counts for 5-10% of the total income for the person or couple.

Since the 1980's the Greenland Home Rule Government has chosen to subsidize the trade with seal skins. The purpose was to ensure decent prices, which decreased considerably as a result of the international campaigns against seal hunting in the 1980s. The campaigns were targeted the Canadian seal hunt, but

¹² Data based on a questionnaire sent out to all hunters with a commercial hunting licence and is part of the study by Rasmussen (2005) of the occupation of hunters in Greenland.

they still had negative economic consequences for the hunters who at that time were severely depending on the trade with seal skins (DFHA, 2008b).

Informal economy

In a study from 2005, it is estimated that the informal economy of Greenland amounts to €17.3 million, whereof €4.7 million stems from hunt of mammals and birds (Rasmussen, 2005, p. 59) and a seal is in Greenland categorised as a marine mammal (DFHA, 2007c, p. 28). If the informal economy resulting from recreational hunt is included the number is even higher and is estimated to amount to €24.3 million. There is no information on the value of products derived from seals in the informal economy.

Around 33% of resources are utilised for own consumption. There is, however, also a relatively large turnover from sales at *Brættet* - the market place of the Greenlandic hunters and fishermen - representing around 27% of the informal economy. The meat traded at Brættet is used primarily for human consumption. These figures should be seen in relation to the catch patterns. Ringed seal is traditionally considered the most important species that provide food and supply income. However, due to the demand for fur, the catch of harp seal is increasingly attractive due to its higher price (Greenland Home Rule, 2006, p. 7). The northern and eastern part of Greenland, which has the lowest income per household, is the most dependent on ringed seal for subsistence. Table 3.3.2 shows the development in the total seal catch, the number of skins traded and imported from 2000 until 2005.

Table 3.3.2 Total catch and seal skin trade

	2000	2001	2002	2003	2004	2005
Total seal catch	185,947	171,174	155,035	153,606	155,396	184,220
Number of seal skins traded	102,646	80,481	61,848	75,309	83,754	118,686
Number of seal skins imported	-	-	1,500	51,935	44,100	45,000

Source: Greenland Home Rule, 2006, p. 11

The difference in the catch and the numbers of seals traded also indicates that a large part of the seals are used either for subsistence or circulate in the informal economy. It may also be caused by the fact that 34% of the hunters report struck and lost as part of the catch (DFHA, 2006a, p. 11).

The decrease in catch levels from 2000 to 2004 was probably caused by adverse weather and changes in ice conditions. Conditions for hunting in 2005 were considerably better than the preceding years (Greenland Home Rule, 2006, p.11). Hunters report that the ongoing climate changes make it more dangerous to go hunting on the ice. The number of storms and the intensity of the storms have increased and it is more difficult to predict where and when it is safe to hunt. The ice freezes later in the winter and breaks up earlier in the spring, reducing the number of hunting days on the ice (DFHA, 2008).

3.3.3 Legislation

International commitments

Greenland is a member of the North Atlantic Marine Mammal Commission and is committed to the rules hereunder. NAMMCO is an international body for

cooperation on the conservation and management of marine mammals and establishing agreement was signed in Nuuk in 1992 (NAMMCO, 2008i). Although part of the Kingdom of Denmark, Greenland is not an EU member.

National legislation

Hunt is the responsibility of the Ministry of Fisheries and Hunting and implemented by the Department of Fisheries, Hunting and Agriculture (DFHA). The legal acts and regulations covering seal hunt are:

- Law on hunting¹³ (12/1999)
- Law on animal protection¹⁴ (25/2003)
- Law on nature protection¹⁵ (29/2003)
- Regulation on permit for commercial hunt (20/2003)
- Regulation on permit for recreational hunt (21/2003)

The hunt is regulated by law on hunting (12/1999) which is applicable for all types of hunt at all land and fish territories of Greenland (§1). The objective of the law is to secure a rational and biologically reasonable use of the hunting resources (§2).

The law on animal protection (25/2003) shall secure that animals are treated properly and shall secure that animals are protected from pain, suffering, anxiety, permanent injury or nuisance (§1). The law is applicable to all animals (§2). The law is thus also applicable for seals and particularly chapter 5 on killing, surgical procedures and the likes.

The law on nature protection (29/2003) shall contribute to protect the nature of Greenland. [...] (29/2003 §1) and the law is applicable for the wild fauna consisting of mammals, birds and other animals living in the nature of Greenland (29/2003 §3). With regards to mammals and birds, the law serves as legal basis for determining specific rules i.a. on hunting seasons, quotas and management plans (29/2003 Chapter 2).

There is thus no legislation specifically targeting seals. However, the Home Rule is in the process of elaborating a governmental order on protection and hunt of seals. According to the Department of Fisheries, Hunting and Agriculture (DFHA, 2007f), this is expected to be based on the law on hunting (12/1999) as well as incorporating elements from law on nature protection (25/2003) and law on animal protection (29/2003). It is expected that there will be minimum requirements regarding ammunition and use of firearms. It is, however, also expected that hunting with net will be allowed, though possibly only in restricted geographic areas (DFHA, 2007f). The proposal is though not yet submitted to hearing¹⁶.

¹³ Translation by consultant: Landstingslov nr. 12 af 29. oktober 1999 om fangst og jagt.

¹⁴ Translation by consultant: Landstingslov nr. 25 af 18. december 2003 om dyreværn.

¹⁵ Translation by consultant: Landstingslov nr. 29 af 18. december 2003 om naturbeskyttelse.

¹⁶ As of November 2007.

The two regulations on commercial (20/2003) and recreational (21/2003) hunt contain provisions on the applicability of the permit, requirements to acquire a permit, reporting requirements and sanctions. Furthermore, there are a number of by-laws adopted in the municipalities. The by-laws provide additional requirements for hunt both in regards to the species caught, the methods used, hereunder specifications when nets are used to catch seal, and transportation during the hunt. These by-laws will only be touched upon when relevant and will not be analysed in depth separately.

Conditions for hunting

The home rule may determine rules and regulations on hunt, inter alia concerning (12/1999 §8):

- Periods of preservation of game
- Prohibitions or limitations on hunt
- Quotas
- Hunting equipment and methods, and
- Codes of conduct

Each year the Department of Fisheries, Hunting and Agriculture publishes *Piniarneq* - a booklet containing the hunters licence as well as information on the hunt and registration of the hunt. This contains information on the hunting season, hereunder for seals. Hunting seal is allowed year around and there is no specification as of the species hunted, with one exemption. Common or harbour seal is protected according to regulation of 13th of august, 1959, and hunting for adult and breeding Common seal is protected from May to September (DFHA, 2006 and 2007c).

The law on hunting (12/1999) stipulates the conditions for access to hunt. Only people with a permission are allowed to hunt (§4). Permission can be given either for commercial or recreational hunt. In order to get a licence for commercial hunt the following requirements must be fulfilled:

- Strong connection to the Greenlandic society
- Enrolled in the Greenlandic national register and has had registered address in Greenland the last two years
- Liable to pay tax in Greenland, and has been so for the two past years
- Has a gross income from hunt or fisheries covering at least 50% of the total gross income¹⁷

A definition of "strong connection to the Greenlandic society" is given in §3 and is to be understood as demonstrating an intent to have domicile in Greenland by owning or renting housing. Exemptions may though be given from requirements 2-4 when this is considered reasonable (§4.4). The requirements to acquire a licence for recreational hunting are less restrictive. The requirement is that one is registered in the national registry of Greenland. Also this rule may be exempted according to §4.4. However, recreational hunt on species managed by quotas, the requirement stands that one must be registered

¹⁷ The paragraph stipulates some incomes that should not be included. This we will not come into further. For more information see 12/1999 §4.2.4.

at the national registry of Greenland and have had domicile in Greenland for the past two years. All, not complying with requirements for commercial or recreational hunt, needs specific permission for all forms of hunt (§7).

Training of the hunters

The Home Rule may, according to the law on hunting (12/1999 §10), determine rules for a hunting test that must be passed to get a hunting licence. However, no such requirement has been made at this point. The reasoning behind this is that most hunters have learned to hunt from their fathers and grandfathers from their childhood. It can be characterised as a kind of informal apprenticeship and this is by the responsible department regarded sufficient for the time being (DFHA, 2007b). However, the establishment of a hunter/fisherman school was approved by the Greenlandic Parliament autumn 2007. The school will be situated in Uummannaq and will be a requirement in order to become a full-time fisherman and hunter (DFHA, 2008).

Killing methods

The hunting law (12/1999) specifies that neither automatic nor semi-automatic firearms are allowed during hunt (§9). Further regulation on the killing of animals is provided by Chapter 5 of the law on animal protection (25/2003) which regulates i.a. killing, surgical procedures and the likes. §13 states that killing by hanging or suffocation is forbidden. Moreover, killing animals by drowning is forbidden, except marine mammals - i.e. drowning seals is allowed as a killing method.

3.3.4 Enforcement

Organisation

Wildlife officers are employed by the Fisheries and Licence control, under the Department for Fisheries Hunting and Agriculture (DFHA) (DFHA, 2007e). The characteristics of the hunt are that it is dispersed and opportunistic, and pose a challenge to control. The geographic distances are considerable and weather conditions make control of all hunts expensive. 9 out of 18 municipalities have a wildlife officer. Several of the counties have also employed a wildlife assistant (DFHA, 2007e). According to the hunting law, the police and the fisheries inspection may undertake controls and inspections on hunting vessels or transport. They have the authority to board the ships and inspect the hunting equipment, without court order (12/1999 §14). Also, wildlife officers, and other hereto designated persons, may control the hunt.

The Home Rule is responsible for the enforcement of the law on animal protection. Inspection is regulated in Chapter 8 (25/2003), and §22 states that it is the responsibility of the home rule government to ensure that the provisions of this law are complied with. The provisions also state that a veterinarian with knowledge of irresponsible treatment of animals shall report this to the community bailiff as soon as possible. However, this is not necessary if the breach is not severe and is remedied immediately. If an animal is treated unwarrantable, the police may order the further treatment of the given animal. The chapter makes references to keeping of animals (dyrehold) and use expressions as "the owner of the animal". There is, however, no specific reference made to treatment of wild animals.

Control is also a part of the NAMMCO cooperation. The *Provisions of the joint NAMMCO control scheme for hunting of marine mammals* (NAMMCO, 1998), §B establishes an International Observation Scheme allowing NAMMCO access to monitor whether decisions as well as national legislation is respected. NAMMCO can appoint observers whom will oversee and inspect the hunting activities (B.1 and B.2.1). According to NAMMCO, the hunt of seal in Greenland is observed every year together with the observation of whaling. The observers are either on whaling vessels or stationed on land (NAMMCO, 2008a). The NAMMCO observers do not have authority of jurisdiction and may thus not intervene in the hunting or related activities (B.2.1). They are, however, in their right to check hunting licences, logbooks, hunting equipment and other things that may be relevant for the inspection (B.2.2). Regarding the independency of the inspectors, §B.2.7 state that the “observers are responsible to NAMMCO and can neither seek nor receive instructions from any other person or authority”. The NAMMCO observers are nominated by the contracting Member States and the secretariat selects a pool of candidates to be finally approved by the members of NAMMCO (NAMMCO, 2008b).

Reporting requirements

Both the hunters and the controlling instance have a requirement to report on the hunt. Hunters have a duty to report on their catch, and at the end of each hunting year the total catch is calculated. This applies for both commercial and recreational hunters. At the end of the period for hunt registration, a form is to be filled in and submitted to the Department of Fisheries, Hunt and Agriculture. The renewal of the hunting permit is dependent on the submission of this form (20/2003 §10 and 21/2003 §8). The form is sent to the hunter together with the hunting permit for the given year enclosed in the folder on hunt information and registration *Piniarneq*, also referred to above under conditions for hunting.

Game keepers and fisheries officers are required to fill in a report after every control visit and the information shall be registered in a database hosted by Greenlandic Fisheries and Licence control (GLFK). The reporting shall contain information such as observations, reports, recommendations, confiscations and censuses (Department of Fisheries and Hunting, 2004). Furthermore, the NAMMCO observers are required to report their findings to NAMMCO (Provisions of the joint NAMMCO control scheme for hunting of marine mammals, B.2.1) and “shall report any violations of the regulations in a given area”. This report must be submitted “as soon as possible” both to the NAMMCO secretariat, the national authorities of the country of inspection and the owner of the vessel (B.2.3). According to NAMMCO, the observers have either been land based or out on sea on day trips (NAMMCO, 2008b).

Sanctions

Infringements of the applicable laws may lead to fines according to both law on hunting (12/1999 §17), law on animal protection (25/2003 §27), law on nature protection (29/2003 §19). Also breaches of regulations on hunting permits (20/2003 and 21/2003) may lead to fines. Breaches of the law on hunting may also lead to confiscations in line with the criminal code. Under certain conditions vessels may be retained. A few municipalities have stricter sanctions according to adopted by-laws.

Table 3.3.3 Assessment Summary Sheet, Greenland

Greenland			
Legislation	Are national legislation requirements in place? ⁽ⁱ⁾		
	Yes	No	Comment
Animal welfare principles	X		Legislation emphasises that killing must be as fast and painless as possible (29/2003 §13).
Hunting tools		X	Netting, which is not considered an appropriate method (EFSA Journal p 92), is allowed. However, the legislation also provides for shooting of seals - a method which is in accordance with animal welfare recommendations.
Assuring death by monitoring ⁽ⁱⁱ⁾		X	Not required by the applicable legislation.
Bleeding-out of animals shot or struck ⁽ⁱⁱ⁾		X	Not required by the applicable legislation.
Environmental factors		X	Not required by the applicable legislation.
Training of the hunters		X	Not required by the applicable legislation.
Enforcement	Are national enforcement requirements in place? ⁽ⁱ⁾		
	Yes	No	Comment
Independent monitoring			<u>Inconclusive</u> - although wildlife officers monitor the hunt. However, they are not necessarily independent of commercial and NGO interests. They are employed by the Department for Fisheries, Hunting and Agriculture, who is the responsible authority for the hunt. Also police and GLK observe the hunt.
Ability of third party to monitor	X		There is no restriction on third party monitoring (but also no explicit provision on third party monitoring in existing legislation).
Reporting requirements			<u>Inconclusive</u> - although the legislation prescribes requirements for reporting both from the hunters and inspectors. The hunters report what species is hunted when and where. Inspectors shall report observations, recommendations, confiscations and censuses. Reporting on environmental factors or struck and lost is, however, not required.
Sanctions and compliance		X	The Department is in the process of developing a system in order to specify how many infringements regard seal hunt, but the system does as of March 2008 not exist.
Are animal welfare recommendations carried out in practice? ⁽ⁱⁱ⁾			
Legislation in practice (implementation and application) Netting is legal and the only hunting method considered being possible in some regions during the winter months and firm ice periods. 16% of the seals killed from 1995-2005 were caught by net. Most seals are shot and although not prescribed by legislation, in practise the seals are often bled-out in order to secure the quality of the meat, blubber and skins and also for safety reasons on board the dinghies used during the hunt. The character of the hunt makes it less likely that hunting is undertaken under adverse environmental conditions - such as bad weather and ice conditions - due to the possible danger the weather poses to the hunter. Regarding training of the hunters, this is traditionally carried out by experienced hunters passing on their knowledge to new hunters.			
Enforcement in practice Enforcement of the rules on seal hunt in Greenland is a logistic challenge due to the dispersed and opportunistic character of the hunt. According to information obtained from responsible authorities, enforcement is carried out by wildlife officers making control visits i.a. in the form of daytrips out into the areas where hunting is undertaken. The officers inspect the hunt during the trip and report on this. GLK (Island Commander Greenland) and the police also inspect the hunt. GLK has a specific role in controlling foreign vessels in Greenlandic waters. In practice, NAMMCO is part of the enforcement by observing the hunt. According to the NAMMCO secretariat hunt is observed on average once every year between June and September (either land based or from a whaling vessel).			
Contextual factors of importance for understanding legislation and enforcement			
Seal hunt is an integrated part of the society and is both for commercial gain and subsistence hereunder both food for human consumption and feed for sled dogs. The skins, meat and blubber are used. The hunt is carried out both as full-time and as recreational hunt. Both hunts are bound by the same legislation and requirements. The character of the commercial hunt is different from the commercial hunts in other range states - being more dispersed and opportunistic. Economically, income from seal products plays an important role for many communities.			
Notes			
⁽ⁱ⁾ Yes - implies that legislation/enforcement requirements are in place and contain provision in accordance with animal welfare recommendations for seal hunt. No - implies that legislation/enforcement requirements are not in place or not in accordance with animal welfare recommendations for seal hunt. No X - if the information available is inconclusive.			
⁽ⁱⁱ⁾ This assessment by the study team is solely based on written information obtained - hence not on observations of the hunt in practice. Furthermore, the description is not claimed to be complete.			

Hunting with net	<p>3.3.5 Information on hunting in practice</p> <p>According to the EFSA Journal (2007, p. 98), trapping seals under water causing death by suffocation is to be avoided and is characterised as "inherently inhumane". 16% of seals in Greenland are caught with net, according to DFHA, 2008 Annex B).</p>
	<p>3.3.6 Summary Assessment</p> <p>The above table summarises the description of the Greenlandic legislation and enforcement system and provides a brief description of the practices and context of the hunt.</p>
	<p>3.4 Namibia</p>
Large scale commercial hunt	<p>3.4.1 Overview of seal hunting</p> <p>In Namibia, there are both commercial seal hunt, or harvest as it is referred to in Namibian legislation, and trophy hunt (EFSA 2007, p. 33). This study focuses on the commercial hunt, and only touches upon the recreational hunt when specified explicitly.</p> <p>The cape fur seal population (<i>arctocephalus pusillus pusillus</i>) is the only hunted marine mammal in Namibia. It is found along the coast from the south of South Africa to the southern Angola. They breed on the rocky beaches of small islands, and on the rocky and sandy beaches on the mainland (EFSA, 2007, p. 25). Until 1975, the harvest occurred only on the off-shore islands (Seal Alert, 2008). The South African hunt ceased in 1990, and cape fur seals are currently only hunted in the Namibian waters, mainly the mainland colonies Cape Cross, Wolf Bay and Atlas Bay (EFSA, 2007, p. 32).</p> <p>The hunt goes back to the nineteenth century, when the blubber and fur were used by European and American sealers (MFMR, 2004, p. 9). The seal population was reduced drastically by 1840. Guano and sealing concessions were given to private companies and exploitation continued until late 19th century, where after the sealing and guano operations as well as the management of the islands were taken over by the government. Sealing on the mainland at Cape Cross started in 1894/95 (Cabinet Submission 2007 cited in MFMR, 2008). Management of the Namibian cape seal population started by the end of the 19th century. Concessions for hunting were granted and Total Allowable Catches (TAC) was introduced in mid-1970 (MFMR, 2004, p. 9).</p>
Resources utilised on a sustainable basis	<p>According to the Ministries of Fisheries and Marine Resources (MFMR), the Namibian government's main objective for the fisheries sector is to utilize the country's marine resources on a sustainable basis and to develop industries based on them in a way that ensures their lasting contribution to the country's economy and overall development objectives. Seals are considered as a natural resource from which Namibians can derive economic benefits – consumptive and non-consumptive (MFMR, 2008).</p>

In a 1993 census the population of cape fur seal was estimated at 1.7 million animals. In 2004 the population was estimated to be at a similar size, although there have been considerable fluctuations in the pup counts, 50% lower than in 1993 (EFSA, 2007, p. 25). The two latest censuses were in 2005 and 2006 when the pup count was 205,500 and 120,000 pups, respectively (Seal Alert, 2008). According to the Ministry of Fisheries and Marine Resources the total pup number of the 2006 cohort for harvested colonies indicated a 74% overall recovery compared to the 1993 level, the year regarded as the maximum pup production for seals of 219,000 pups ever reached in Namibia (MFMR, 2008).

Table 3.4.1 shows data on the TAC and the reported catch. Hunt is only allowed for pups and adult males. Hunt for adult females are not allowed (MFMR, 2004, p. 9). Females give birth to a single pup between November and December. Lactation starts immediately after birth of the pup and continues until weaning in September/October the next year (MFMR, 2008).

Table 3.4.1 TAC and reported catch for cape fur seal in Namibia

Year	TAC		Reported Catch	
	Pups	Adult males	Pups	Adult males
1989	16,000*	n.a.	6,285*	3,213*
2000	60,000	7,000	38,054	3,605
2001	60,000	5,000	39,926	4,202
2002	50,000	5,000	35,082	4,496
2003	60,000	5,000	29,577	4,005
2004	60,000	5,000	54,496	4,911
2005	65,000	5,000	59,205*	5,963
2006	85,000	6,000	77,800	5,300
2007	80,000	6,000	n.a.	n.a.

Source: EFSA, 2007, p. 115.

*Seal Alert, 2007a.

3.4.2 Socio-economic context

Private
concessionaires

In Namibia two private concessionaires, Albert Brink of Seal-Lion Products, and William Burger of Namibian Vension & Marine Exports, hold the rights to hunt for seals (Seal Alert, 2008 and WSPA, 2008). The main seal products sold on the international market are seal skins, seal oil, seal carcass meal and seal genitals. According to MFMR estimates, the seal industry produces seal products worth around US\$617,354 (MFMR, 2008). The level of investment in the seal industry totals around US\$692,000. These investments include a seal processing factory and workshops where seal packaging is done. If profits increase and the market for seal products expands, then the level of investment will rise as right holders will need to increase production and supply (MFMR, 2008).

Seasonal workers
and boat trips

The sealing industry employs a total of 140 people at their facility both in Luderitz and Cape Cross. On average in Namibia, a single employed person caters for a household of six dependents. The 140 employees are hired on a seasonal basis in July to November. Furthermore, as mentioned above, in addition to the large scale commercial hunt; Namibian legislation opens for trophy hunting.

Boat trips are offered to hunt for adult male cape fur seals. According to WSPA, the hunt is offered for €860 plus travel expenses (WSPA, 2008).

Seal Alert raises the issue of the economic sustainability of Namibian seal hunt and argues that other use of seals will "generate more income and [...] more jobs" providing the example of increasing possibilities for eco-tourism. Moreover Seal Alert refer to the harm to the economy that a potential boycott against Namibian products would inflict (Seal Alert, 2007b).

3.4.3 Legislation

International commitments

Namibia is signatory to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (MFMR, 2008).

National legislation

The Namibian seal hunt is administered by the Ministry of Fisheries and Marine Resources. According to Chapter 11 of the Namibian Constitution which deals with Principles of State Policy, provisions relating to natural resources are contained in Article 95. This is entitled 'Promotion of the Welfare of the People'. The article provides that: The State shall actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at [...] maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future..."

Based on the Constitution (Article 56 in Chapter 7), seal hunt is managed by the following legal acts:

- Marine Resources Act (No. 27/2000)
- Regulation relating to the exploitation of marine resources (No. 241/2001)

The Marine Resources Act (No. 27/2000) covers the management, protection and utilisation of marine resources in Namibia and in Namibian waters (§3.2) and provides the general setup for administration and control of fisheries and marine resources. The regulation relating to the exploitation of marine resources prohibits all other seal hunt but cape fur seal hunt and regulates the sealing.

Conditions to hunt

The hunt is only allowed for cape fur seal (241/2001 §18.1.a). All other seal species in Namibian waters are protected, exempt in terms of a right, an exploratory right or an exemption granted under 62.1.a. In the Namibian legislation seal hunt is referred to as harvest which is defined as meaning (27/2000 §1):

- a) searching for, catching, taking or attempting to catch or take any marine resource;
- b) placing, or having, fishing gear in the sea or using it on the sea shore or on an island;

- c) engaging in any other activity that can reasonably be expected to result in the locating, catching or taking of marine resources;
- d) undertaking any operations at sea or on an island in preparation for any activity mentioned in sub-paragraph (a), (b), or (c).

The right to hunt, or harvest, marine resources is regulated by the Marine Act (27/2000 §33) stating that any one who wishes to participate in commercial harvest of any marine resource, thus including seal, shall apply the Minister for a permit (27/2000 §§33.1 and 33.2). A hunting right is only valid within the period of time granted by the Minister (27/2000 §33.5). When considering an application the Minister must take regard to a number of factors. These factors are listed in Text-box 3.3.

Text-box 3.3 Factors to be considered granting licences to harvest marine resources

- whether or not the applicant is a Namibian citizen;
- where the applicant is a company, the extent to which the beneficial control of the company vests in Namibian citizens;
- the beneficial ownership of any vessel which will be used by the applicant;
- the ability of the applicant to exercise the right in a satisfactory manner;
- the advancement of persons in Namibia who have been socially, economically or educationally disadvantaged by discriminatory laws or practices which were enacted or practised before the independence of Namibia;
- regional development within Namibia;
- co-operation with other countries, especially those in the Southern African Development Community;
- the conservation and economic development of marine resources;
- whether the applicant has successfully performed under an exploratory right in respect of the resource applied for;
- socio-economic concerns;
- the contribution of marine resources to food security; and
- any other matter that may be prescribed.

Source: 27/2000 §33.4.

Every right-holder is generally supplied with conditions pertaining to the harvesting of seals. These conditions are directed both at the training, killing methods and enforcement of the hunt. According to the MFMR (2008) the conditions are as follows:

- Application will have to be made annually for quotas.
- Harvesting may only take place under the direct supervision of trained fisheries inspectors and a senior official of your company.
- Personnel involved i.e. clubbers, herders and stickers, must receive training before and during the season to ensure that everyone knows exactly what their function is at all times.
- Only clubbers performing at an acceptable level must be allowed to club seal pups, after having gained experience as herders before allowed to club.

- Only manageable groups of seals should be herded to ensure efficient harvesting.
- A silenced 22 rifle, firing subsonic bullets, may be used for harvesting of bulls to minimize the disturbance caused by the loud club of a supersonic bullet.
- You are expected to utilize the full seal quota allocated to you for a specific season.
- Observers of the Wildlife Society of Namibia are allowed access to the harvests as observers to recommend possible improvements.
- You are furthermore reminded that the whole carcass of harvested seals must be utilized.

All activities in terms of this allocation and all rights in terms thereof shall be governed by the laws of the Republic of Namibia.

Training of hunters

One of the requirements mentioned in Text-box 3.3 above is the "ability of the applicant to exercise the right in a satisfactory manner". This appears as a requirement to the skills of the harvester i.e. the hunter to kill the seal. There is though no further description of what skills are required or if there are minimum requirements to be fulfilled in the regulation.

Animal welfare considerations

Neither the Marine Act nor the regulation relating to the exploitation of marine resources make any reference to animal welfare considerations, apart from the requirement that that pups are bled-out after being clubbed. No such requirement is made for adult animals. According to the EFSA opinion it is common that several animals are shot before being "approached at close quarters to monitor and bled". This implies that shot animals, that initially lost consciousness, wake up, and either escapes or are conscious when approached (EFSA, 2007, p. 47).

Killing methods

The regulation on the exploitation of marine resources contain a specific section on seals (241/2001 §20). The hunting process is described as shown in Text-box 3.4.

Text-box 3.4 241/2001 §20 regulating seal harvest

- (1) Seals must be harvested in the presence of at least one fisheries inspector.
- (2) A holder of a right relating to the harvest of seals must identify a group of pups to be harvested, which must be driven away from the sea and allowed to settle down before clubbing begins, care being taken to facilitate the escape of adult seals.
- (3) After the identified pups have settled down, they must be harvested as follows:
 - (a) a group of pups must be released from the group referred to in sub regulation (2) in the direction of the sea;
 - (b) a clubber must kill a pup by clubbing it on the top of the head with a sealing club, when a group released in terms of paragraph (a) moves past the clubbers;
 - (c) the inspector overseeing the harvest must be satisfied that a pup, which has been clubbed, is dead;
 - (d) a sticker must pierce the heart of the pup with a knife, after the pup has been clubbed.
- (4) Adult seals selected for harvesting must -
 - (a) be killed on land by shooting the seal with a rifle in the head so that the bullet immediately kills the seal;
 - (b) the inspector overseeing the harvest must be satisfied that a seal, which has been shot, is dead.

Source: 241/2001 §20.

This implies that the inspector must oversee that the animals that have been shot or clubbed are dead. There is no requirement to bleed-out an adult seal, which have been shot; but the pups, i.e. clubbed animals, must be bled-out by a knife piercing the pup's heart. The knife must have a "fixed straight and sharp blade of at least 30mm in width and 120mm in length" (241/2001 §1). According to the regulation there are designated clubbers and stickers. A clubber is a "member of a sealing team equipped with a club" whilst a sticker is a "member of a sealing team equipped with a knife" (241/2001 §1). For the killing of adult animals there are also requirements for the tools applied. A rifle is defined as "a rifle which is used with ammunition capable of killing an adult seal instantaneously by penetrating the brain case and destroying the brain without exiting on the opposite side of the brain case" (241/2001 §1). A sealing club is a "straight wooden or fibreglass club with a mass of at least 1 kg, but not exceeding 2 kg, and a length of at least 0.9 m but not exceeding 1.9 m and which in one end is thicker than the other" (241/2001 §1).

3.4.4 Enforcement

Organisation

The Marine Resource Act (27/2000) creates a general policy for the organisation of control over marine resources. It is the task of fisheries inspectors to control the seal harvest. He or she may enter any premises, other than a dwelling house in which marine resources are kept and stop any vehicle for the purpose of carrying out a check for marine resources (27/2000 §5.1.b and c). Furthermore, the inspector may examine "any object that he or she has reasonable grounds to suspect being used or intended for use in the harvesting, handling or processing of marine resources" (27/2000 §5.1.d). The inspectors may secure evidence, or preserve items, if found "reasonably necessary" to prevent repetition or continuation of an offence (27/2000 §5.2.b).

These provisions target the storing of the killed animals, and the qualities of the hunting tools rather than the killing process itself. However, according to the regulation relating to the exploitation of marine resources, at least one inspector must be present during the harvest (241/2001 §20.1) and the inspector must "be satisfied" that the animal is dead, both when a pup has been clubbed and an adult has been shot (241/2001 §§20.3.c and 20.4.b).

The Marine Resources Act creates also the cadre for fisheries observers, appointed by the Fisheries Observer Agency, that i.a. shall observe the "harvesting, handling and processing of marine resources and related operations [...]" (27/2000 §7.1).

Reporting requirement

No requirements regarding reporting have been identified by the study team during the analysis.

Sanctions

The regulations relating to the exploitation of marine resources (241/2001) provide for sanctions regarding: §18 allowing seal harvest of cape fur seal only, §20.2 on herding the seals, §20.3 on killing seal pups, and §20.4.a stating that adult seal shall be shot in the head. Breaches of these provisions may lead to sanctions up to N\$300 (241/2001 §31.1.h.i). There is not mentioned any sanctions if an inspector is not present during the harvest as specified in §20.1 or if an inspector does not confirm the death of a shot adult seal as specified in §20.4.b.

3.4.5 Information on hunting in practice

Criticism by several NGOs

The Namibian seal hunt is criticised by NGOs working for the protection of animals, e.g. the World Society for the Protection of Animals, Seal Alert and Humane Society International. Some of the concerns regard conservation. Conservation aspects are, however, outside the mandate of this study and will not be touched upon further.

Also the EFSA opinion points to weaknesses in the seal hunt management in Namibia. The Namibian government state in response to this that "it is unfortunate that on the EFSA team, information on Namibia was provided by a non-Namibian who used to work for the Ministry of Fisheries and Marine Resources, whose contract for the seals work with the Ministry was prematurely terminated. A lot of information on Namibia in that report does not depict the true picture of seal harvesting in Namibia" and continues that "[u]nwarranted criticism based on distorted information can cause resistance, but sound objective evaluation is a precursor to cooperation in good faith and warranted custodian to this heritage" (MFMR, 2008).

Training of hunters

The legislation states that the "ability of the applicant to exercise the right in a satisfactory manner". This typically implies that the hunters must receive training before the season starts and also during the hunting season. "Only clubbers performing at an adequate level are allowed to use clubs, clubbers must have previously gained experience as herders and in the case of shooting, marksmen

must undergo a weekly test to satisfy the inspectors of their accuracy" (Kirkman, 2006 cited in the EFSA Journal, 2007, p. 33).

Killing methods and animal welfare aspects

The killing method used for the Namibian hunt is debated and has been criticised in many studies (i.a. David (1989), Keyes (1980) Best (1990) cited in EFSA, 2007, p. 65). Adult males shall be shot and pups clubbed according to the legislation. According to the EFSA Journal (2007, p. 47) "the low inertia of the ammunition in use, there is a high risk of animals not being killed outright with a single shot, particularly in case of adult males with thick skulls".

Furthermore, several NGOs stress that the killing methods pose a threat to animal welfare. First, the fact that the pup is separated from the mother causes the animals substantial stress and anxiety, both for the cow and for the pup. Second, the herding itself is an additional stress factor on for the pup. And third the herding inflicts a time pressure on the clubbers, as they must kill as many herded pups as possible before they manage to escape. According to WSPA this process "is likely to - at least for a proportion of animals - cause unacceptable long delays before bleeding-out is commenced during which time the animal may have regained consciousness" (WSPA, 2007). These critical points are also mentioned in the EFSA Journal (2007, pp. 65-66). Footage from the hunt, indicate that the procedure outlined in the regulation relating to the exploitation of marine resources, is frequently not complied with (EFSA, 2007, p. 65).

Enforcement and inspection

Kirkman (2006 cited in EFSA, 2007, p. 68) report that a one or two government control officers are designated to each hunting operation. According to the EFSA Journal, officers in charge of inspection appear not to have the required knowledge for inspecting the hunt and securing that the required procedures are complied with (EFSA, 2007, p. 66). There are no independent observers present to observe the hunt (Kirkman, 2006, cited in EFSA, 2007, p. 68).

3.4.6 Summary assessment

The below table summarises the description of the Namibian legislation and enforcement system and provides a brief description of the practices and context of the hunt.

Table 3.4.2 Assessment Summary Sheet, Namibia

Namibia			
Legislation	Are national legislation requirements in place?⁽ⁱ⁾		
	Yes	No	Comment
Animal welfare principles		X	Not required by the applicable legislation.
Hunting tools	X		The weapons used to shoot adult seals are defined as "capable of killing and adult seal instantaneously by penetrating the brain case and destroying the brain without exiting [...]" (241/2001 §1. The requirements to the clubs and rifles are described in the definitions of 241/2001.
Assuring death by monitoring ⁽ⁱⁱ⁾	X		Required for both pups and adult males (241/2001 §20. 3c and §20.4b).
Bleeding-out of animals shot or struck ⁽ⁱⁱ⁾			<u>Inconclusive</u> - as bleeding out is required for pups only (241/2001 §20.3d). Bleeding out is not required for adult animals.
Environmental factors		X	Not included in the relevant legislation.
Training of the hunters			<u>Inconclusive</u> - because requirements are unclear regarding the training required by the licence conditions.
Enforcement	Are national enforcement requirements in place?⁽ⁱ⁾		
	Yes	No	Comment
Independent monitoring			<u>Inconclusive</u> - although monitoring is required both in the Marine Act and in the regulations relating to the exploitation of marine resources (27/2000 §7 and 241/2001 §20.1). However, the degree to which the inspectors are required to be independent is unclear.
Ability of third party to monitor			<u>Inconclusive</u> - because third party monitoring is not regulated in the legislative acts. However, according to the licence requirement "Observers of the Wildlife Society of Namibia are allowed access to the harvests as observers to recommend possible improvements" (MFMR, 2008).
Reporting requirements		X	There are no reporting requirements prescribed in the relevant legislation.
Sanctions and compliance			<u>Inconclusive</u> - because information is insufficient for concluding.
Are animal welfare recommendations carried out in practice?⁽ⁱⁱ⁾			
Legislation in practice (implementation and application) Reports indicate that the procedures prescribed in the legislation are not always adhered to. The herding process is believed to cause considerable distress for the animals (EFSA, 2007). According to EFSA (2007, p. 94) both non-targeted and targeted animals may sustain injuries before they are killed or escape during the pup hunt.			
Enforcement in practice The hunt is to be observed by governmental inspectors. However, the EFSA opinion reports that there are very few inspectors present during the hunt, and that the inspectors lack training and knowledge of the legislation and hunting practises. Ability of third party to monitor is limited.			
Contextual factors of importance for understanding legislation and enforcement			
The Namibian hunt is currently the third largest seal hunt, following Canada and Greenland. The characteristics of the Namibian hunt are somewhat different from the other seal hunts. It is the only commercial hunt in the southern hemisphere and is conducted on the beach of the Namibian coast. The hunt is seasonal and hunters, or harvesters, are employed on a seasonal basis by two private concessionaires. Seal products are mainly driven by commercial interests and products are exported to international markets.			
Notes			
⁽ⁱ⁾ Yes - implies that legislation/enforcement requirements are in place and contain provision in accordance with animal welfare recommendations for seal hunt. No - implies that legislation/enforcement requirements are not in place or not in accordance with animal welfare recommendations for seal hunt. No X - if the information available is inconclusive.			
⁽ⁱⁱ⁾ This assessment by the study team is solely based on written information obtained - hence not on observations of the hunt in practice. Furthermore, the description is not claimed to be complete.			

3.5 Norway

3.5.1 Overview of seal hunting

Three types of hunts	Norway has three kinds of seal hunting: the commercial hunt in the West and East ice, the hunt of seal along the coast, and the hunt in Spitsbergen and Jan Mayen.
Commercial hunt	The Norwegian commercial seal hunt is restricted to harp and hooded seal and is traditionally undertaken both at the East and West Ice (MFCA, 2004a, p. 35) ¹⁸ . Until the beginning of the 1960s as many as 50 Norwegian vessels participated in the annual seal hunt in the West Ice. After 1982, the seal hunt has been radically reduced (MFCA, 2004a, p. 36). In the 2007 seal hunt, four vessels were given the right to participate in the West Ice and one vessel in the Eastern Ice (Directorate of Fisheries 2007c and MFCA, 2008). This hunt receives the most attention in this study.
Coastal hunt	From the Østfold in the Oslo Fjord along the coast to the most northern county of Finnmark, grey and harbour seals are hunted as well as ringed seal and harp seal. The hunt is much smaller than the commercial hunt and in 2006 the quotas for harbour seal were 750 and for grey seal 1,186 animals. The catch did not meet the quota limits. A separate section below elaborates further on this hunt.
Hunt in Spitsbergen and Jan Mayen	The seal hunt in Spitsbergen and Jan Mayen is carried out by a limited number of hunters and is regulated separately under the Ministry of Environment, which is responsible for management of game and fresh water fishing in Spitsbergen and Jan Mayen (Directorate of Fisheries, 2007f). Hunt is allowed for bearded and ringed seal (MFCA, 2004a, p. 43) during a limited period of time. Outside this season all seal hunt is prohibited (Directorate of Fisheries, 2007f). This hunt will not be touched upon further.
Seal hunt by Lapp communities	In the northern Norway the aboriginal Lapp communities has long standing traditions within seal hunt (MFCAa, 2004, p. 35). There are no particular legislation targeting and it follows Norwegian legislation (Directorate of Fisheries, 2007f).
Size of hunt	The Norwegian hunt traditionally focussed on whitecoats, although this is prohibited today. The price of skins was high and the costs of hunting relatively low. However, the pattern of the hunt changed in 1989 due to a ban on hunt of pups following massive boycotts and demonstrations against the Norwegian hunt (MFCA, 2004a, p. 40). In 1996, the hunt of weaned pups was re-opened (MFCA, 2004a, p. 36). Hunt for seal pups that are not unweaned is prohibited as pups are considered unweaned by the date the hunt starts according to §§9 and 10 J-53-2007. During the 2007 hunt the allowed quotas where 31,200 adult harp seals in the West Ice (MFCA, 2008). Two non-suckling pups equal one adult animal. In the East Ice, the allowed quota was 15,000 adult harp seals,

¹⁸ There is also a limited hunt in Spitsbergen and Jan Mayen and coastal hunt of seals. These two hunts are rather limited and will not be analysed in depth. When referring to Norwegian seal hunt, this covers the hunt on the Western and Eastern Ice.

where 2.5 non-suckling pups equals one adult (J-53-2007 §7). Table 3.5.1 provides an overview of the size of the hunt from 1998 to 2004 and the development in the number of vessels participating in the hunt.

Table 3.5.1 Norwegian commercial seal hunt, 1998-2004¹⁹

	1998	1999	2000	2001	2002	2003	2004
No. of Vessels	5	5	3	3	4	3	4
Tot. no. of animals killed	9,067	6,399	20,549	12,012	10,691	12,870	14,746
Harp seal - Total	2,716	1,953	18,678	8,192	3,575	7,575	9,895
Of this:							
Pups ¹	1,725	781	8,581	2,597	1,524	2,504	8,288
Older	991	1,172	10,097	5,595	2,051	5,071	1,607
Hooded seal - Total	6,351	4,446	1,871	3,820	7,116	5,295	4,851
Of this:							
Pups ¹	5,597	3,525	1,346	3,129	6,452	5,206	4,202
Older	754	921	525	691	664	89	649
Tot. no. of animals according to region							
West Ice	8,235	5,249	14,192	6,812	8,343	7,572	-
East Ice	832	1,150	6,357	5,200	2,348	5,298	14,746

¹Pups are seals younger than one year of age.

Source: SSB table 31 Selfangsten 1998-2004 supplemented with correcting information from MFCA, 2008.

3.5.2 Socio-economic context

Commercial seal hunt

The Norwegian seal hunt is subsidised by the state. In 2007, state subsidies amounted to around €1.687 million²⁰. From 1998 to 2003, subsidies constituted on average around 76% of the total income from sealing (MFCA, 2004a, p. 41). In the same period the average income from seal skin, blubber and meat was around €343,000²¹. There is in some years also an extra income from other uses of the seal.

As indicated in Table 3.5.1 above, three to five vessels participated in the hunt in the years from 1998 to 2004 (MFCA, 2004a, p. 40). In 2007 the number of vessels increased to seven: four in the West Ice and three in the East Ice. Each vessel has a crew of 13-15 men (EFSA, 2007, p. 29). In addition there is a seal hunt inspector on board. There is also employment created on the mainland that processes the seal products.

Coastal seal hunt

The objective of coastal seal management is to secure a sustainable seal populations - and within this scope to use the seal as a resource. The population management is based on ecological and societal considerations (1993/05/06/414 §1). Each year the Directorate of Fisheries sets a quota for the allowed catch based on recommendations from Institute of Marine Research (MIR) – Havforskningsinstituttet and the Sea Mammal Board (Sjøpattedyrrådet)

¹⁹ Translated by consultant.

²⁰ NOK 13.5 million.

²¹ NOK 2.743 million. Consultant's calculations based St.ml. 27 2003-2004 Ministry of Fisheries and Coastal Affairs, 2004, p. 41.

(MFCA, 2008). Table 3.5.2 shows the recommended quota, the set quota and the catch is shown for harbour and grey seal. There are no quotas for ringed and harp seal (J-2001-2006 §§3-4).

Table 3.5.2 *Quotas and catches for harbour and grey seal along Norwegian coast*

	Harbour Seal			Grey Seal		
	Recom- mended quota	Set quota	Catch	Recom- mended quota	Set quota	Catch
2000	380	438	359	625	625	176
2001	473	508	466	285	625	105
2002	504	508	412	285	355	110
2003	511	949	457	355	1186	353
2004	511	949	549	368	1186	302
2005	550	989	614	400	1216	379
2006	305	750	660	400	1536*	329

Source: MIR, 2007.

*According to MFCA, 2008, the grey seal quota for 2006 was 1,186 animals.

In order to increase the annual catch and to protect the fisheries sector, the Norwegian government launched in May 2004 a proposal to allow foreigners to participate in this hunt. This would also contribute to the tourism sectors in coastal communities (MFCA, 2004b). The proposal was approved 14.01.2005 and the hunt was opened to tourists having the required competence.

3.5.3 Legislation

International commitments

In Norway the management of wild animals is subject to international legislation such as the Bern Convention (The Convention on the Conservation of Wildlife and Natural Habitats), the Bonn Convention (Convention on Migratory Species) and the Convention on Biological Diversity. Norway is not a part of the EU, and the Habitats Directive is not a part of the agreement on the European Economic Area (EEA). Norway has not implemented the Directive.

National legislation on commercial hunting

Norway is one of the range states with the most extensive legislation on seal hunt. It ranges from general legislation on participation in fisheries and hunt to specifications on quotas and hunting methods. Sealing is administered under the Ministry of Fisheries and Coastal Affairs, and the Directorate of Fisheries is responsible for its implementation and enforcement. The seal hunt is regulated by the following laws and regulations:

- Act no. 15 of 26 March 1999 relating to the right to participate in fishing and hunting (1999-03-26-15)
- Act no 40 of 3 June 1983 relating to sea-water fisheries etc (1983-06-03-40)
- Regulation on the execution of seal hunt on the West Ice and East Ice²² (2003-02-11-151)

²² Translation by consultant: Forskrift om utøvelse av selfangst i Vesterisen og Østisen.

Furthermore, two regulations provide annually the legal basis for the annual hunt. For the year 2007 these were the following:

- Regulation on seal hunt in the West Ice and East Ice 2007²³ (J-53-2007)
- Regulation on access to participate in seal hunt in the West Ice and East Ice 2007²⁴ (J-54-2007)

The Norwegian seal hunt legislation has a socio-economic approach focussing on securing sustainable use of the marine resources, increasing the profitability of the sector, settlements and employment in the coastal regions as well as securing that the harvest of the marine resources benefits the coastal communities (1999-03-26-15 §1). The Act relating to the right to participate in fishing and hunting regulates the requirements to undertake commercial fishing and hunt²⁵ (1999-03-26-15 §2). According to Norwegian law, the hunt is considered commercial if it contributes to the outcome of the hunter, separately or combined with other incomes (1999-03-26-15 §3).

Act no 40 of 3 June 1983 relating to sea-water fisheries etc (1983-06-03-40) regulates all sea fishing²⁶. However, selected chapters and paragraphs also regulate the seal hunt²⁷. The law inter alia stipulates rules limiting the hunt as well as duties to report on the catch. Furthermore, control and enforcement as well as sanctions for breaching the law are specified. The law serves as legal basis for regulation on execution of seal hunt in the West and East Ice (2003-02-11-151), as well as the regulation on seal hunt in the Western and East Ice (J-53-2007).

Regulation 2003-02-11-151 on the execution of seal hunt in the West Ice and East ice is one of the key legislative acts regulating the hunt. It replaces regulation 1991-02-22 due to substantial discussions on the killing methods in the 1991 regulation. Based on critique, a working group was established to propose hunting methods that are in line with requirements for animal welfare and ethics. Regulation 2003-02-11-151 specifies the rules for execution of the seal hunt - covering requirements to the hunters, hunting methods, responsibilities and sanctions. Animal welfare considerations are thus emphasised and this paragraph corresponds to §2 of the Norwegian Animal Welfare Act, 1974-12-20-73.

Conditions for hunting

Regulation J-53-2007²⁸ regulates the 2007 hunt - but is only valid until 31.12.2007, as a new regulation is issued by the Ministry of Fisheries and Coastal Affairs each year. The regulation of 2007 establishes a general prohibition on seal hunt from vessels (§1). Nevertheless, Chapters II and III stipulate special rules allowing hunt in the Western and East Ice under certain condi-

²³ Translation by consultant: Forskrift om regulering av fangst av sel i Vesterisen og Østisen 2007.

²⁴ Translation by consultant: Forskrift om adgang til å delta i fangst av sel i Vesterisen og Østisen 2007.

²⁵ Vessels specified in the Norwegian Maritime Code, Sjøloven 1994-06-24-39, §§1-4.

²⁶ Except fishing for Anadromous Salmonidae.

²⁷ Chapters II, III, IV, IX and X as well as §24.

²⁸ Forskrift om regulering av fangst av sel i Vesterisen og Østisen 2007.

tions, hereunder the allowed quota and the duration of the hunting season. Finally, Chapter IV expresses some general rules for the hunt including provisions on reporting, control and sanctions.

According to the regulation on the execution of seal hunt on the West Ice and East Ice, which is the primary legal act providing provisions on sealing, hunting is prohibited (2003-02-11-151 §6):

- of other seal species than harp and hooded seal;
- of adult hooded seal females and adult harp in the breeding ground (ungelegrene);
- of seals that are in the water;
- under conditions where it is not possible to hit the seal with a hakapik or a slagkrok and bleed-out the seal on the ice after shooting it.²⁹

A permission is needed to engage in seal hunt and that it is possible to determine additional requirements to acquire this permission (1983-06-03-40). In order to participate in seal hunt, several tests and courses must be passed. These are under the responsibility of the Directorate of Fisheries. In order to be a shooter, during the hunt a special shooting test is required and must be passed every year before the hunt starts. There is also a test for the use of hakapik (2003-02-11-151 §3).

Regulation J-54-2007 stipulates which vessels that may participate in the hunt. Although there is a general prohibition for Norwegian vessels to hunt seal (§2), vessels may participate if they comply with certain conditions listed in §3. The vessels must be registered in the register of Norwegian fishing vessels, the vessel must be suitable and equipped to undertake seal hunt, and a written application on participation must be submitted to the Directorate of Fisheries before a specified date. For 2007 this date was 1st March.

Training of hunters

There are requirements to the training of both the captain of the vessels as well as the crew. Every year, captains are required to participate in a course on seal hunt organised by the Directorate of Fisheries. The hunting crew must participate in this course every second year - although this provision may in some cases be exempted for (J-54-2007 §3). There is also a specific shooting test and a test in the use of hakapik (2003-02-11-151 §3).

Animal welfare aspects

The guiding principle of the regulation is, as stated in §1 of the regulating on the execution of the hunt (2003-02-11-151):

"the hunters shall during the hunt demonstrate utmost care and make use of hunting methods that prevent all unnecessary pain for the animals. Injured animals shall be sought to be terminated as soon as possible."

²⁹ Except when the conditions of §10 or the requirements mentioned in §7.5 are complied with. 2003-02-11-151.

Killing methods

Under Norwegian legislation, seals can be killed either by shooting or by a blow to the skull with a hakapik or a slagkrok. The characteristics of the weapons are specified in §4 and §5 of the regulation on the execution of seal hunt from 2003 (2003-02-11-151). §4 stipulates requirements to the ammunition used, for both adult animals (§4.1) and pups (§4.2). It is also specified that a firearm and ammunition always shall be present at the designated place during the hunt (§4.3). Furthermore, the firearm must be authorised by a gunsmith and targeted before departure (§4.4). Likewise there are requirements for the hakapik and slagkrok. Regarding the wooden handle and the iron pike and hook (§§5.1 and 5.2) the paragraphs stipulates requirements for the length and weight of the weapons.

The killing of the animals is regulated in §§7-12 in the regulation of the execution of the hunt (2003-02-11-151). It is stressed that the animals shall be killed in a way that secures that the animal does not suffer unnecessarily (2003-02-11-151 §7.1). §7 also stipulates the chronology of the killing for both adult animals and pups. Adult animals shall be shot, while pups can either be shot or hit by hakapik or slagkrok. Once an animal is shot it shall be struck with hakapik as soon as possible (2003-02-11-151 §7). There is no precise definition of what constitutes "as soon as possible". However, it is mentioned in §8 that provides special rules on shooting from the ice and vessels - i.e. animals shall be struck with hakapik and bleed-out as soon as the consideration of the further hunt makes it possible. During such hunt another person shall accompany the shooter in order to hit and bleed-out the animals shot (2003-02-11-151 §8). When a hakapik or a slagkrok is used, the seal shall be struck in the skull with the blunt end as to crush the skull. Thereafter, the spike of the tool is struck deeply into the brain of the seal. An animal shall be bled-out instantly after it is struck. This is done by an incision from the jaw to the end of the breastbone, where after the veins to the fore flippers are cut (2003-02-11-151 §7).

It is prohibited to attach a sling to the animal on the ice until after the animal is struck and bled-out, except in selected hunting (plukkfangst) where the animal is obviously dead (2003-02-11-151 §9). Selected hunting is defined as hunt of a single animal from a moving vessel (2003-02-11-151 §2.2). It is also prohibited to board animals that has not been bled-out with a langtrøe (sling) (2003-02-11-151 §§9 and 10). The following hunting methods are prohibited (2003-02-11-151 §11):

- Catch or kill seal using line, net, prong or any other kind of trap
- Firearms with a smooth bore
- Using hakapik on adult animals which have not been shoot
- Using slagkrok on adult animals
- Hit animals with a hakapik or slagkrok other than on the skull
- Killing animals in artificial lighting

National legislation on coastal seal hunt

The hunt for coastal seals is regulated by the regulation on administration of seal along the Norwegian coast (1996/05/06/414), and Regulation on quotas for hunt of coast seal 2007 (J-2001-2006). The former is the main legal act for hunt of seal along the Norwegian coast and sets out the scope of the regulation, conditions for participating in the hunt, the killing method, reporting and sanctions.

It is applicable for all seal species (§3) and prohibits to catch, hunt, kill or harm seals (§4). The Directorate of Fisheries may though authorise hunt if the population is considered to be "hunnable" (§5). This is done through an annual regulation on quotas and is for 2007 regulated by J-2001-2006. This regulation stipulates that hunt is allowed for harbour, grey, ringed and harp seal within the limits of the regulation after permission from the Directorate (§5). Hunt is only allowed within the limits described Table 3.5.3.

Table 3.5.3 Restrictions on hunt of coast seal

Species	Catch restrictions	Geographic restrictions	Area with allowed hunt	Hunting season
Harbour	Quota per county	Selected counties	Østfold, Rogaland*, Sogn og Fjordane, Møre og Romsdal**, Sør-Trøndelag, Nord-Trøndelag, Nordland, Troms and Finnmark	2 Jan. - 30 April and 1 Aug. - 30 Sep
Grey	Quota per geographic area	Selected areas	Lista to Stad, Stad to Lofoten, Vesterålen to Varanger	South of Stad: 1 Feb.-30 Sep.; North of Stad: 2 Jan. - 15 Sep.
Ringed	Open	Selected counties	Nordland, Troms and Finnmark	2 Jan.- 30 Sep.
Harp	Open	Open	Along the Norwegian coast line	2 Jan.- 30 Sep.

Source: J-201-2006 §§ 1-4 and 1996/05/06/414 §5.

*Hunt for harbour seal is prohibited in Lysefjorden.

**Hunt for harbour seal is prohibited in Indre Sognefjord and connecting fjords.

Regulation 1996-05-06-414 stipulates also that seals may be killed, irrespective of the prohibition on hunt, if they are inflicting damage to fisheries equipment or fish farm installations (§9). Only the owner, user or other person authorised to supervise the installation may put the animal down (§9). Furthermore, an exception applies for seals in river basins with salmon, sea trout or arctic sea char. Killing seals in these areas is allowed after permission from the regional representation of the Directorate of Fisheries after other attempts to reduce harm on equipment had been made. If a breeding female is killed, her pup should as far as possible also be put down (§9). If a seal is killed under §9, this must be reported instantly to the Directorate of Fisheries (§11).

3.5.4 Enforcement

Commercial hunt - organisation

The enforcement of the Norwegian seal hunt is under the responsibility of the Directorate of Fisheries (Regulation J-53-2007). The Directorate can decide that all vessels shall have inspectors on board during the hunt (J-53-2007, §14). According to the Directorate - to the best of their knowledge - all vessels that have participated in seal hunt since 1988, have had an inspector on board (Directorate of Fisheries, 2007f). The inspectors are hired for this specific task and they must be trained veterinarians. Every year an instruction to the inspectors is elaborated. This instruction determines the tasks of the instructor - i.e. how the

control is to be conducted and how it shall be reported. The instruction stresses that the inspectors shall see to that all provisions concerning seal hunt is complied with. Particularly emphasised are (Directorate of Fisheries, 2007b, p.1):

- Guiding principle for the hunt as mentioned in §1 of 2003-02-11-151 on demonstrating the utmost care and making use of hunting methods that prevent all unnecessary pain.
- Securing that all the required tests have been passed in order to participate in seal hunt as specified in 2003-02-11-151, §3.
- Securing that the firearms and ammunitions as well as hakapik and slagkrok comply with the requirements, and that the arms are located at the designated place during the hunt as specified in 2003-02-11-151 §§4 and 5.
- Controlling that the procedures of the killing comply with §7 of 2003-02-11-151.

Furthermore, the instruction states that the inspector must not receive other forms of remuneration than agreed directly with the Directorate of Fisheries (Directorate of Fisheries, 2007b, p. 1).

As Norway is a part of NAMMCO, independent observers from there may observe the hunt. The NAMMCO observers must though have the same level of training as required by the national legislation - i.e. be trained veterinaries (Joint NAMMCO control scheme B.4.2). NAMMCO has observed the Norwegian seal hunt both from the mainland and once on a sealing vessel during the hunt (NAMMCO, 2008a).

Reporting

Both vessel captains and inspectors are required to report to the Directorate. According to the regulation on seal hunt in the West Ice and East Ice 2007 (J-53-2007 §13) all vessels participating in the hunt shall keep a logbook on the hunt that shall be submitted to the Directorate of Fisheries as soon as possible after the hunt is ended. The inspectors, that are to be present on every vessel during hunt, also have an obligation to report to the Directorate. An inspector report is to be filled in following a standard elaborated by the Directorate (Directorate of Fisheries, 2007b §4.2). If the inspector considers an infringement taking place, the captain shall immediately be notified and a separate report submitted. The infringement report must contain information on the provisions breached as well as a short description of the incident. Both the captain of the vessel and the inspector shall sign the report. The captain will also give his comments to the incident (Directorate of Fisheries, 2007b §4.1).

Sanctions

When the law is breached, penalties or imprisonment of up to 6 months can be sentenced. When circumstances are particularly severe imprisonment may be up to 2 years (1983-06-03-40 §53). Vessels and the catch may be seized by the authorities (1983-06-03-40 §54). There is no statistics gathered on the range of reported breaches. However, according to the Directorate the number of reported breaches is low. It has been deemed necessary to summon the captain/ship owner to the Directorate following an infringement report only 3-4 times (Directorate of Fisheries, 2007f).

Enforcement of regulations on coastal seal hunt

The hunt of coastal seals is regulated by the ministry of Fisheries and Coastal Affairs, and the Directorate of Fisheries is the implementing authority. When a seal is killed the hunter is obliged to inform the regional representation of the Directorate of Fisheries hereof as soon as possible (§7). It is the responsibility of the hunter to verify that there is a quota available (§7), and the Directorate may close the hunt in a given county, before the quota is filled (§8). Furthermore, the hunter is obliged to report on the catch in a form issued by the Directorate of Fisheries. The form must be submitted even if the hunter has not killed any seals (§11).

Difficult to get observer licence

3.5.5 Information on hunting in practice

It is difficult to get an observer licence for the Norwegian hunt, as it is required that the observer is a trained veterinary. There is thus only limited information on how the hunt is undertaken from non-official organisations.

3.5.6 Summary assessment

The below table summarises the description of the Norwegian legislation and enforcement system and provides a brief description of the practices and context of the hunt.

Table 3.5.4 Assessment Summary Sheet, Norway

Norway			
Legislation	Are national legislation requirements in place?⁽ⁱ⁾		
	Yes	No	Comment
Animal welfare principles	X		Clearly stated in the regulation on the execution of seal hunt, both in §1, which corresponds to §2 of the Act on animal protection, and in §7 regulating the killing procedures (2003-02-11-151).
Hunting tools	X		Requirements to weapons used both for adults and pups. These are in line with recommendations of the EFSA opinion. The legislation prohibits netting and traps (2003-02-11-151 §11).
Assuring death by monitoring ⁽ⁱⁱ⁾			<u>Inconclusive</u> - since this is not required by the legislation, but if the procedure for killing seals is followed, the animal will obviously be dead (2003-02-11-151 §7). As soon as possible after a seal is shot it shall be struck with the spike of the hakapik into the brain.
Bleeding-out of animals shot or struck ⁽ⁱⁱ⁾	X		Bleeding-out is required instantly after the animal is struck with the hakapik or slagkrok (only allowed on pups). Techniques to bleed-out the animal are also outlined (§7 2003-02-11-151).
Environmental factors			<u>Inconclusive</u> - since requirements for environmental factors are not clearly outlined in the legislation. However, §6.2 stipulates a general prohibition of shooting seals under conditions where the seal cannot be clubbed and bleed-out on the ice afterwards. §11f states that it is not permitted to hunt in artificial lighting, and §6 states that it is forbidden to shot a seal in water.
Training of the hunters	X		Seal hunt courses are mandatory every second year for the hunting crew and every year for the captain of the vessel. Separate shooting tests and a test in use of hakapik also exist (2003-02-11-151 §3).
Enforcement	Are national enforcement requirements in place?⁽ⁱ⁾		
	Yes	No	Comment
Independent monitoring	X		It is required to have a seal hunt inspector on board every sealing vessel. The inspector is a trained veterinary that is hired for this explicit task by the Directorate of Fisheries. Monitoring can thus be categorised as independent.
Ability of third party to monitor			<u>Inconclusive</u> - although there are very strict requirements to monitor the seal hunt, but it appears to be difficult to get an observers licence.
Reporting requirements	X		Both inspectors and vessels are required to report to the Directorate of Fisheries. Inspectors have a standardised form to fill out. The vessels shall keep a logbook to be submitted to the Directorate after the hunt (1986-06-03-40 §9 and J-53-2007 §13). The logbook contains information on special circumstances e.g. the weather conditions.
Sanctions and compliance			<u>Inconclusive</u> - since the information on level/number of sanctions and non-compliance is unstructured.
Are animal welfare recommendations carried out in practice?⁽ⁱⁱ⁾			
Legislation in practice (implementation and application) The fact that there is an inspector on board the vessel induces the hunters to follow the legislation and the procedures prescribed. Adults are shot and pups are clubbed; and if the procedures are followed, the animal will obviously be dead before being bleeding-out.			
Enforcement in practice Norway has one of the strictest systems for enforcement of seal hunt, requiring an inspector to be present on every vessel. The inspector is observing the hunt and responsible for controlling that all requirements are complied with, regarding training, equipment and killing methods. NAMMCO observes the seal hunt, though mainly from the shores.			
Contextual factors of importance for understanding legislation and enforcement			
Using the marine resources is a vital part of the culture of the coastal communities in Norway. The country has two forms of hunt - the commercial and the recreational hunt. The two hunts are different in character and the legislation and context of the hunts differ greatly. This study focus mainly on the commercial hunt. The commercial seal hunt is industrialised and is carried out from a small number of vessels within a short period of time in the spring/early summer.			
Notes			
⁽ⁱ⁾ Yes - implies that legislation/enforcement requirements are in place and contain provision in accordance with animal welfare recommendations for seal hunt. No - implies that legislation/enforcement requirements are not in place or not in accordance with animal welfare recommendations for seal hunt. No X - if the information available is inconclusive.			
⁽ⁱⁱ⁾ This assessment by the study team is solely based on written information obtained - hence not on observations of the hunt in practice. Furthermore, the description is not claimed to be complete.			

3.6 Russia

Lack of information about Russia

It is important to stress that the analysis for Russia is characterised by lack of reliable information. This section does therefore not provide a full picture of Russian seal hunt. The following steps have been taken to get information:

- direct contact to officials within the Russian administration;
- search in written materials, hereunder reports, articles and web pages;
- NGOs have been contacted and urged to supply information on the Russian hunt.

Furthermore, Russian representatives were invited to the workshop in Brussels 14th January 2008 - but declined; and the study team offered to meet with officials from the Russian Federal Research Institute of Fisheries and Oceanography, in Russia, at a time convenient for them. This was, however, also declined.

3.6.1 Overview of seal hunting

Different hunts

In Russia various species of seals live along the Arctic and Pacific coasts, Chukotski peninsula, in Caspian Sea and Baikal Lake. Baikal seals are protected and no industrial hunting is taking place. Hunting in the Caspian Sea is very limited. Therefore, this study focuses on the main two areas for the seal hunt the coastline of the Far East and the Barents, White and Kara Seas' coastlines.

During the Soviet period the best developed area for the seal hunting was the Far East coastline. In the end of the 1980s, annual industrial hunt of harp seal in the Far East was at the level of around 40,000 seals per year. The number of hunted seals was regulated by quotas allocated by the federal authorities to several specialised fleets operating in the region. Additionally to industrial hunting, the local indigenous population hunted between 10,000 and 15,000 seals annually.

After the Union collapse, industrial seal hunting was interrupted due to the lack of financing and the last large scale industrial hunting season in the Far East took place in 1992. In the absence of hunting the seal population increased significantly. Salmon and red caviar production are the two industries that suffer most from negative impacts of increased seal populations and the harp seal populations predation on fish stocks.

During last few years, industrial hunting in some locations along the coast in the Far East, has started to recommence, however so far in a small scale. In the 2007 quotas, the TAC for the whole region was set at 16,000. The local indigenous population continues hunting about 10-15,000 seals annually and in 2007 received quotas for hunting of about 14,000 seals.

A number of species are hunted

According to the EFSA opinion (2007, pp.18-19) eight species are hunted in Russia. Table 3.6.1 shows the hunted species, the reported and/or allowable catch and the geographic area of the hunt.

Table 3.6.1 Overview of hunting

Species	Reported number of killed seals and /or TAC	Geographic location of the hunt
Spotted seal (<i>Phoca largae</i>)	15,000 (n.a.)	n.a.
Baical seal (<i>Pusa sibirica</i>)	3,500 (n.a.)	n.a.
Ringed seal (<i>Pusa hispida</i>)	35,200 (2005 quota)	Bering, E. Kamchatka, Okhotsk (31,400); Barents, Kara, White Seas (3800)
Caspian seal (<i>Pusa caspica</i>)	9,140 (2005 quota)	Caspian Sea zone
Ribbon seal (<i>Histiophoca fasciata</i>)	16,700 (2005 quota)	W. Bering, E. Kamchatka, Okhotsk
Bearded seal (<i>Erignathus barbatus</i>)	11,700 (2005 quota); and 800	W. Bering Sea, E. Kamchatka, Okhotsk Sea zones; and in the Barents and White sea
Harp seal (<i>Pagophilus groenlandicus</i>)	45,100 (2005 quota), 22,474 (2005 reported catch) 7,107 (2006 reported catch) 5,476 (2007 reported catch)	White sea
Hooded seal (<i>Cystophora cristata</i>)	No reported quota or catch since 1994	

Source: The EFSA Journal, (2007, pp. 18-19).

Note: The EFSA journal also contains information on walrus. This is not included in this study.

Geographically dispersed hunt

As seen in the table, seal hunt in Russia, is geographically dispersed. It covers both large scale commercial hunt and aboriginal hunt. Seal hunting in the Barents and Kara Seas is carried out in close cooperation with the Norwegian Ministry of Fisheries and Coastal Affairs. Joint research activities and negotiation of hunting quotas are coordinated by the Joint Norwegian - Russian Fisheries Commission, and established under this commission the Working Group on Seals (VNIRO, 2007). Hunting quotas of harp seals have been reduced yearly for several years. The quota given in 2007 for harp seal in the Barents, White and Kara Seas by the Russian authorities was 41,465 animals. Additionally 150 seals were hunted via quotas received by indigenous minorities.

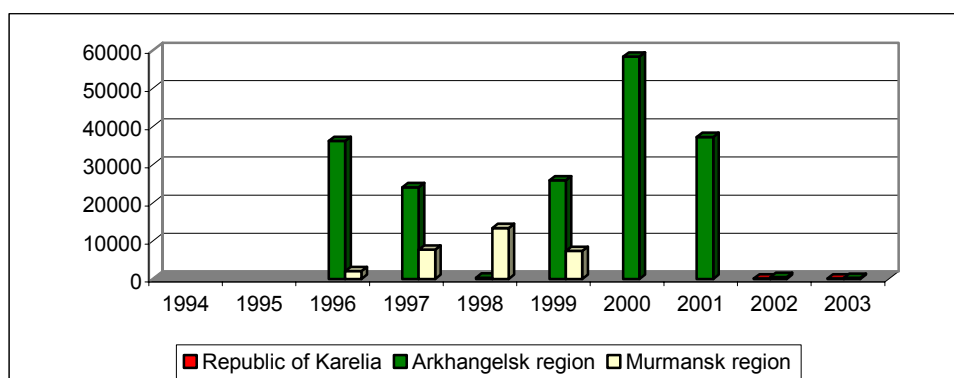
According to the report of the Working Group on Seals (Study Group on the Development of Fish Pots for Commercial Fisheries and Survey Purposes, 2007), the recent quotas have been below the recommended sustainable yields, and that prolongation of current catch level will likely result in an increase in population size and their predation on fish stocks, which is particularly serious issue in the Barents Sea.

3.6.2 Socio-economic context

Commercial vs non commercial hunt

It was not possible to obtain information on the economic importance of the seal hunting - hereunder figures on employment in the related industries or income levels. According to IFAW there are two types of suppliers for pelt in Russia; the major firms (representatives) and the private entrepreneurs (Filipova, 2005). Figure 3.1 shows the number of pelts harvested commercially per region.

Figure 3.1 Commercial seal pelts harvesting by region



Source: Filippova, 2005.

In addition to the conventional commercial hunt, there are four groups of population in the Russian Federation that are involved in traditional seal hunting. These are:

- Small indigenous/aboriginal nations of North, Siberia and Far East - i.e. small communities of hunters, fishermen and collectors preserving old traditions and life style. These are Asian Eskimo and Coastline Chukchi men and women.
- Ethnic Russians living in the White Sea coast (Pomori - coast-dwellers) - who appeared in connection with well developed sea fishery and hunting of marine mammals.
- Quite numerous indigenous/aboriginal populations of North, Siberia and Far East that are living in a similar way to the small indigenous/aboriginal nations - these are Karelian and Komi in the European part of the Russian Federation, Buryats and Northern Yakuts in Siberia and Asian part.
- Group of so-called old-timers consisting of ethnic Russians and mixed (metis) populations leaving along the coastline of Siberia and Far East.

Due to various reasons these four groups preserve old traditions and are dependent on traditional fishing and mammals harvesting, and there are specific hunting rules for the indigenous groups of population. Fishing and hunting for these populations are regulated by specific rules, laws and regulations that are different from those regulating industrial seal hunting.

3.6.3 Legislation

International commitments

Russia has not signed the Bern Convention on European Wildlife and Natural Habitats, but has observer status at meetings of the committee. Russia is neither party to the Bonn Convention on Conservation of Migratory species (CMS, 2008i), but has signed a memorandum of understanding on Siberian crane. Russia is, however, since 1992 signatory to CITES (2008i).

National legislation

An overview of the legislation in Russia on marine mammal harvest was submitted by the Association of Traditional Marine Mammal Hunters of Chukotka (ATMMHC) to the NAMMCO Workshop on Hunting Methods for Seals and Walrus carried out in September 2004 by the North Atlantic Marine Mammal Commission in Copenhagen.

The current legal basis for the industry is a combination of amended laws inherited from the Soviet times and more recent laws, decrees, rules, regulations and standards. There is an expressed need to adjust and modernise existing institutional and legal basis for the industry³⁰. The main principles of the sector development strategy are described in the "Concept of Fishery development till 2020", adopted on September 2, 2003, № 1265-p. Extensive legislative work has been taking place and a new law "On fishing and preserving the marine living resources" with a number of amendments is to have become into force from January 1, 2008.

It has not been possible within the scope of this assignment to make a thorough assessment of existing legislation or analyse the implications of the laws under development. Some of the most important legal documents that lay the legal basis for the marine mammal harvest in Russia are listed below:

- *Wildlife Federal Act, April 1995* with later amendments - describes the main principles of governmental management and the use and protection of the wildlife species. Among others: Chapter V describes ownership of the wild life, rules and procedures for getting licenses for hunting and fishing, as well as rights and obligations of the users; Chapter VI (Articles 48 and 49) gives rights to indigenous minorities to use traditional hunting and fishing methods and guarantees their priority with respect to wild life use; Chapter VII describes the economical side of the wild life regulation, e.g. payment for licenses, protection fees, etc.; Chapter VII describes the enforcement mechanisms related to the Wildlife Federal Act; Chapter IX states that international agreements entered by Russia prevail the national legislation.
- *Constitution on marine mammal harvest.* Article 72.1 guarantees protection of the traditional living habitat and of the traditional way of life of the small ethnic communities.
- *Decrees and resolutions of the RF Government* approve annually total allowed catches of the Aquatic Biological Resources in the internal fresh waters, the internal marine waters, in the national waters, on the continental shelf, and in the exclusive economic zone of the Russian Federation, in the Azov and the Caspian Seas and in the lower reaches of the rivers flowing into the seas as well as in the Amur River.

³⁰ In the Marine Doctrine of the RF, in orders of the President of the RF (15 June 2004, № ПП-1161), Government of the RF (10 November 1996, №1342, 27 September 2004, № МФ-П9-5337), and in several decisions of the Marine Board under the Government of the RF

- *Regulation on protection and harvest of marine mammals* is the basic specialized document regulating the harvest. The document describes the requirements to protection, regulation and control over the stock condition, responsibilities of the catchers, fishing areas and gives specific instructions as to the fishing and hunting in the Far East Catch Basin, the Northern Catch Basin, the Caspian Catch Basin, and the Baikal Catch Basin. Finally the document describes enforcement rules and specifies responsibilities for violations.

Text-box 3.5 Normative acts of the Federal Government, ministries etc.

Resolution of the Council of Ministers of the Russian Federation # 728 of July 26, 1993 "Amateur and Sport Hunting in the Russian Federation".
 Resolution of the Government of the Russian Federation # 1574 of December 27, 1996 "The Procedure of Issuance of the Long-Term Licenses for the Use of the Wildlife Species".
 Order of the Russian Federation Ministry of Natural Resources # 134 of July 14, 1993 "Protection and Regulation of the Wildlife Resources Use".
 Order of the Russian Federation Ministry of Agriculture # 569 of June 26, 2000 "Approval of the Provisions on the Order of Issuance of the Long-Term Licenses" (with alterations of March 29, 2001).

Text-box 3.6 Relevant GOSTs and regulations

GOST 17.1.2.04-77 Environmental protection. Hydrosphere. Environmental indicators and the regulations on evaluation of the fishery water bodies.
 The regulations on harvest of the marine plants and the water invertebrates in the USSR basins. Approved by the order of the USSR Ministry of Fisheries # 17 of January 17, 1966 (still in force with alterations and addenda).
 The regulations on fishing in the internal basins of the Far East. Approved by the order of the USSR Ministry of Fisheries # 524 of November 24, 1980 (still in force with alterations and addenda).
 Standard regulations of the amateur and the sport fishing. Approved by the order of the USSR Ministry of Fisheries # 187 of April 13, 1983 (still in force with alterations and addenda).
 The regulations on fishery, protection and use of the living resources of the economic zone of the USSR in the Black Sea for the Soviet fishing organizations and the fishing vessels. Approved by the order of the USSR Ministry of Fisheries # 321 of June 18, 1986 (still in force with alterations and addenda).
 The regulations on fishery, protection and use of the living resources of the economic zone of the USSR in the Baltic Sea for the Soviet fishing organizations and the fishing vessels. Approved by the order of the USSR Ministry of Fisheries # 322 of June 18, 1986 (still in force with alterations and addenda).
 The regulations on protection and harvest of marine mammals. Approved by the order of the USSR Ministry of Fisheries # 349 of June 30, 1986 (still in force with alterations and addenda).
 The regulations on fishery, protection and use of the living resources of the economic zone of the USSR in the Barents Sea for the Soviet fishing organizations and the fishing vessels. Approved by the order of the USSR Ministry of Fisheries # 356 of July 1, 1986 (still in force with alterations and addenda).
 The regulations on fishery in the economic zone, the national waters and on the continental shelf of the USSR in the Pacific and the Arctic Oceans for the Soviet fishing vessels, organizations and citizens. Approved by the order of the USSR Ministry of Fisheries # 458 of November 17, 1989 (with alterations and addenda).
 The basin (regional) regulations on fishery in the fishery waters.

There are furthermore a number of relevant normative acts of the Federal Government, ministries etc. and GOSTs³¹. These are listed in Text-box 3.5 and Text-box 3.6 above.

Conditions for hunting

Conditions for hunting are determined in the decree of the Ministry of Fishing of the USSR "On approval of the rules for protection and hunting of mammals" (nr 349, 30.06.1986). The decree was issued during the Soviet times by the main responsible authority at that time, the Ministry of Fishing Industry. The decree states that "protection, regulation of use and control over sea mammals is responsibility of basin fishing authorities (basin departments for protection and reproduction of marine resources and fishery regulation under the State Fishery Committee). The law gives the departments authority to carry out protection, regulation and control over mammal populations; to issue licenses; to determine locations, technologies and conditions for harvesting; to control observance of specified conditions and rules in the process of harvesting. Permits for hunting of sea mammals are given to specialised fishing companies and fishery farms and to indigenous populations traditionally involved in the mammals harvesting.

Training of hunters

No information of training requirements of the hunters has been identified.

Animal welfare principles

No information of animal welfare principles in the relevant Russian legislation has been identified.

Killing methods

There is a ban on the killing of adult females in the breeding lairs which was been prolonged until the end of 2007 for both harp and hooded seals. Information from different sources on the seal killing techniques used in Russia is often inconsistent and conflicting. According to Mr Vladimir Zabavnikov (2007), Russian Federal Research Institute of Fisheries and Oceanography (VNIRO) killing of seals during industrial hunting is only allowed by rifled fire arms. The use of nets is not allowed in industrial hunting though is used by some indigenous population - i.e. traditional ways of hunting. Other sources however contradict to this statement. Seal killing techniques used in Chukotka (Russian Far East) was presented at the NAMMCO Workshop on Hunting Methods for Seals and Walrus carried out in September 2004 by the North Atlantic Marine Mammal Commission in Copenhagen by Edward Zdor, Chukotka, Russian Federation as seen in Text-box 3.7.

³¹ GOsudarstvenniy (State) STandard.

Text-box 3.7 Hunting methods in Chukotkan Seal hunt

Seals are taken on the ice or in open water at all times of the year. Netting is a very commonly used method for taking seals in Chukotka. Several types of seal nets are used. The summer net is 15 to 20m in length and is used in open water, in the same manner as fishing net. It is most effective in darkness. The winter net is 5-6 m in length and is set across fractures in the ice. A special type of net, a square of about 2.5 m, is set beneath seal holes in the ice, hanging below the hole like a sack. The seal is able to come up the hole but gets stuck in the net when it tries to dive down again.

Seal traps are used on rivers where seals swim up the river following fish. The trap is a partially submerged mesh box with a trap door in the upper part which remains at the surface. When a seal hauls out on the box, it falls through the trap door into the trap. Seals are also hunted using rifles and associated equipment to retrieve the seal. In the summer seals are shot from boats, floating ice, or hiding places on shore. In the spring and early summer seals are shot as they lie by their breathing holes. In the fall and winter seals are hunted from the ice edge or at open water leads. Some hunters also hunt seals at the breathing hole.

Bearded seals are large and very cautious animals and require specialised hunting methods. In the spring and summer bearded seals haul out on the ice and are hunted by carefully stalking the animal to within firing range. In the fall they haul out on the new ice edge and are hunted from boats. Open water hunting is difficult because the seals sink when killed. If they are killed outright they must be harpooned very quickly to ensure retrieval. If a bearded seal is shot and injured just before it submerges, the hunter waits at the spot where the seal went down. The seal tends to emerge at or near the same spot, at which point it is shot and harpooned.

3.6.4 Enforcement**Organisation**

The responsibility of managing seal hunt has for the few past years changed several times. Currently seal management is the responsibility of the State Fisheries Committee. The Federal Wildlife Act from 1995, Chapter VII, describes enforcement mechanisms related to the Wildlife Federal Act.

3.6.5 Information on the practices of Russian hunt**Seal farms**

IFAW points out that as part of the Russian seal hunt, there are so-called seal farms, where seals are caught and kept in cages until they moult and can be killed and sold internationally (IFAW, 2004).

3.6.6 Summary Assessment

The below table summarises the description of the Russian legislation and enforcement system and provides a brief description of the practices and context of the hunt.

Table 3.6.2 Assessment Summary Sheet, Russia

Russia			
Legislation	Are national legislation requirements in place? ⁽ⁱ⁾		
	Yes	No	Comment
Animal welfare principles			<u>Inconclusive</u> - due to lack of knowledge. However, in the legislation analysed no provisions on animal welfare are identified.
Hunting tools		X	Netting is allowed and is a frequently used hunting method. There is insufficient information on other hunting weapons used.
Assuring death by monitoring ⁽ⁱⁱ⁾	-	-	<u>Lack of information</u> in order to conclude.
Bleeding-out of animals shot or struck ⁽ⁱⁱ⁾	-	-	<u>Lack of information</u> in order to conclude.
Environmental factors	-	-	<u>Lack of information</u> in order to conclude.
Training of the hunters	-	-	<u>Lack of information</u> in order to conclude.
Enforcement	Are national enforcement requirements in place? ⁽ⁱ⁾		
	Yes	No	Comment
Independent monitoring	-	-	<u>Lack of information</u> in order to conclude.
Ability of third party to monitor	-	-	<u>Lack of information</u> in order to conclude.
Reporting requirements	-	-	<u>Lack of information</u> in order to conclude.
Sanctions and compliance	-	-	<u>Lack of information</u> in order to conclude.
Are animal welfare recommendations carried out in practice? ⁽ⁱⁱ⁾			
Legislation in practice (implementation and application) There is not sufficient information to assess the practices of the hunt in Russia. NGOs have though pointed to animal welfare being compromised e.g. by using traps and cages for catching, transporting and keeping live seals.			
Enforcement in practice Lack of information.			
Contextual factors of importance for understanding legislation and enforcement			
The Russian hunt is one of the largest seal hunts with quotas allowing for catches of around 100,000 per year. Russia has commercial hunt as well as hunt carried out by a number of aboriginal communities. Further analysis is needed to provide thorough description of the context. Russia has an increasing market for fur products and is increasingly importing seal products.			
Notes			
⁽ⁱ⁾ Yes - implies that legislation/enforcement requirements are in place and contain provision in accordance with animal welfare recommendations for seal hunt. No - implies that legislation/enforcement requirements are not in place or not in accordance with animal welfare recommendations for seal hunt. No X - if the information available is inconclusive.			
⁽ⁱⁱ⁾ This assessment by the study team is solely based on written information obtained - hence not on observations of the hunt in practice. Furthermore, the description is not claimed to be complete.			

3.7 Sweden

3.7.1 Overview of seal hunting

Both commercial hunt and hunt for predators

Historically, seals have mainly been perceived as unwanted predators, causing considerable damage on the fisheries. Today, it is only the grey seal and in some few cases the harbour seal that still causes problems along the Swedish coast (Olsson, year unknown).

There are three species of seals along the Swedish coast, the grey seal (*Hali-choerus Grypus*), the ringed seal (*Pocha hispida*) and the harbour seal (*Phoca vitulina*). Grey seals are mainly found in the Baltic Sea, where the number was

estimated to 20.700 in 2006. Ringed seals are mainly found in the northern Baltic and in 2005 the number of counted ringed seals was 4,100. Around 9,500 harbour seals are found in the Kattegat Skagerak area (Fiskeriverket, 2007).

Controlled hunting of grey seal in the Baltic seal

Most part of the hunt takes place in the Baltic Sea and during the time of the year when there is ice. However, only a small part of the seals are shot on the ice. In 2007, about 5% of the seals were shot on the ice (Ministry of Agriculture, 2008). In 1974, all seals became protected under Swedish law. Controlled hunting was however permitted until 1987. This type of hunting allowed commercial fishermen to kill seals if the seals were observed in direct connection with the fishing gear (Olsson, year unknown). The right to conduct commercial hunting was however removed in 1988 as a result of a large decline in the seal population caused by a seal epidemic and environmental toxics (Swedish EPA, 2001).

During the period 1989-2000, the grey seal population again increased and on 26 September 2001, the Swedish Environmental Protection Agency (hereinafter the Swedish EPA) adopted a first decision to allow controlled hunting of grey seals in the Baltic Sea (Decision adopted on the basis of Article 23 a first indent 3 and Article 24 of the Hunting Ordinance (1987:905)). The decision was taken in order to protect the Swedish fisheries. There was expressed concern about the damage caused by seals in form of damaged catch, damage to fishing gear and hidden losses (Decision adopted on the basis of Article 23 a first indent 3 and Article 24 of the Hunting Ordinance (1987:905)). The Swedish EPA furthermore argued that allowing hunting would reduce the risk for illegal hunting.

Following the Decision in 2001, the Swedish EPA has adopted yearly decisions allowing controlled hunting on the basis of allocated quotas. Table 3.7.1 shows the current decision adopted by the EPA for 2007, which allows controlled hunting of grey seals (200 in designated areas). In 2006, the Swedish EPA allowed eight fishermen on the west coast to bring down 16 harbour seals in order to protect their hoop nets for damage by the seals. These decisions were taken on the basis of individual applications to the EPA by the eight fishermen (Decision taken on the basis of Article 27 of the Hunting Ordinance (1987:905)).

Table 3.7.1 Swedish grey seal hunt quota and catch, 2001-2007

	2001	2002	2003	2004	2005	2006	2007
Quotas	150*	150	170	170	170	180	200
Catch	44*	around 80	around 80	around 80	around 80	100+	96**

Source: Quotas: Swedish EPA Decisions 2001-2007; Catch: EFSA, 2007;

* Swedish EPA 2007b; ** Swedish EPA, 2007a.

Decreasing struck and lost rates

Struck and loss was estimated to a relative high (42%) in the first year of the Swedish hunt but is now estimated to be at 4% (EFSA, 2007, p. 70).

3.7.2 Socio-economic context

Limited number of hunters and fishermen killing seals

In 2007, around 50 seal hunters reported to have shot one or more seals. 20-30 of these were commercial fishermen whose primary aim with hunting of seal is to keep the seal away from their fishing equipments and to reduce the seals' damage to equipments and catch. The rest of the hunters are recreational seal hunters. All seal hunters, incl. the fishermen, use the skin and meat i.a. for commercial purposes or by the hunter himself (Swedish EPA, 2007a and Grahn, 2007). The extent to which seals are exploited in Sweden as a resource is limited. Since 2001, when controlled hunting of grey seals again was allowed in Sweden, quotas have been set at 150-200/year in total. Out of the reported 96 killed seals so far in 2007, 15 of these have been used for scientific purposes (thus not kept by the hunter). The rest, 81 seals may have been used for commercial purposes by the hunters (Swedish EPA, 2007a).

EU project has led to change

The attitudes towards seals in Sweden are in the process of changing. Seals have for long been regarded as having negative effects on the fisheries and thus been seen as a pest. During the last few years, this has changed, i.a. due to EU funded projects informing and learning citizens about the potential uses of seal and how to see this marine mammal as a resource (Grahn, 2007). Today, the meat, skins and blubber are used.

3.7.3 Legislation

International commitments

Management of wild animals in Sweden, including management of seals, is governed by a legislation based on international conventions, such as the Bern Convention (the Convention on the Conservation of European Wildlife and Natural Habitats), the Bonn Convention (Convention on Migratory Species) and the Convention on Biological Diversity.

Sweden has, furthermore, transposed the EU Habitat Directive (Directive 1992/43/EC on the conservation of natural habitats and of wild fauna and flora). The requirements of the Directive are found in the Swedish Environmental Code (Miljöbalken SFS (1998:808)) and in the Species Protection Ordinance (Artskyddsförordningen (1998:179)). According to the Directive, the Member State shall designate special areas of conservation for seals. Grey seals, ringed seals and harbour seal are also listed in Annex V to the Directive, which entails that they shall be protected from any measures not consistent with sustainable preservation of its population. Also, EU Directive 89/370/EEC is transposed into Swedish legislation by the Regulation on Art Protection (Artskyddsförordningen (1998:179)) (Articles 4 and 13). Sweden has not introduced a total ban on all seal products as have some EU Member States. Sweden participates also in HELCOM.

Swedish legislation

The government ministries sharing responsibility in the field of wildlife management are the Ministry of Environment and the Ministry of Agriculture. The Swedish EPA is the sectoral agency responsible for wildlife management. The County Administrative Board is the overall responsible regional authority for the management of wild animals at County level (22 in total). In Sweden, the following legal acts govern seal hunt:

- Hunting Act (Jaktlagen (1987:259))
- Hunting Ordinance (Jaktförordningen (1987:905))
- Swedish EPAs Regulation and guideline on hunting and the game species belonging to the state (Naturvårdsverkets föreskrifter och Allmänna Råd om jakt och statens vilt (NFS 2002:18))
- National management plan for the grey seal population in the Baltic Sea, 2001 (Nationell förvaltningsplan för gråsälsbeståndet i Östersjön (2001) *under revision*)
- The Swedish Environmental protection Agency's Decision on controlled hunting of grey seals for 2007, adopted on 11 April 2007
- The Weapon Act (Vapenförordning (1996:70))
- The Swedish Environmental protection Agency's Regulation on hunting examination (Naturvårdsverkets föreskrifter om jägarexamen, NFS 2005:4)

Wildlife management in Sweden is governed by the hunting legislation (mainly the Swedish Hunting Act (Jaktlagen (1987:259)) and the Hunting Ordinance (Jaktförordningen (1987:905)), which lay down regulations on hunting and of species in general, as well as controlled hunting of wild animals. In 2001, the EPA adopted a National management plan for the grey seal population in the Baltic Sea (Nationell förvaltningsplan för gråsälsbeståndet i Östersjön (2001)). The plan sets out the goals for the management of the seal population for the coming five years. The measures to be implemented are based on the goal to create conditions for a continued positive development of the grey seal population and to find a sustainable co-existence between the grey seals and the coastal commercial fishery. The plan is currently under revision.

Wild animals are protected under Swedish hunting legislation (Article 3 of the Hunting Act). Hunting of wild animals is only permitted under certain conditions as set out in the legislation.

According to the Hunting Ordinance, the Swedish EPA may adopt a decision to allow controlled hunting of seals in order to inter alia: prevent serious damage to, especially, plants, cattle, forest, fishery, water and other property. Such decision must contain the following information:

- which species that are covered and the quotas
- which methods and equipment that may be used
- which time and geographic areas the decision covers
- other conditions necessary in order to as far as possible avoid damage or disturbance of the species in question, and
- the control to be carried out (Article 9 b of the Hunting Ordinance)

Individual permits for seal hunt may also be issued by the EPA on application by affected fishermen.

Conditions for hunting

As previously mentioned, the latest decision on the hunting of grey seals adopted by the Swedish EPA, is the "Decision on controlled hunting of grey

seals 2007" (hereinafter "the Decision"), which was adopted on 11th April 2007. The Decision sets out the geographic locations where hunting of grey seals is permitted and how many seals that may be killed in each county, in total 200 grey seals. Hunting is allowed 16 April - 31 December, unless it is closed earlier by the Country Administrative Board. The hunter is obliged to keep himself updated on how many grey seals that are left in the quotas in the area in question. The Swedish Coast Guard provides around the clock information on the status of reported killed in each county. The Country Administrative Boards cancels the hunt when the quotas are met or the hunting period is ended.

The main principle is that hunting should take place from land. But, if the weather is calm (windspeed <3m/s) the hunt can also take place from ice or from boat anchored to ice, from a shooting tower or other construction built or anchored to the bottom of the sea. Commercial fishermen who fulfil certain requirements may apply to the Swedish EPA to obtain a permit for hunting from boat. They must show that they suffer from damage to the catch, even though they have undertaken precautionary measures and that they have been trained and educated in seal-hunting, organised by hunting associations in Sweden and in Finland. Such hunt is only allowed within a range of 100m from the fishing equipments damaged by the seals. The fishing equipment shall also be of such construction or material specifically adjusted in order to prevent damage caused by seals. The fisherman may ask another person to conduct the hunt on his behalf. In this case, the Swedish EPA may issue additional permit conditions in regard to the hunt. Only 6 applications for conducting seal hunt from boat has been approved by the Swedish EPA in 2007 (Ministry of Agriculture, 2008).

In Sweden the right to hunt is directly connected to the landowner. Every landowner has the right to hunt on his or her land. According to specific legislation, normally waters up to 300m from the coast line belong to the private property. However, in coastal areas where there are archipelago, the hunting right of the landowner is limited to 100m from the coast line (Article 12 of the Hunting Act). If the landowner does not want to exercise his right to hunt on his property, he can lease it out in whole or in part.

A permit to hunt in *public waters* can be issued in accordance with rules adopted by each County Administrative Board. There are no general requirements as to the qualifications of the hunter in regard to seal hunt, with the exception of commercial fisherman hunting from boat (separate application to the Swedish EPA). However, hunting from boat only constitutes a small percentage of the total hunt of grey seals.

Training of hunters

In order to be eligible for a firearms licence, the hunter must have passed the Swedish hunting exam. If, however, the hunter was granted firearms licence before 1985, he/she is not required to take the exam. This group of hunters constitutes a large percentage of the Swedish hunters (Swedish EPA, 2007b). The Swedish EPA is responsible for the administration of the register of hunting exams. The exam itself is administered by the hunting associations. Training courses are arranged by training associations and others. The training course includes, in addition to practical education in handling of a firearm, education in ethics and animals welfare issues in connection with hunt of wild animals.

Since 2002, Swedish seal hunters have also been offered training in seal hunting on a voluntary basis. This training is though not required by law. The training program has been developed by the Swedish Hunting Organisation (Jägareförbundet) in co-operation with the Finnish Hunters' Central Organisation and Kvarkenrådet. The training covers different topics relevant for hunting seals (ethical requirements, management, species knowledge, shooting, hunting methods). The Swedish Association for Hunting and Wildlife Management estimates that approximately 400 hunters have completed the training program (Grahn, 2007).

Animal welfare principles

According to the Hunting Act, "*hunting shall be conducted in a way as to avoid any unnecessary suffering of wild animals*" (Article 27). Other relevant provisions guiding the hunt are shown in Text-box 3.8.

Text-box 3.8 Relevant provisions in Swedish legislation on animal welfare

Everyone must show respect for wild animals. Wild animals shall not be molested or persecuted, except in connection with permitted hunting. The landowner may however take any necessary measures to prevent damage caused by the wild animal, if such damages cannot be otherwise avoided in a satisfactory manner. (Article 5 of the Hunting Act)

The hunter shall as soon as possible take all appropriate measures in order to track down and put to death a wild animal that has been injured during the hunt. (Article 28 of the Hunting Act)

Only weapons and hunting equipment approved by the Government may be used in hunting. (Article 30 of the Hunting Act)

As a basic rule in connection with controlled hunting, hunting shall be conducted from land. (The Swedish Environmental protection Agency's Decision on controlled hunting of grey seals for 2007, adopted on 11 April 2007)

The Swedish Association for Hunting and Wildlife Management states that the requirement to use class 1 ammunition, in combination with EPAs provisions on under which circumstances the hunt may be conducted (environmental facts) and the education of the hunters, ensures a high level ethics in the Swedish seal hunt (Grahn, 2007).

Killing methods

Only firearms may be used in seal hunting in Sweden:

- Rifle - loaded with a bullet minimum 9 gr with E100 min 2.7 kJ or 10 gr with E100 min 2 kJ. The bullet must also be a construction that allows it to expand.
- Half-automatic weapons may be used if they can be charged with maximum 3 bullets.

There are no specific legal requirements as to the chronology of the killing process. Studies by Øen (2007) and Mørner (2007) indicate however that the ammunition required by Swedish legislation will lead to immediate death of the seal if struck in the required area and that the skulls, of the seals shot during the study with these calibres, were "completely fractured into small parts" (Mørner, 2007). Furthermore, there is an obligation to land the seal. The hunt may therefore only take place on places where the seal can be landed and in a way which allows the animal to be landed. The hunter is allowed to have helpers onboard a

boat with the motor running in order to be able to board the seal as quickly as possible. The boat may only be used for this purpose (not to divert the seals attention to the hunter). A hunter that has shot a seal shall immediately report this to the authorities. Reporting requirements are returned to below.

3.7.4 Enforcement

Organisation

The Swedish Environmental Protection Agency (EPA) is the overall competent authority for monitoring of hunting issues. At regional level, it is the responsibility of the County Administrative Boards. The County Administrative Boards proposes yearly quotas for grey seal, monitors the hunting in the country, and reports to the Swedish EPA after cancellation of hunt.

Hunting Inspectors are appointed by the County Administrative Board. They are responsible for the observance of the Hunting Act and regulations adopted on the basis of the Act. They shall have passed an exam organised by the County Administrative Board and/or the National Police Board. The education does not include specific education in seal hunt. According to the Swedish EPA, very few inspectors are active today since the landowners have been given increased rights/powers to act on persons conducting illegal hunting on his/her land (Swedish EPA, 2007a). Specific inspectors are instead appointed by the Country Administrative Boards for carrying out inspections in areas of archipelago (Skärgårdstillsynsmän). The qualifications of these inspectors are decided upon by each Country Administrative Board. An inspector, a police officer, a coast guard officer or landowner may confiscate the killed seal and other property used in connection with illegal hunt, such as hunting equipment, conveyance, other property (Articles 47 and 49 of the Hunting Act). Sweden does not have a system where inspectors are present in connection with seal hunt. The Swedish Coast Guard make random inspections as part of their ordinary monitoring activity.

Reporting requirements

Both hunters and authorities are obliged to report. A hunter that has killed a seal shall report this to the Swedish Coast Guard in Härnösand immediately, at the latest at 21.00 the same day. The following information shall be provided:

- Name, address and telephone number of the hunter;
- Time (date and time) when the seal was killed or shot at;
- The position from which the hunting was conducted.

If the hunter intends to keep the seal, samples shall be sent to the Swedish Museum on Natural History for registration. Annex 2 A of the EPA's De Regulation sets out detailed information on how the animal shall be handled, which data that shall be submitted, what parts of the animal that shall be sent in, etc.

The Country Administrative Boards shall report on any effects of the hunt in form of damage to the seal population and information on other gained experiences in the County in question. The report should also include a list of any proposed changes in the hunting of grey seals (The Swedish Environmental

protection Agency's Decision on controlled hunting of grey seals for 2007, adopted on 11th April 2007).

Sanctions

According to the National management plan for the grey seal population in the Baltic Sea (2001), there was no reporting of illegal hunt of grey seals before 1998. During 1998-2000, the reporting increased considerably. Non-compliance of the following provisions of the Hunting Act are penalised as indicated below:

- Penalty: Fine
 - Hunting shall be conducted in a way as to avoid any unnecessary suffering of wild animals (Article 27)
 - The hunter shall as soon as possible take all appropriate measures in order to track down and put to death a wild animal that has been injured during the hunt (Article 28)
 - Reporting requirement of killed animals during hunt (Article 26)
 - Requirement passed exam (Article 41 §1)
- Penalty: Fine or imprisonment maximum 1 year
 - Only weapons and hunting equipment approved by the Government may be used in hunting (Article 30 §1)

In order to be penalised under the Swedish hunting legislation, the prosecutor must prove that the hunter acted with intent or gross negligence. This may be difficult to prove and some cases are therefore dropped. According to the EPA, two cases have been dropped the last five year (Ministry of Agriculture, 2008). There is no available statistics on reported cases of illegal seal hunting in Sweden. Due to the limited hunt of seals Sweden does not have a separate system for these infringements (Swedish EPA, 2008).

3.7.5 Information on hunting in practice

Demanding hunt

According to the Swedish Hunters Association, seal hunt in Sweden is demanding and the character of the hunt automatically limits its scope and the number of hunters involved. The hunters must have knowledge of the local conditions and the local nature, have access to a boat and be used to the sea (Grahn, 2007). The Hunting Association moreover stresses that there is no competitive nature of the hunt - there is neither time pressure nor economic incentives to hurry the hunt (Grahn, 2007).

3.7.6 Summary Assessment

The below table summarises the description of the Swedish legislation and enforcement system and provides a brief description of the practices and context of the hunt.

Table 3.7.2 Assessment Summary Sheet, Sweden

Sweden			
Legislation	Are national legislation requirements in place? ⁽ⁱ⁾		
	Yes	No	Comment
Animal welfare principles	X		Provisions in both the Hunting Act §§ 5, 27-28 and 30-31 as well as the Decision on controlled hunting of grey seals for 2007, adopted on 11 April 2007.
Hunting tools	X		The applicable weapons are clearly prescribed (§§14 and 16 of NFS 2002:18) and are in accordance with international best practises.
Assuring death by monitoring ⁽ⁱⁱ⁾		X	There is no requirement to monitoring in the legislation.
Bleeding-out of animals shot or struck ⁽ⁱⁱ⁾		X	There is no requirement to bleeding-out the seal in the legislation.
Environmental factors			<u>Inconclusive</u> - although the may only take place from land unless certain environmental criteria are fulfilled e.g. concerning wind. If these conditions are met hunt may also be undertaken from e.g. the ice (The Swedish EPA Decision on controlled hunting of grey seals for 2007, 11 April 2007).
Training of the hunters			<u>Inconclusive</u> - although requirements to training in order to be eligible for a firearms licence. Commercial fishermen - permitted to hunt from boat - must be trained in seal-hunting by hunting associations in Sweden and in Finland (NFS 2005:4, § 4 of the Weapon Ordinance (1996:70), and the Swedish EPA Decision on controlled hunting of grey seals for 2007.
Enforcement	Are national enforcement requirements in place? ⁽ⁱ⁾		
	Yes	No	Comment
Independent monitoring			<u>Inconclusive</u> - as the hunting Inspectors are appointed by the County Administrative Board and is regulated by Article 42 of the Hunting Act (1987:259)) and Article 53 of the Hunting Ordinance (1987:905) and the RPSFS 2000:28.
Ability of third party to monitor	-	-	Not applicable as the Swedish hunt is not large scale.
Reporting requirements	X		Both the hunter and the inspectors are required to report according to The Swedish EPA Decision on controlled hunting of grey seals for 2007, adopted on 11 April 2007.
Sanctions and compliance			<u>Inconclusive</u> - as there is no available statistics on reported cases of seal hunt infringements.
Are animal welfare recommendations carried out in practice? ⁽ⁱⁱ⁾			
Legislation in practice (implementation and application) There is no requirements for monitoring or bleeding-out the animal. However, if the animal is shot in the head with the required ammunition, studies indicate that the seal will obviously be dead. A voluntary course is offered to seal hunters providing training and which is finalised with an exam.			
Enforcement in practice Enforcement is challenged by the large geographic distances relative to the number of hunters. There is no other information on the practical aspects of the enforcement.			
Contextual factors of importance for understanding legislation and enforcement			
The Swedish seal hunt is rather limited with only about 100 seals killed per year. The seal hunt is undertaken by professional fishermen or as a recreational activity on the same basis as other recreational hunts. The seal is used either by the hunter or sold for commercial purposes, e.g. to restaurants.			
Notes			
⁽ⁱ⁾ Yes - implies that legislation/enforcement requirements are in place and contain provision in accordance with animal welfare recommendations for seal hunt. No - implies that legislation/enforcement requirements are not in place or not in accordance with animal welfare recommendations for seal hunt. No X - if the information available is inconclusive.			
⁽ⁱⁱ⁾ This assessment by the study team is solely based on written information obtained - hence not on observations of the hunt in practice. Furthermore, the description is not claimed to be complete.			

3.8 United Kingdom (Scotland)

3.8.1 Overview of seal killing

Killing - not hunt

There is no seal hunt in the UK, but seals are killed in order to protect the fisheries industry. Therefore, this section covers the killing of seals in UK and not hunt. Furthermore, only scarce information from the British and Scottish authorities has been obtained during this study.

Mainly in Scotland

In United Kingdom, seals are protected by the Conservation of Seals Act 1970. The act covers harbour seal and grey seal and the majority of seals are in Scottish waters. In 2006 it was estimated that the British population of harbour seal (*phoca vitulina*) counted to be at a minimum of 28,300 seals of which 85% lives in Scottish waters (DEFRA, 2007 and JNCC, 2007a). The grey seal population (*halichoerus grypus*), was in 2005, estimated to be in between 97,000 and 159,000 animals, 90% of which is found in Scottish water, respectively (DEFRA, 2007 and JNCC, 2007b). Therefore only Scotland is covered by this study.

Seal management is the responsibility of the Scottish Government, on the basis of independent scientific advice that is provided by the Natural Environment Research Council's Special Committee on Seals (Scottish Government, 2007a). According to the Marine Directorate there are no official statistics on how many seals are killed each year (Scottish Marine Directorate, 2007). The NGO the Hebridean Partnership estimates that 3,500 seals are killed every year (Hebridean Partnership, 2008).

3.8.2 Socio-economic context

Lack of information

As mentioned above there is neither commercial nor recreational hunt for seals, and there is no cull for seals. Seals are killed in order to reduce the impact on fisheries. Information on the impact of seals on fisheries has been requested from the Scottish Marine Directorate, but no information is received.

3.8.3 Legislation

International commitments

The British Government is signatory to the UN Convention on Biological Diversity (CBD). As part of the UK, Scotland has an international obligation to conserve and protect Biodiversity.

As part of the EU, Scotland is obligated under the Habitats Directive. According to the Scottish Government, all 238 of the sites in Scotland identified under the EC Habitats Directive were formally designated as SAC. However, the European Court of Justice, in case C-6/04 of 20th October 2005 declared that the Habitats Directive had not been implemented correctly. The judgement indicated several articles that lacked implementation, hereunder Articles 14.2, 15 and 16. It has not been possible to get updated information on this from the Scottish authorities.

Scottish legislation

Seals in Scotland are managed by the:

- Conservation of Seals Act 1970 (1970 c.30)
- Conservation of Seals (Scotland) Order 2004
- Conservation of Seals (Scotland) Order 2007
- Criminal Procedure (Scotland) Act 1995 (c. 46)

The Conservation Act provides for the "protection and conservation of seals in England, Wales and Scotland, and in the adjacent territorial waters" (introductory text 1970 c.30). Under the Conservation of Seals Act 1970, Scottish seals are provided with a degree of protection during their main moulting and breeding periods. Furthermore, the Act also prohibits certain methods of taking or killing seals - poisons and inappropriate firearms.

In 2004 the Scottish government issued a Conservation of Seals Order (Scottish Statutory Instrument 2004 No. 283). This order states prohibits "[t]he killing, injuring or taking of seals of the species known as: (a) *Phoca vitulina* (common seals); and (b) *Halichoerus grypus* (grey seals)" within a specified geographic area. The area of protection for common seal was furthermore changed by Conservation of Seals Order 2007 (2007 No. 126).

Conditions for killing

According to the Conservation Act there shall be an annual closed season for both grey and harbour seal (1970 c.30 §2). Outside the closed season, seals are not protected by legislation. The closed season is shown in Table 3.8.1.

Table 3.8.1 Closed season for killing seals in Scotland according to 1970 c30 §2

Species	Closed season
Grey seal	1 September – 31 December*
Harbour seal	1 June – 31 August*

*Both dates included.

Furthermore, the Conservation Act (1970 c.30) §3 states that killing, injuring or taking of seals of both species may be prohibited in specified areas. However, there is a general exemption in the Conservation of Seals Act, allowing for seal killing if the following conditions are met (1970 c.30 §9):

- the taking or attempted taking of any seal which had been disabled otherwise than by his act and was taken or to be taken solely for the purpose of tending it and releasing it when no longer disabled;
- the unavoidable killing or injuring of any seal as an incidental result of a lawful action;
- the killing or attempted killing of any seal to prevent it from causing damage to a fishing net or fishing tackle in his possession or in the possession of a person at whose request he killed or attempted to kill the seal, or to any fish for the time being in such fishing net, provided that at the time the seal was in the vicinity of such net or tackle.

This implies that killing seals is allowed when a seal is injured or if it might cause damage to fishing equipment. The seal must be “in the vicinity” of the equipment. There is though no definition of “vicinity” nor case law defining the term (Wilson S. et.al., 2007).

According to the Marine Directorate “individual” seals may be killed if “it is considered necessary [...] to protect fisheries or fish farms, usually where non-lethal measures have proved ineffective, the killing involves an individual using an appropriate firearm to shoot individual seals, which are directly involved in damaging fisheries or fish farms. This might be seals damaging fishing nets or fish farm cages, eating fish held in fishing nets or fish farm cages or eating fish in confined river systems where they are particularly vulnerable to seal predation” (Scottish Marine Directorate, 2007). According to the Marine Directorate the seals concerned are not pursued or hunted but shot as and when they are involved in activities which damage fisheries or fish farms (Scottish Marine Directorate, 2007). What constitutes activities which damage fisheries or fish farms is not defined further.

Training of seal killers

The Conservation Act (1970 c.30) stipulates no requirements in regards to the competence or training of the shooters neither concerning §9 nor §10.

Animal welfare principles

As mentioned above, it is an offence to kill, injure or take a seal during the closed season (1970 c.30 §2.2). This is the only provisions relating to animal welfare in the Act.

Killing methods

The Conservation of Seals Act lays down provisions of “prohibited killing methods of seals” in §1 (1970 c.30). The provision states that poisoning seals is not allowed as well as other weapons but rifle with ammunition “having a muzzle energy of not less than 600 foot pounds and a bullet weighing not less than 45 grains”.

3.8.4 Enforcement

Organisation

Enforcement is regulated by §§4 to 8 of the Conservation of Seals Act (1970 c.30). It refers to a constable having the authority to stop any person suspected of committing an offence. Hence it is the responsibility of the constable to secure that the Act is enforced. In doing so the constable may “without warrant search any vehicle or boat which that person may be using”.

Sanctions

Penalties for infringements of the Act are provided for in §5 (1970 c.30). Any offence, other than breaches of §11.7³², may involve a fine not exceeding level 3 on the standard scale. The fine increases, by second or following infringements up level 4 on the standard scale. According to the Criminal Procedure (Scotland) Act 1995 (c. 46) level 3 equals £1,000 and level 4 equals £2,500.

³² On obstruction of entry on land by any person authorised by the Secretary of State.

3.8.5 Information on the hunting in practice

Little information

Little information is available on how the Conservation Act functions in practice and to which degree it serves its purpose.

Enforcement and inspection

According to Wilson et.a. (2007) there has been one successful prosecution under Section 1 of the Act, where a salmon farm employee was convicted of shooting three seals with a shotgun (MacIennan Salmon Company (Skye) case from 1989) (Wilson et.al. 2007, Section 2.3). NGOs reports that it does in fact not function and that the Act provides no protection to the seals what so ever. The Hebridian Partnership reports that if Citizens or employees report on illegal killing of seals they risk losing their jobs (Hebridian Partnership., January, 2008).

3.8.6 Summary Assessment

The below table summarises the description of the Scottish legislation and enforcement system and provides a brief description of the practices and context of the hunt.

Table 3.8.2 Assessment Summary Sheet, United Kingdom (Scotland)

United Kingdom (Scotland)			
Legislation	Are national legislation requirements in place?⁽ⁱ⁾		
	Yes	No	Comment
Animal welfare principles		X	It is prohibited to kill, injure or take seals in the closed season (1970 c.30 §2). There are, however, no animal welfare principles for when seals are killed in general or under §§9 and 10.
Hunting tools	X		Killing seals is only allowed using a rifle "having a muzzle energy of not less than 600 foot pounds and a bullet weighing not less than 45 grains" (1970 c.30 §1). Netting is not allowed.
Assuring death by monitoring ⁽ⁱⁱ⁾		X	No requirements in the legislation.
Bleeding-out of animals shot or struck ⁽ⁱⁱ⁾		X	No requirements in the legislation.
Environmental factors		X	No requirements in the legislation.
Training of the hunters		X	No requirements in the legislation.
Enforcement	Are national enforcement requirements in place?⁽ⁱ⁾		
	Yes	No	Comment
Independent monitoring	X		Responsibility of the police (1970 C.30 §4).
Ability of third party to monitor	-	-	<u>Not applicable</u> - as there is no hunt for seals in Scotland, only killing of seals under conditions set out in the Act (1970 C.30).
Reporting requirements		X	There are no requirements in the Act to report on killings of seals.
Sanctions and compliance		X	There is no statistical data on how many seals are killed nor under which conditions (the Marine Directorate, 2007).
Are animal welfare recommendations carried out in practice?⁽ⁱⁱⁱ⁾			
Legislation in practice (implementation and application) There seem to be loopholes in the Act, making killing of seals possible with little chance of sanctions. The Act aims to protect seals, nevertheless NGOs indicate that a large number of seals are killed every year, over 3,500. Scottish authorities do though stress that the kill is limited and that the seal population is growing.			
Enforcement in practice According to Scottish NGOs, there is little or no enforcement of the Act. It has been in place for almost 30 years and only two cases have been taken to court, one of which ended in conviction. According to NGOs, people informing the police of infringements are in danger of losing their jobs, indicating that there is a strong culture for not talking about possible infringements.			
Contextual factors of importance for understanding legislation and enforcement			
There is a general prohibition on seal hunt and there is neither commercial nor recreational seal hunt. However, killing seals is allowed under certain circumstances, such as for research purposes or if the seal poses a threat to the fisheries equipment. The government of Scotland has no data on the number of seals killed under these exemptions, and the economic damage caused on the fisheries sector by seals. Killing of seals is debated in Scotland. On the one side is the fishermen pressuring for a cull and on the other side NGOs warning about population levels and animal welfare considerations.			
Notes			
⁽ⁱ⁾ Yes - implies that legislation/enforcement requirements are in place and contain provision in accordance with animal welfare recommendations for seal hunt. No - implies that legislation/enforcement requirements are not in place or not in accordance with animal welfare recommendations for seal hunt. No X - if the information available is inconclusive.			
⁽ⁱⁱⁱ⁾ This assessment by the study team is solely based on written information obtained - hence not on observations of the hunt in practice. Furthermore, the description is not claimed to be complete.			

3.9 Overview and identification of best practices

The above analysis of the national systems for managing seal hunt provides an overview of the different practices and approaches to managing the hunt in the various countries. The systems differ according to e.g. the conditions under which the hunt is carried out and the size of the hunt. Measured against the recommendations of the EFSA opinion it is clear that there is room for improvement within many dimensions for almost all the countries included in the study. There are thus several steps that can be taken to improve the legislation and to improve the enforcement hence increasing the probability that the legal framework is implemented in practice. This section summarises the best practices that have been identified.

3.9.1 Best practices - Legislation

Animal welfare principles

Many countries have animal welfare provisions in their respective laws on animal protection and this is used actively in some countries e.g. Finland. However, stating animal welfare principles clearly emphasises the importance of killing animals under conditions minimising their pain.

The Norwegian regulation on the execution of seal hunt (2003-02-11-151) clearly stipulates that the hunters shall demonstrate utmost care and use hunting methods that prevent all unnecessary pain (§1). It also stresses that hurt animals shall be killed as soon as possible. This formulation also points to the importance of monitoring that an animal is dead, as soon as possible i.e. that an animal shall be dead before proceeding to the next animal. Whether this is the actual interpretation of the article and whether it is enforced accordingly is unknown. Also §7, on the killing process, stresses that animals shall be killed in a way that animals do not suffer unnecessarily.

- *Best practice:* Animal welfare principles are highlighted in the applicable hunting legislation, whether this targets seal hunting specifically or hunting in general.

Hunting tools

The analysis has shown that all countries have some degree of description of the tools that shall be used to hunt seals. According to the EFSA opinion, some tools are more likely to reduce animal welfare than others. First of all, the hakapik required in the hunt in Norway is heavier than the hakapik required in the Canadian hunt, and this reduces the risk of not killing the animal in the first blow. The Namibian club is even lighter and without a spike. Moreover, the club or hakapik should only be used on pups where the skull is still relatively thin (EFSA, 2007). Using club or hakapik to stun or kill adult seals is prohibited in all countries, except Greenland or Canada. Second, regarding rifles and ammunition, all countries except for Greenland and UK/Scotland have requirements to the arm and ammunition used to kill seals.

	<ul style="list-style-type: none"> • <i>Best practice:</i> The characteristics of the weapons used to kill seal are specified. It is made explicit in the legislation which weapons are allowed for stunning and/or killing pups and which are allowed for stunning and/or killing adult seals. The requirements to the weapons are made in accordance with the recommendations of the EFSA opinion (2007b).
Assuring death by monitoring	<p>Canadian is the only country where it is required by law to undertake a blinking test as to confirm that the seal is dead before proceeding to strike another seal (MMR §28.3). To monitor the seal and assure that it is irrevocably unconscious is a clear recommendation from both the EFSA opinion (EFSA, 2007) and the IVWG (2005).</p> <ul style="list-style-type: none"> • <i>Best practice:</i> Legislation should specifically outline requirements for monitoring and thereby oblige the hunter to assure that the seal is irrevocably unconscious before bleeding it out and before continuing to the next seal.
Bleeding-out animals shot or stunned	<p>The Norwegian legislation (2003-02-11-151 §7) states that the animal shall be bled-out right after being hit with hakapik or slagkrok (a hook only allowed on pups). The procedure for bleeding-out is also described. Norway is the only country with an explicit requirement to bled-out all seals right after being hit. In the Namibian regulation relating to the exploitation of marine resources (241/2001) it is only required that pups are bled-out. None of the other range states require bleeding out, although the government in some states say that this is done in practise for practical reasons, e.g. in Greenland and Finland.</p> <ul style="list-style-type: none"> • <i>Best practice:</i> Bleeding-out of all animals is required directly following stunning i.e. before proceeding to stun another seal.
Environmental factors	<p>The Swedish EPA Decision on controlled hunting of grey seals for 2007, adopted on 11 April 2007 states that if the weather is calm (wind speed <3m/s) the hunt can take place from ice or from boat anchored to ice, from a shooting tower or other construction built or anchored to the bottom of the sea. Otherwise hunt must take place from land. Hence the legislation prescribes a condition securing that shooting is taken place from a stable foundation. The Norwegian legislation prescribes that hunting seal that is in the water is prohibited (2003-02-11-151 §6). Several countries have restrictions on hunting in artificial light, e.g. Norway and Finland. The difference in environmental conditions, both regarding weather and hunting location and climate influences what and which factors that needs to be addressed. However, from this the following best practice can be deducted:</p> <ul style="list-style-type: none"> • <i>Best practice:</i> Requirements are specified as to secure that the seal and/or the hunter is sufficiently stable and that the target can be properly visualised. Other environmental factors, relevant for the hunt in question, are also regulated.
Training of hunters	<p>The analysis has shown that the requirements of the hunters differ considerably, and the analysis above indicate that in the countries with less strict education systems for the hunters, there are more reports of malpractice. However based</p>

on the limited available information, no firm conclusion can be made. Nevertheless, of the countries with an industrialised commercial hunt, Canada, Namibia and Norway, the latter hunt is the least criticised and with a fairly developed training program for the hunters.

In Canada there is no required theoretical training or curriculum to be completed. Young sealers learn from the more experienced and for two years they must hold an assistant sealers licence. Also in Greenland young sealers learn from the more experienced. In principle this hands-on training is just as good or might even be better than formally organised training. The challenge is to secure that good practices are passed on and not bad practices.

Norway is the country with the most extensive training requirements of all the range states in the study with mandatory seal hunt training courses every year for the captain of the sealing vessel and every second year for the hunters on board. The legislation moreover prescribes that passing a test is required both for shooting and in the use of hakapik. Finland has an extensive exam to get a hunting card. The test is general and a course targeting seal hunt is voluntary. The curriculum is though rather extensive and detailed. Many stakeholders have during the process pointed to the fact that seal hunt is a dangerous and advanced form of hunting, which emphasise the importance of proper training.

- *Best practice:* A defined level of knowledge and ability of the hunter regarding seals biology, hunting methods and the three step procedure, hereunder practical use of the hunting tools, e.g. shooting test is required.

3.9.2 Best practices - enforcement

Independent monitoring

The range states comply with this dimension differently. The Namibian legislation prescribes a monitoring scheme requiring that an inspector overseeing the hunt must be satisfied that the seal is dead (241/2001 §20). Also Norway has a developed system for monitoring and it is required to have an inspector on every sealing vessel. It is the only of the range states with a monitoring system this extensive.

In the other countries covered by the study monitoring is more random. It must here be taken into consideration that the practical possibility of monitoring and inspecting the hunt differs according to the environment where the hunt is undertaken and the scope of the hunt. In e.g. Greenland and Sweden the hunt is carried out in a rather extensive geographic area and is not industrialised in the same way as the above mentioned hunts.

Independency of monitoring is evaluated on the affiliation of the inspectors to the regulating authority. Observation by marshals, police and coast guard can thus be considered to be more independent than inspectors employed by the regulating authority, e.g. the Directorate of Fisheries in Norway or the Department of Fisheries and Oceans in Canada. Also the affiliation of the inspector with the local community is likely to reduce independency of the inspector. In

Norway, the inspectors are, however, hired for the specific task of inspecting the hunt and are requested to be independent.

The optimal monitoring system meets both these requirements, and there is clearly room for improvements in the field of independent monitoring. However, the following best practice can be deducted:

- *Best practice:* A system for monitoring and observation of the hunt, securing regular supervision of the hunt and that secures independency of the inspectors is provided for.

Ability of third party to monitor

Canada is the only country that specifically allows for third party monitoring. NGOs do though report cases of administrative difficulties regarding getting such licence. Under the Norwegian legislation vessels can be ordered to have observers on board during the hunt. It is though a requirement that inspectors and observers are trained veterinaries, which clearly is a restraint to the opportunity for third party to monitor the hunt.

None of the other countries have provisions on third party monitoring. Several countries do though state that observers are welcome, but that there are practical challenges due to the nature of the hunt e.g. Greenland and Finland. This indicates that there is room for improvement in all countries included in this study.

- *Best practice:* Third party monitoring of the hunt is possible, with a minimum of administrative or logistic barriers.

Reporting requirements

All countries, except Namibia, have reporting requirements that are more or less developed, both for hunters and the monitoring authorities.

In most countries, hunters are required to report on where and when the seal was killed. Only Norway has a formalised process for the inspector to report - with a form that must be filled-in with information on whether requirements to weapons and ammunitions are complied with, whether the ship logbook is kept as required and if there has been any infringements of legislation. In cases of non-compliance the inspector must fill in an infringement report with detailed descriptions of the breach.

- *Best practice:* Clear requirements for reporting targeted both hunters and inspectors. There are requirements to where and when animal is killed and weapon and ammunition used. Also the range of relevant environmental factors (weather conditions, etc.) should be reported.

Sanctions and compliance

All countries have prescribed maximum penalties for non-compliance in the legislation. The degrees to which sanctions are put on hunters infringing the legislation are unclear and depend on several factors. Knowledge about infringements is pivotal for enforcement and for this dimension to have real value it must be connected to both monitoring and reporting requirements. None of the countries currently gather statistical data based on the reports and there is clearly room for improvements in all countries. The number of actual court

cases cannot be seen isolated. For instance Canada has had a number of court cases and put fines of seal hunters infringing legislation. Is this an indication of a good system for enforcement in general or that there are a large number of infringements? In Norway the first court case is ongoing. Is this a symptom of few infringements or a system that does not prosecute hunters infringing legislation? Frequency of monitoring, the reporting system and number of cases of non-compliance must thus be seen relative to each other in order to get an understanding of the range of infringements.

- *Best practice:* Statistical information on reporting from the hunt should be compiled and systemised.

4 Measures to improve animal welfare aspects of seal hunting

4.1 Overview

White Paper on European Governance

The White Paper on European Governance, 2001, COM(2001) 428 states that "Proposals must be prepared on the basis of an effective analysis whether it is appropriate to intervene at EU level and whether regulatory intervention is needed. If so, the analysis must also assess the potential economic, social and environmental impacts".

As mentioned in the introduction, several EU Member States are considering, or have already introduced, national legislative measures to ban the import and use of all seal skins and seal products. Differences between such national measures could be regarded as barriers to trade and/or the public could be confused by the diversity of legal requirements. Hence, it seems to be appropriate to investigate the provision of harmonised rules across the Member States.

Both measures linked to and not linked to management systems

This chapter introduces both policy measures that are not linked directly to the management systems - such as a total prohibition of placing on the market or of imports/exports, and measures that could be linked to the management system analysis presented in the previous chapter.

Although, Section 3.8.1 shows that there are 'best practices' to pursue by policy measures no attempt is here made to make specific references to elements of the seal hunt management systems. However, it should be acknowledged that the results of this study and the EFSA opinion provide a sound basis for such more precise formulations of policy measures. In any case the assessments of the impacts will not entail a level of preciseness where the impacts can be directly attributed to a very specific characteristic of a management system.

Both legislative and non-legislative measures

Furthermore, the EU might pursue both legislative and non-legislative measures at the EU level. This distinction is adopted in the below presentation of possible measures to assess the impacts of.

4.2 Legislative measures

Table 4.2.1 presents the formulations of the legislative measures and their rationale - both with respect to effectiveness/efficiency with expect to achieve the

objectives of the measure, and regarding consistency - i.e. the extent to which the measures are likely to limit trade-offs across the economic, social and environmental domain. The measures are sorted so that they start with what immediately appears most wide-ranging. However, a combination of the first two measures - prohibition of placing on the market and prohibition of imports/exports - must be recognized to be the most comprehensive.

While the two first measures are not linked to elements of seal hunt management systems, the third and fourth - and possibly also the fifth - will in their final formulations mention such elements.

The table shows that the strict regulatory measures such as total prohibitions of placing on the market or import/export bans are considered effective because there will be no or only little doubt about the coverage of the measures - although there might be indirect adverse animal welfare impacts as trade is shifted to countries with fewer requirements to how the seal skins have been derived. Furthermore, they are regarded as efficient in the sense that they only require EU expenditure for enforcement. However, the trade-offs across the environmental, economic and social dimensions are likely to be fairly significant. The more targeted - or less strict - regulatory measures are in contrast considered to be less effective and efficient, but in contrast imply lower trade-offs across the environmental, economic and social dimensions.

Table 4.2.1 Legislative measures

Formulation	Effectiveness/efficiency	Consistency
Prohibition of placing on the market of skins of seals and products derived there from	<p>The measure is <u>effective</u> in the sense that it is without a doubt prohibited to hold any seal skins or seal products physically within the EU territory that are made available and destined for the first time for distribution or direct sale in the EU market.</p> <p>However, (second-hand) seal products already sold once on the EU market are not covered. Furthermore, products that are imported, manufactured or stored within the EU territory but intended for export outside the EU are not covered. These exemptions might reduce the effectiveness of enforcement</p> <p>The measure is considered <u>efficient</u> in the sense that it only requires expenditure for enforcement.</p>	This comprehensive measure will benefit the environmental dimension - the animal welfare concerns of the general public regarding seal hunting - at economic costs of the sealers and seal product manufactures - here-under the Inuit population.
Prohibition of imports into the Community of skins of seals and products derived there from (will in practice also imply exports)	<p>The measure is <u>effective</u> in the sense that it is without a doubt prohibited for any seal skins or seal products to enter the customs territory of the Community (with exception of imports of non-commercial nature). Similarly, seal skins and seal products may not leave the customs territory.</p> <p>Products which are not customs cleared are not covered.</p> <p>The measure is considered <u>efficient</u> in the sense that it only requires expenditure for enforcement.</p>	<i>similar to above</i>
Prohibition of placing on the market (and/or imports/exports) of skins of seals and products derived there from - if not taken through measures that meet the established standards for the hunting of seals	<p>The measure is similar to the above two measures - but excludes seal skins and seal products that stem from approved hunting methods.</p> <p>The measure is therefore likely to be less <u>effective</u> than the above two in the sense that it requires precise definitions/delimitations of approved hunting methods (which can be based on the results of the EFSA opinion and this study) - and there might unintended way to show compliance with the established standards.</p> <p>The measure is also considered less <u>efficient</u> in the sense that it requires higher enforcement expenditure than the above two measures.</p>	<p>The trade-offs across the environmental, economic and social dimensions are probably lower than for the above two measures.</p> <p>The targeting will hurt the economy where it is supposed to hurt - but at the same time benefit 'best practice' seal hunting.</p>
Harmonised, mandatory labelling system	<p>The measure is similar to the above measure - but allows selected seal skins and seal products from any range state, if they fulfil the labelling requirements (which can be based on the results of the EFSA opinion and this study).</p> <p>The measure is considered similarly <u>effective</u> as the above measure - for the same reasons.</p> <p>However, it might be slightly less <u>efficient</u> than the above, because the provision and enforcement of labels will require contacts with numerous seal hunters and seal product manufacturers.</p>	<p>The trade-offs are similar to for the above measures.</p> <p>However, the economic and social dimension might benefit from a price mark-up on the consumer market and at the same time help to increase the image of seal hunting in general.</p>
Bi-/multilateral agreement(s) with range state(s)	<p>Agreements between the EU and one or more states - and thus possibly enlarging the geographical area not to be covered by the above legislative measures.</p> <p>Hence, <u>effectiveness</u> and <u>efficiency</u> will depend upon the actual content of an agreement.</p>	The trade-offs across the environmental, economic and social dimensions will depend upon the actual content of an agreement.

4.3 Non-legislative measures

Table 4.3.1 presents then the formulations of possible non-legislative measures in a similar way to the above mentioned legislative measures. However, it appears immediately that the formulations of the non-legislative measures are less precise, and thus the analysis of them and their implementation in practice might be less easy to handle. This feature is also reflected in the table with respect to the difficulties in explaining the effectiveness, efficiency and consistency of the measures.

Table 4.3.1 Non-legislative measures

Formulation	Effectiveness/efficiency	Consistency
Voluntary labelling systems / development of voluntary standards	An EU-administered voluntary labelling system that seal hunters can subscribe to (if they fulfil the labelling requirements) is similar to the above-presented (see Table 4.2.1) harmonised, mandatory labelling system. However, such voluntary system might be less <u>effective</u> than the mandatory - merely because it is voluntary. The level of <u>efficiency</u> might be lower or higher, depending on the costs saved by not making the labelling system mandatory and possibly lower enforcement expenditure.	A voluntary system might encourage a natural self-selection process regarding compliance and thus maintain the balance between the environmental, economic and social dimension - i.e. those who pursue the label might benefit more than it costs, and the welfare of the seals is enhanced.
Development of guidelines by an internationally recognised organisation	Best practices on seal hunting methods and seal hunt management systems recommended by an internationally recognised organisation. Such organisation does not appear to exist at present. Hence, <u>effectiveness</u> and <u>efficiency</u> will depend upon the actual content of such guidelines.	<i>not possible to comment upon</i>
Information campaigns	An EU information campaign targeted at consumers can, for example, benefit from the results of the public consultation carried out within the present study. An EU information campaign targeted at seal hunters and producers can, for example, benefit from the above mentioned guidelines. The <u>effectiveness</u> and <u>efficiency</u> will depend on the actual information campaign - although the costs involved might be quantifiable from experiences with other similar information campaigns.	It is difficult to say how information campaigns will affect the trade-offs across the economic, social and environmental dimensions - since such campaigns might seek to make improvements with respect to all three dimensions.

5 Impact assessment of measures

Although the presentations of the range states' seal hunt management systems in Chapter 3 comprise the major contribution from the study; the title of this chapter is more alike the title of the study and this report. This chapter starts out by delimiting the coverage of impacts. Then it provides an insight into the information available for describing the baseline for the analysis. Finally, impacts of the types of measures introduced in the previous chapter are assessed.

5.1 Coverage of impacts

Delimitation of impacts

The aim of an impact assessment is to provide information about the likely impacts across the three main policy dimensions: environmental, economic and social. Table 5.1.1 below presents the focus with respect to these three dimensions within the present study. Furthermore, the table emphasises a geographical dimension of the impacts of the measures; partly because some range states are EU members and other are not; and partly because some measures might depend on the used seal hunting methods and might thus directly affect the range states differently.

The impacts to assess are selected on the basis of a proportionate analysis, where the most important impacts have been identified for further analysis. The starting point for this selection is that the analysed policy measures are considered to have little impact at the macro level - for example on the national GDP or total employment situation - in the range states (and the non-range states). At the micro level, however, the impacts will be felt by certain groups of the society - and these groups of the society are considered to be of concern, both in the range states and by the EU. Hence the focus can be said to be on the distributional impacts where the 'winners' are the seals who are less hunted or at least are killed in a way that avoids unnecessary pain, distress and suffering. The 'losers' are then those who derive their income directly or indirectly from seal hunting, although part of this group might see a benefit from implementing some of the policy measures.

To set the scene, Table 5.1.1 provides a brief introduction to the likely impacts of EU policy measures for the selected types of impacts. These descriptions provide the starting point for the analysis of more elaborated causes-and-effects between the policy measures and their impacts. Furthermore, the descriptions do not distinguish impacts that in practice can be quantified from those where only qualitative assessments are feasible.

The table shows that the environmental dimension of the assessment is limited to discussing the impacts of animal welfare aspects for seal. And, as emphasised in the introduction, this discussion will to a large extent be build upon the EFSA 2007 scientific opinion (EFSA, 2007). The assessment does thus not address biodiversity issues such as the impacts on others parts of an ecosystem of a possible increase in the number of seals. As mentioned below, the central economic impacts are delimited to those of trade and local economy, while the social dimension concentrates on the conditions for the Inuit population.

Table 5.1.1 Type of impact and likely impacts of EU policy measures

Type of Impact	Likely impacts of EU policy measures
<i>Environmental dimension</i>	
Welfare of seals	<p>In terms of welfare, the effectiveness of killing methods used for seals vary according to the methods used, the skill of the operators, and the environmental conditions (EFSA, 2007). Hence, policy measures that encourage the use of 'best practices' - e.g. a labelling system - will improve the animal welfare aspects of seals.</p> <p>Policy measures - such as prohibitions of market access for seal products - might reduce the size of the hunting and thus the number of seals suffering.</p> <p>However, animal welfare gains will be reduced by the extent such policy measures imply that seal products are diverted to others markets - which might have lower requirements to animal welfare aspects.</p>
<i>Economic dimension</i>	
Trade	<p>Since seal hunting mostly takes place outside the Community territory, any restrictions to market access in the Community will have trade impacts.</p> <p>Trade restrictions on seal skins will directly affect the seal hunters while they indirectly will be affected by reductions in the trade of manufactured seal products. Seal product manufacturers will obviously be affected by the latter restrictions.</p> <p>Furthermore, importers and seal product manufacturers on the Community territory will experience income and production losses.</p> <p>However, trade losses for the exporters will be reduced if seal products are diverted to others markets and of course depend on how important the EU market is at present.</p>
Local economy	<p>While the macroeconomic impact of reducing seal hunting might be limited in the range states - there will be an impact on the incomes of the individual sealers (although state subsidies might alleviate this income loss) and the seal product manufacturers.</p> <p>These activities often take place in remote, coastal areas. Hence, the impacts will in practice depend on the share of income in a local economy from sealing activities - and whether or not there are any other employment/income opportunities.</p>
<i>Social dimension</i>	
Inuit population	<p>The impact on the Inuit population follows the impact on the local economy.</p> <p>However, the impact might differ if the policy measures accept the use of traditional hunting methods and/or allows sales of seal products made by the Inuit population.</p> <p>However, policy measures that have adverse impact on the image of seal skins and other seal products will have a negative impact on the Inuit population anyway.</p>
<i>Geographical dimension</i>	
Seal hunt management system specific impacts	<p>If policy measures - e.g. a prohibition of placing on the market or a labelling system - punish certain substandard aspects of the seal hunt management systems, or relate to certain seal species, the impact on the different range states will differ.</p>

5.2 Baseline

The impacts of EU measures are assessed as changes in the conditions - with respects to the welfare of seals, trade, local economy, and the Inuit population - in comparison with a baseline. Although measures might be implemented at different points in time in the future - if they are implemented at all - the baseline chosen for the present study is a given year (say 2008) - represented by the most recently available information about the different elements (mostly 2006).

It is important to emphasise that the quality of the information differ between elements, and for some of these between range states. Furthermore, what can be quantified and qualified depends on the availability of information.

The starting points for the presentations of the below baseline are the socio-economic contexts presented in Chapter 3 - that are based on the vast material gathered for producing the presentations of the range states. This information is complemented by additional data sources such as Eurostat and the different national statistical offices.

Welfare of seals

No baseline - and impact embedded in measures

Although this type of impact is included in the above table, it does not as such have a well-specified baseline - i.e. a measurable level of seal welfare. Furthermore, the assumed impacts on the welfare are to a large extent embedded in the formulations of the measures.

However, as also mentioned above, animal welfare gains will be reduced by the extent such policy measures imply that seal products are diverted to others markets - which might have lower requirements to animal welfare aspects.

Trade

Trade across and inside EU border

Since the potential EU measures directly address the trade flows across the EU border, and also in between the EU Member States a central data set for the analysis is the Eurostat external trade database. Table 5.2.1 shows the seal products covered in this database.

The coverage reflects the present prohibition of the importation into the EU Member States of skins of whitecoat pups of harp seals and of pups of hooded seals. In this context, it must be remembered that the 2006 declaration from the European Parliament also focuses on the regulation of import, export and sale of all products from harp and hooded seals - and not only the pups. However, this distinction of harp and hooded seals is not available in the other trade data sets used in the analysis - and any such distinction in the impact analysis must be based on available data of seal catches by species.

It is important to emphasise that the Eurostat trade data presented below do not cover goods in transit. They exclude extra-EU trade where the goods are placed in a customs warehouse (purely for storage) or given temporary admission inside the EU borders for trade fairs, temporary exhibitions, tests etc. as well as

intra-EU trade where the goods are merely passing across a Member State, by any means of transport, but are not stored there for any but transport reasons. This implies that the data for imports of seal products concern only products destined for the EU market and/or where further (substantial) processing takes place.

The trade data can therefore be said to appropriately represent the importance of seal products trade for the EU Member State economies. Although, EU firms doing trade in seal furs will claim the many jobs also are dependent on the not-accounted transit of seal products, for example German (mainly Frankfurt) and Finnish traders; who furthermore are important seen from the Canadian export viewpoint. Hence, the Canadian export-to-EU data presented later in this chapter differ much from the Eurostat trade data.

Table 5.2.1 Seal products covered in Eurostat trade database

Code	Title
43017010	Raw furskins of whitecoat pups of harp seal or blueback pups of hooded seals, whole, with or without heads, tails or paws
43017090	Raw furskins of seal, whole, with or without heads, tails or paws (excl. those of whitecoat pups of harp seal or blueback pups of hooded seals)
43021941	Tanned or dressed furskins of whitecoat pups of harp seal or blueback pups of hooded seal, whole, with or without heads, tails or paws, not assembled
43021949	Tanned or dressed furskins of seal, whole, with or without heads, tails or paws, not assembled (excl. whitecoat pups of harp seal or blueback pups of hooded seal)
43023051	Tanned or dressed whole furskins of whitecoat pups of harp seal or blueback pups of hooded seal, and pieces or cuttings thereof, assembled, without the addition of other materials (excl. "dropped" furskins, clothing, clothing accessories and other fur skin articles)
43023055	Tanned or dressed whole furskins of seal, and pieces or cuttings thereof, assembled, without the addition of other materials (excl. of whitecoat pups of harp seal or blueback pups of hooded seal, and "dropped" furskins, clothing, clothing accessories and other fur skin articles)
43031010	Articles of apparel and clothing accessories made of the fur skin of whitecoat pups of harp seal or blueback pups of hooded seal (excl. gloves made of leather and fur skin, footwear and headgear and parts thereof)

Table 5.2.2 provides an account of the latest data for a whole year - i.e. 2006 - for the imports in Euro to EU-27 from the eight range states covered by this study, and the exports the other way. The table shows that imports (excluding transit - see above) from non-EU range states mainly come from Greenland and Canada, while the import from Namibia is fairly limited. Intra-EU trade is comparable in size regarding the sales of seal skins on the EU market - for Finland and the UK (Scotland), while the trade figures for Sweden are insignificant. It must here again be emphasised that, for example, Canadian sealskins destined the Italian market but actually entering Finland - are registered as import from Finland by Italy (not transit), while the import from Canada by Finland is registered as transit trade. This kind of registration helps, however, by combining these data with other trade flows and trade data to distinguish transit trade from other trade.

While there is limited export out of EU-27 to Canada, Greenland and Norway, there is a significant export to Russia in particular of tanned or dressed furskins of seal, whole, with or without heads, tails or paws, not assembled (excl. white-

coat pups of harp seal or blueback pups of hooded seal). Hence, the trade balance (excluding transit - see above) with Russia is much in favour of EU-27.

Table 5.2.2 Trade between EU-27 Member states and 8 range states, Euro, 2006

	Canada	Finland	UK (Scotland)	Green- land	Namibia	Norway	Russia	Sweden
<i>Import to EU-27 from:</i>								
43017010	0	0	0	0	0	0	0	0
43017090	191389	931888	337817	1313000	0	659	186081	0
43021941	21849	0	0	0	0	2192	0	0
43021949	461238	7582	299325	60131	67079	176794	0	4443
43023051	0	0	1742	0	0	0	0	0
43023055	45563	0	178239	39599	0	113657	0	0
43031010	0	162	88150	6312	0	0	0	1620
Total	720039	939632	905273	1419042	67079	293302	186081	6063
<i>Export from EU-27 to:</i>								
43017010	0	0	0	0	0	0	0	0
43017090	1251	551435	2389	19608	0	14108	195500	0
43021941	0	0	0	0	0	0	109774	0
43021949	24627	677193	2193682	1458	0	1947	2505755	0
43023051	0	0	0	0	0	0	0	0
43023055	0	0	269327	2182	0	0	23282	0
43031010	1062	0	909209	0	0	36411	297931	0
Total	26940	1228628	3374607	23248	0	52466	3132242	0
<i>Import minus export</i>								
43017010	0	0	0	0	0	0	0	0
43017090	190138	380453	335428	1293392	0	-13449	-9419	0
43021941	21849	0	0	0	0	2192	-109774	0
43021949	436611	-669611	-1894357	58673	67079	174847	-2505755	4443
43023051	0	0	1742	0	0	0	0	0
43023055	45563	0	-91088	37417	0	113657	-23282	0
43031010	-1062	162	-821059	6312	0	-36411	-297931	1620
Total	693099	-288996	-2469334	1395794	67079	240836	-2946161	6063

Source: Eurostat external trade database.

Table 5.2.3 provides a similar account of the 2006 trade situation, but where the figures are in units - e.g. number of raw furskins. Although articles of apparel and clothing accessories made of the furskin of whitecoat pups of harp seal or blueback pups of hooded seal (excl. gloves made of leather and furskin, footwear and headgear and parts thereof) and possibly other items seem not as fully covered compared with the trade figures in Euro - the table is considered useful for comparisons with other seal product data using such units.

Table 5.2.3 Trade between EU-27 Member states and 8 range states, Units, 2006

	Canada	Finland	UK (Scotland)	Green- land	Namibia	Norway	Russia	Sweden
<i>Import to EU-27 from:</i>								
43017010	0	0	0	0	0	0	0	0
43017090	3558	9131	5064	54184	0	12	1407	0
43021941	200	0	0	0	0	15	0	0
43021949	6868	260	4490	1900	13729	3526	0	88
43023051	0	0	50	0	0	0	0	0
43023055	227	0	3423	605	0	2409	0	0
43031010	0	0	0	0	0	0	0	0
<i>Export from EU-27 to:</i>								
43017010	0	0	0	0	0	0	0	0
43017090	10	1062	600	168	0	25	1745	0
43021941	0	0	0	0	0	0	735	0
43021949	712	35	6635	15	0	194	17425	0
43023051	0	0	0	0	0	0	0	0
43023055	0	0	3421	13	0	0	267	0
43031010	0	0	0	0	0	200	0	0
<i>Import minus export</i>								
43017010	0	0	0	0	0	0	0	0
43017090	3548	8069	4464	54016	0	-13	-338	0
43021941	200	0	0	0	0	15	-735	0
43021949	6156	225	-2145	1885	13729	3332	-17425	88
43023051	0	0	50	0	0	0	0	0
43023055	227	0	2	592	0	2409	-267	0
43031010	0	0	0	0	0	-200	0	0

Source: Eurostat external trade database.

While the above two tables show that the trade between EU-27 as a whole and the eight range states differ between range states, the following two tables look into which of the EU-27 Member States - apart from Finland, UK (Scotland) and Sweden - are likely to be affected by an EU measure that puts restrictions on imports of products derived from seal species.

Table 5.2.4 shows that Denmark and Italy by far are the two largest EU importers of raw furskin from seal for further processing/sales on the EU market - and they share the market. Denmark absorbs the raw furskins directly coming from Canada and Greenland (that are not categorised as goods in transit), while Italy absorbs the raw furskins from Russia, Finland and the UK (Scotland) - where many of the skins from the latter two originates from outside the EU borders. Greece also has a small share of the skins coming from the two latter range states.

While the tanning in Denmark takes place in few locations, there are numerous small furrieries producing the final seal products for the markets. Most of these furrieries do, however, only not rely on the supply of seal skins only. Similarly, Italy is among the world's leading producers of coats and other clothing items

made from seal skin; but the producers are many and do also use other types of skin.

Table 5.2.4 Import of raw furskin to EU-27 Member states from 8 range states, Euro, 2006

	Canada	Finland	UK (Scotland)	Green- land	Namibia	Norway	Russia	Sweden
Austria	0	0	0	114	0	0	0	0
Belgium	0	0	0	0	0	0	0	0
Bulgaria	0	0	0	0	0	0	0	0
Cyprus	0	0	0	0	0	0	0	0
Czech Rep.	0	0	0	0	0	0	0	0
Germany	0	0	0	0	0	0	0	0
Denmark	191389	0	0	1312886	0	0	0	0
Estonia	0	0	0	0	0	0	0	0
Spain	0	0	0	0	0	0	0	0
Finland	0	0	0	0	0	659	0	0
France	0	0	0	0	0	0	0	0
UK	0	0	0	0	0	0	0	0
Greece	0	60089	32433	0	0	0	0	0
Hungary	0	0	0	0	0	0	0	0
Ireland	0	0	280	0	0	0	0	0
Italy	0	871799	281132	0	0	0	186081	0
Lithuania	0	0	0	0	0	0	0	0
Luxembourg	0	0	0	0	0	0	0	0
Latvia	0	0	0	0	0	0	0	0
Malta	0	0	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0	0	0
Poland	0	0	23972	0	0	0	0	0
Portugal	0	0	0	0	0	0	0	0
Romania	0	0	0	0	0	0	0	0
Sweden	0	0	0	0	0	0	0	0
Slovenia	0	0	0	0	0	0	0	0
Slovakia	0	0	0	0	0	0	0	0
EU-27	191389	931888	337817	1313000	0	659	186081	0

Source: Eurostat external trade database.

Note: Sum of codes 43017010 and 4317090 (see Table 5.1.1).

The picture is somewhat different when it comes to the import of tanned or dressed furskin of seals. Table 5.2.5 shows that more EU Member States are engaged in this part of the trade. Although Denmark and Italy remain important traders, Greece and the UK, but also Latvia are significant importers. Greece deals, for example, with the largest part of the imports coming from Namibia, while the UK is the main trading partner here with Norway. Latvia takes in a sizeable part of such furskins from Canada.

Table 5.2.5 *Import of tanned or dressed fur skin to EU-27 Member states from 8 range states, Euro, 2006*

	Canada	Finland	UK (Scotland)	Green- land	Namibia	Norway	Russia	Sweden
Austria	0	0	0	0	0	0	0	0
Belgium	0	0	0	0	0	0	0	0
Bulgaria	0	0	0	0	0	6742	0	0
Cyprus	0	0	0	0	0	0	0	0
Czech Rep.	0	0	0	0	0	0	0	0
Germany	0	0	74820	0	0	0	0	0
Denmark	275610	0	0	89336	0	98	0	0
Estonia	0	1436	0	0	0	10998	0	0
Spain	0	0	50751	0	0	1879	0	0
Finland	0	0	0	947	0	726	0	0
France	0	0	0	0	0	0	0	0
UK	0	0	0	0	0	233190	0	2213
Greece	67763	6146	121801	0	53001	0	0	0
Hungary	0	0	0	0	0	0	0	0
Ireland	0	0	31414	0	0	0	0	576
Italy	0	0	186177	0	14078	0	0	0
Lithuania	0	0	0	0	0	0	0	0
Luxembourg	0	0	0	0	0	0	0	0
Latvia	139714	0	0	0	0	0	0	0
Malta	0	0	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0	0	0
Poland	45563	0	0	0	0	0	0	1654
Portugal	0	0	14343	0	0	29856	0	0
Romania	0	0	0	0	0	0	0	0
Sweden	0	0	0	9447	0	9154	0	0
Slovenia	0	0	0	0	0	0	0	0
Slovakia	0	0	0	0	0	0	0	0
EU-27	528650	7582	479306	99730	67079	292643	0	4443

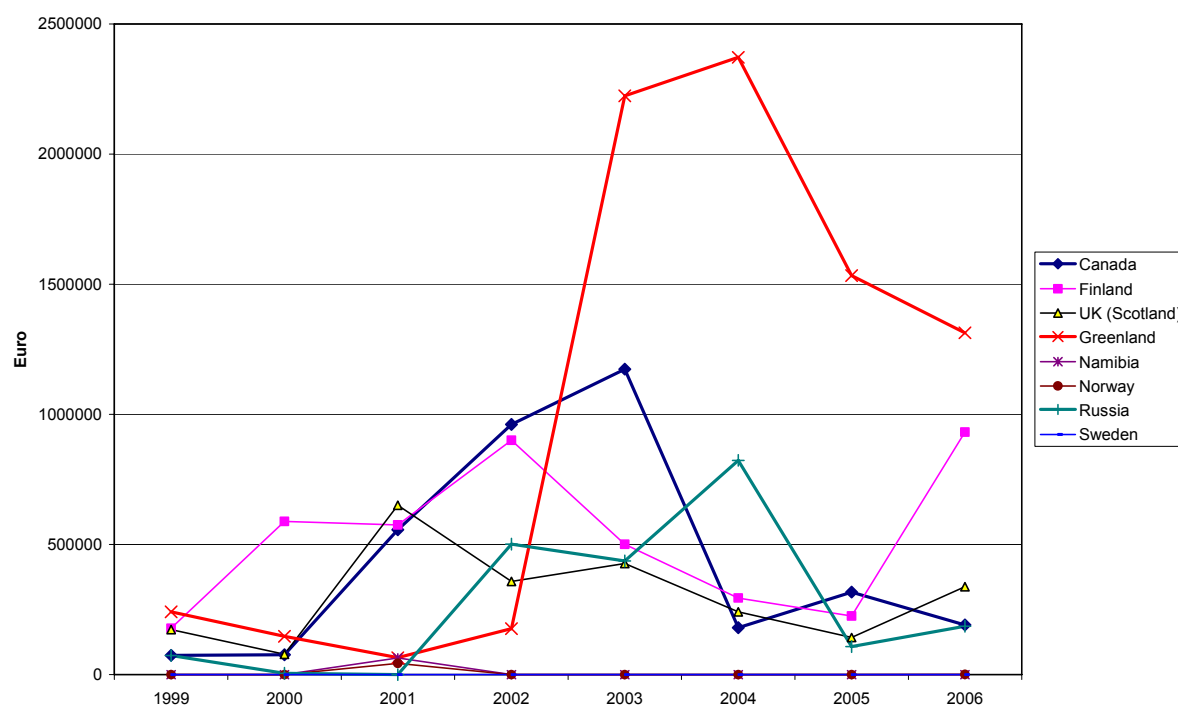
Source: Eurostat external trade database.

Note: Sum of codes 43021941, 43021949, 43023051 and 43023051 (see Table 5.1.1).

The description of the baseline for the trade impact analysis has until now concentrated on the situation in 2006. However, as Figure 5.1 and Figure 5.2 show the situation has not been stable in the period 1999 to 2006³³ for which Eurostat supplies data. Hence, the possible fluctuations in trade figures - which can be due to good or bad hunts and other factors - must be kept in mind when trying to access the impacts on trade from potential EU policy measures.

³³ Eurostat trade data for 2007 are still incomplete.

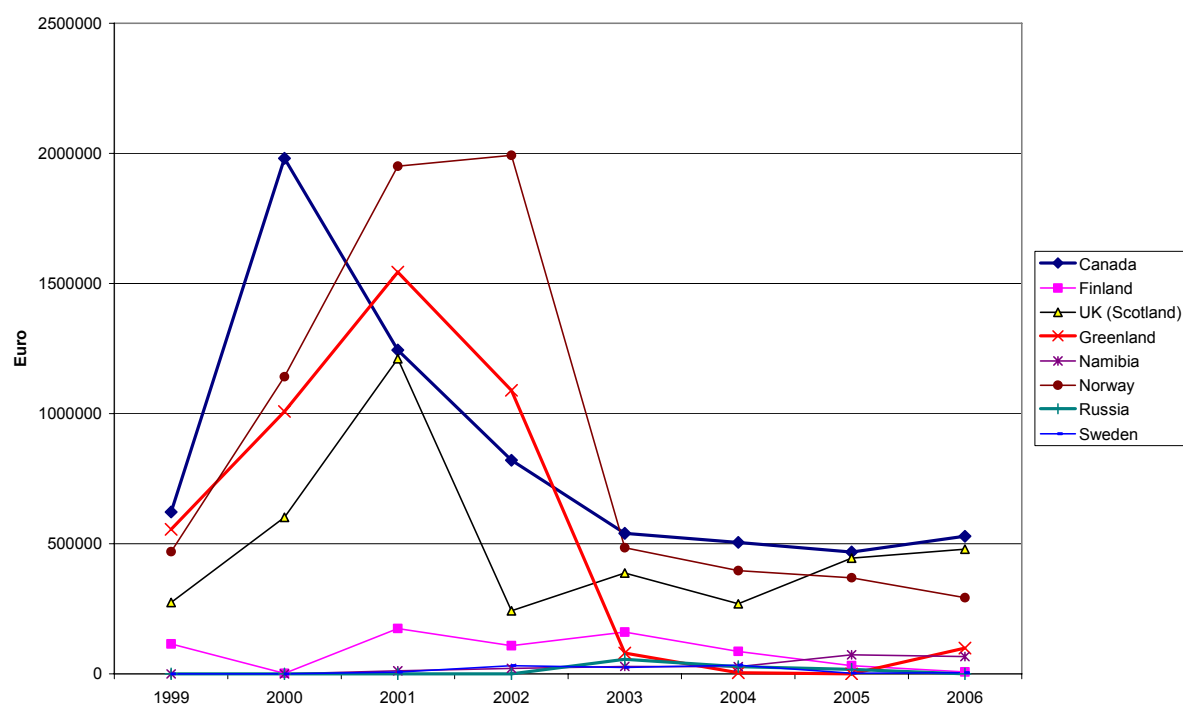
Figure 5.1 Import of raw furskin to EU-27 from 8 range states, Euro, 1999-2006



Source: Eurostat external trade database.

Note: Sum of codes 43017010 and 4317090 (see Table 5.1.1).

Figure 5.2 Import of tanned or dressed furskin to EU-27 from 8 range states, Euro, 1999-2006



Source: Eurostat external trade database.

Note: Sum of codes 43021941, 43021949, 43023051 and 43023051 (see Table 5.1.1).

Range state export data

While the trade data from Eurostat are sufficient to describe the situation for the EU-27 Member States - hereunder the range states: Finland, UK and Sweden, they do not fully cover the trade of the non-EU range states: Canada, Greenland, Namibia, Norway and Russia. In particular, the exclusion in the Eurostat trade data of goods that are placed in a customs warehouse (purely for storage) or given temporary admission for trade fairs, temporary exhibitions, tests etc. is to some extent inappropriate for these exporters since they actually consider these EU traders as importers of their goods. On the other hand, further EU restrictions on such transit trade might not be that severe - depending on how easily this part of the trade can be shifted to a non-EU country.

To ensure the most recent picture, as seen from the different range states' viewpoint, the data used in the following are to the extent possible based on national sources - i.e. the national statistical offices.

Table 5.2.6 below shows Canadian export figures provided by Statistics Canada. While the exports of raw furskins of seals are specifically available, the tanned or dressed furskins are contained in a group of not-elsewhere-specified (nes) furskins. However, the data are considered sufficient for an indication of the Canadian dependence on the EU for its exports.

First and foremost, the table shows that in 2006 more than 60% of the raw furskins of seal was exported to Norway, while around a third to the EU - in particular Germany (mainly transshipment in Frankfurt) and Finland. As mentioned earlier the exports to these two EU Member States are not registered as imports by Eurostat since this part is considered as transit i.e. the goods are placed in a customs warehouse (purely for storage) or given temporary admission for trade fairs, temporary exhibitions, tests etc. The remaining 6.5% of the exports go primarily to China - hereunder Hong Kong.

Furthermore, almost 60% of tanned or dressed furskins (nes) go to EU markets - mainly whole, not assembled skins, while the export of assembled pieces or cuttings of furskins is limited. Finland followed by Greece are the main EU importers, while both the US and Turkey are the largest non-EU markets - although these markets are mainly considered to be for other furskins than from seals.

Table 5.2.7 repeats the already described picture for Norway - i.e. that imports of raw furskins of seal are much more important than exports. Norway exported only 373 furskins of seal (amounting to around Euro 7,000) of which 12 were registered as EU import (see Table 5.2.3). In contrast, the import of sealskins amounted in 2006 to 107,604 skins. Hence, further restrictions of imports of raw furskins of seals to the EU will only have limited direct implications for Norway. However, the large export figures for tanned or dressed furskins, whole, not assembled, not mink, sheep, coyote (code 43021909, which include sealskins) show sensitiveness to further regulations for the more processed section of products.

Table 5.2.6 Canadian exports, Can\$, 2006

	430170 - Raw fur-skins whole - seal	430219 - Tanned or dressed fur-skins, whole, not assembled, nes	430230 - Tanned or dressed furskins - assembled pieces or cuttings
Austria	0	950	13988
Belgium	0	870	0
Bulgaria	0	0	0
Cyprus	0	0	0
Czech Rep.	0	32860	0
Germany	2091143	1711744	39586
Denmark	222556	371763	3716
Estonia	0	0	0
Spain	0	100682	32599
Finland	2964716	8744547	0
France	0	273418	0
UK	0	634873	5150
Greece	14529	6206711	183856
Hungary	0	293018	0
Ireland	0	0	0
Italy	0	615194	0
Lithuania	0	0	0
Luxembourg	0	0	0
Latvia	0	228528	0
Malta	0	0	0
Netherlands	0	0	3347
Poland	0	360614	0
Portugal	0	18140	0
Romania	0	0	0
Sweden	0	15364	12120
Slovenia	0	0	0
Slovakia	0	0	0
EU-27	5292944	19609276	294362
Norway	10042654	104690	20912
Namibia	0	18032	0
Greenland	0	11014	2128
Russia	0	1531820	12980
Other range states	10042654	1665556	36020
China	931452	834367	45270
Hong Kong	125105	2918163	33126
South Korea	2486	136274	28862
US	0	4136882	248630
Turkey	0	3825504	0
Other	0	409378	105411
Total	16394641	33535400	791681
EU-27 share	32.3%	58.5%	37.2%
Other range state share	61.3%	5.0%	4.5%

Source: Statistics Canada.

Table 5.2.7 Norwegian exports and imports, 2006

	Export, NOK	Export, skins	Import, NOK	Import, skins
43017000 - Raw furskins whole - seal	57200	373	49141040	107604
43021909 - Tanned or dressed furskins, whole, not assembled, not mink, sheep, coyote	107089127	..	15433012	..
43023000 - Tanned or dressed furskins, assembled	347320	..	8026126	..

Source: Statistics Norway.

Table 5.2.8 indicates that around a fourth of Greenland's export goes to the EU market - i.e. an export of raw furskins of seal of around Euro 5 million compared with a registered EU import of Euro 1.3 million - excluding goods in transit (Table 5.2.2). Putting the size of this export into perspective shows that it amounts to around 1.7% of total Greenlandic exports - that are dominated by the prawn industry with around 53%.

Table 5.2.8 Greenlandic exports, 2006

	Export, DKr
Raw furskins whole - seal	36949000
Products of seal skin	903000
Total	37852000

Source: Statistics Greenland.

There do not seem to be any immediately available Namibian national data sources that can shed further light on the Namibian exports of seal products. However, the cape fur seal (at least until recently) is considered an Appendix II by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Appendix II lists species that are not necessarily now threatened with extinction but that may become so unless trade is closely controlled.

Table 5.2.9 shows the Namibia exports of cape fur seal skin for 2006 - measured as imports to different countries where Namibia stands as the direct exporter or as the origin of the seal skins imported. The table shows (like Table 5.2.5) that Greece is by far the most important EU market for Namibia. However, Turkey, Norway and Hong Kong were in 2006 even more important markets.

Table 5.2.9 *Namibian exports, no of skins, 2006*

Number of cape fur seal skins	
Germany	336
Denmark	150
Greece	13550
Italy	300
Poland	1
EU-27	14337
Norway	15177
Canada	6510
Other range states	21687
Hong Kong	14684
Turkey	17813
Total	68521
EU-27 share	20.9%
Other range state share	31.7%

Source: CITES trade statistics derived from the CITES Trade Database, UNEP World Conservation Monitoring Centre, Cambridge, UK.

Table 5.2.10 finally shows the exports from the three EU range states, Finland, UK (Scotland) and Sweden in 2006 - i.e. the exports registered by these member states as not being transit trade. Hence, the data do, for example, not comprise the sales of raw furskins to Italy from Finland - as registered by Italy (see Table 5.2.4), since they originate from outside the EU, mainly Canada.

Table 5.2.10 *Exports by Finland, UK (Scotland) and Sweden, Euro, 2006*

		Finland	UK (Scotland)	Sweden
43017010	Raw furskins - whitecoat pups of harp seal or blueback pups of hooded seals	0	0	0
43017090	Raw furskins - other seals	0	3052	12098
43021941	Tanned or dressed furskins - whitecoat pups of harp seal or blueback pups of hooded seals - not assembled	0	0	0
43021949	Tanned or dressed furskins - other seals - not assembled	72238	298995	80
43023051	Tanned or dressed furskins - whitecoat pups of harp seal or blueback pups of hooded seals - assembled	0	0	0
43023055	Tanned or dressed furskins - other seals - assembled	0	24469	0
43031010	Articles of apparel and clothing accessories - whitecoat pups of harp seal or blueback pups of hooded seals	6016	0	9379
Total		78254	326516	21557
	<i>Share of exports to EU</i>			
43021949	Tanned or dressed furskins - other seals - not assembled	2.5%	38.1%	100.0%
Total		2.3%	34.8%	0.4%

Source: Eurostat external trade database.

The figures therefore represent the export of nationally produced goods threatened by new EU policy measures - while excluding the activities of the traders of transit goods. However, for Finland and Sweden only a limited share of this

export is sold to other EU Member States. In regards to UK, it is surprising that the has export of raw seal skins as neither commercial nor recreational hunt is legal.

For the last range state covered by this study, Russia, it has not been feasible for the study team to obtain additional trade data from national Russian sources. Such lack of Russian information is also reflected in the respective description of the range state seal hunt management system (see Section 3.5.1). Hence, any assessment of the trade impacts of policy measures for Russia will have to rely on other available information.

Local economy

From trade to local economy

It must firstly be reemphasised that because the potential EU policy measures predominantly focus on prohibitions of prohibition of placing on the market or of imports/exports of seal products, the impacts will foremost be direct for the trade situation. Hence, the impacts on local economies are mainly derived from the impacts on trade. The focus here is thus on how this impact will be felt by certain groups of the society - i.e. from a distributional impact viewpoint.

Limitations to local economy assessment

Before looking further into local economy issues to address in the impact assessment, it is important to acknowledge the limitations to a local economy assessment of changing production and sales of seal products.

Firstly, there is no unambiguous definition of local economy - although for the seal hunt issue the interest is centred around often small coastal communities. Secondly, to reach at widely-accepted analyses for such local economies it is beneficial to base the analyses on official data.

Table 5.2.11 gives - but not surprisingly - a somewhat discouraging picture, when it comes to the feasibility of carrying out assessment of impacts for local economies that are dependent on seal hunting or seal product manufacturing. However, this picture is in itself valuable for the policy makers - i.e. that not all envisaged impacts can be fully assessed, and so any policies will have to be based on limited information.

Table 5.2.11 *Local-economy coverage in range state statistics*

Range state	Local-economy coverage	Usability for this study
Canada	Canada is administratively divided into 10 provinces and 3 territories. This classification is also adopted by Statistics Canada - while data for sub-regions (some very small in size) are available for a number of data sources. However, industries/occupations are not distinguished in detail at the very detailed geographical level. Actually seal hunt is generally comprised with 'fishing' in the adopted industrial classifications.	It is not feasible from Statistics Canada to identify the sealing communities - but if they are identified elsewhere (e.g. via landings provided by the regional offices of the Department of Fisheries and Oceans); data from e.g. censuses provide good population and economy descriptions for fairly small geographical areas.
Finland	Finland is administratively divided into 10 regions (and 77 sub-regions) and further into 416 municipalities - many of which are very small. The part of the Finnish employment statistics - from Statistics Finland - that is based on administrative registers can provide data on a very detailed local economy level - although with seal hunting and seal product manufacturing as part of the broader definitions: hunting and tanning or dressing or fur.	Similar to for Canada - i.e. if the extent of seal hunting can be attributed to the local economies, these can be fairly well described by official data, hereunder from administrative registers.
Greenland	Greenland is divided into 14 municipalities - for which Statistics Greenland provides a number of data variables, hereunder landings of sealskins in amounts and values.	Although data are available on the landings of sealskins by municipality - the mere size of Greenland means that a municipality hardly can be characterised as a local economy.
Namibia	Namibia is divided into 13 regions and further divided into 107 constituencies. Socio-economic data at these geographical levels exist from censuses only - the latest from 2001 and the next due in 2011.	Although there are good indications of where seals are landed in Namibia, other information about these local economies is too scarce for further analysis.
Norway	Norway is divided into 19 counties and 434 municipalities - many of which are very small. Statistics Norway provides much socio-economic data at the municipality level - although seal hunting is generally comprised within agriculture and hunting.	There seem to be good indications from different reports regarding where seal hunting takes place - and this information can be combined with socio-economic data from Statistics Norway.
Russia	Russia is divided into 89 federal administrative districts. The Federal State Statistics Service provides - partly via its regional offices - statistics for these administrative units, while some data also are available at a sub-regional level. There appears to be no coverage of seal hunting.	The availability of Russian data is insufficient for any local economy analysis.
Sweden	Sweden is divided into 22 counties and 288 municipalities. The part of the Swedish employment statistics - from Statistics Sweden - that is based on administrative registers can provide data on a very detailed local economy level - although with seal hunting and seal product manufacturing as part of broader categories.	Similar to for Finland - i.e. if the extent of the limited seal hunting can be attributed to the local economies, these can be fairly well described by official data, hereunder from administrative registers.
UK (Scotland)	Scotland consists administratively of 33 counties. The Central Register Office for Scotland provides data for this level mainly on population - and for some data even for so-called settlements and localities. The UK National Statistics provide other socio-economic data such as employment by county - but not sufficiently disaggregated to identify seal hunting.	If the extent of seal hunting can be attributed to local economies, these can be combined with socio-economic indicators - to be established on the basis of the available statistics.

Baseline for local economy assessment

The above limitations regarding the exact definitions of local seal hunt dependent economies and their descriptions via statistics imply that there is only little local economy information to investigate when addressing a baseline for an assessment. Furthermore, it must be emphasised that such information is not fully

comparable between the range states - and for some range states, particularly Namibia and Russia, the information cannot be obtained. In other words, it is not possible to produce balanced range state baselines.

Instead the socio-economic contexts presented for each of the eight range states in Chapter 3 - that again are based on various obtained documents, stakeholder information etc. - provide information that can help to establish a picture of possible local economy impacts of a decrease in the sales of products from seals. Table 5.2.12 shows that this information touches upon three issues: the extent to which there are local economies that depend on seal hunting, the general economic/employment situation in such economies compared with the rest of the countries, and whether there are alternative income sources to substitute any declines in incomes for sealing. With respect to the latter, the level of subsidies (if any) to sealing (communities) should also be considered - i.e. whether they will be increased to compensate for any income declines; although this is an issue of the range states regional income redistribution policies. The table indicates that local-economy concerns predominantly are found in Canada and Greenland.

Table 5.2.12 Seal product dependent local economy characteristics in range states

	Canada	Finland	Green-land	Namibia	Norway	Russia	Sweden	UK (Scotland)
Income from sealing	15-35% of local economy	insignificant	50% of households hold licences		only 3 to 5 vessels participate		insignificant, only 50 hunters	insignificant
Unemployment	30pp above national level							
Alternative income		tourism	24% of hunters have additional occ.	eco-tourism	tourism	sales go to non-EU		tourism

Source: Chapter 3.

The information in the above table can with right be regarded as too scarce for a local economy assessment. Table 5.2.11 did, however, indicate that for several of the range states it seems to be possible to make some further estimates for the above three local economy characteristics by a combination of identifying sealing communities and using official regional data. Furthermore, some of these official data sources do also for some variables distinguish between rural and urban areas - where the former could represent communities such as sealing communities.

The recommendation is here, however, here that such estimates are too unreliable for good indications of which local economies will be affected how much by different policy measures. It is considered more appropriate - as mentioned above - to assume that the assessed trade impacts in particular affect local economies - and in this way establish any differences between the impacts of local economies in the range states.

Inuit population

As emphasised in Section 1.4 in the introduction, it is clear that there are diverging opinions on who the Inuits are and what constitutes traditional hunting methods. However, it is acknowledged that seal hunting, irrespective of the methods used, is a part of the cultural inheritance of certain people and certain regions.

The impact on the Inuit population from any policy measures will therefore be in line with the impact on the local economy. Although, the impact might differ if the policy measures accept the use of traditional hunting methods and/or allows sales of seal products made by the Inuit population. However, the experience from the EU ban on sealskins from 1989 which excluded this part of the hunt is that policy measures that have adverse impacts on the image of seal skins and other seal products will have a negative impact on the Inuit population anyway.

5.3 Impact of prohibition of placing on the market of skins of seals and products derived therefrom

Resuming from Chapter 4 and the above sections, the policy measures addressed by the impact assessment will not comprise specific references to elements of the seal hunt management systems. In any case the assessments of the impacts will not entail a level of preciseness where the impacts can be directly attributed to a very specific characteristic of a management system. Furthermore, any impacts assessed will be based on various sources of different quality.

The types of policy measures are analysed one by one in the following, where the descriptions of the impacts to the extent feasible distinguish between the range states and the rest of the EU. Furthermore, the impacts can be interpreted to concern the period of implementation and the immediate period after - i.e. before e.g. any redirection of trade takes place.

The first measure - which is clearly a legislative measure - concerns a ban on the products physically within the EU territory that are made available and destined for the first time for distribution or direct sale in the EU market. Hence, the measure does not ban goods in transit - such as the large transshipments of seal skins taking place in Germany (mainly Frankfurt). Furthermore, products that are manufactured the EU territory but intended for export outside the EU are not covered.

Minor impact on EU Member States ...

Table 5.3.1 shows that a total prohibition of placing on the market is assessed to have minor impacts on the EU Member States. This minor impact assumes, however, that transshipments of sealskins and other seal products, and imports of sealskins for further processing and exports continue. The sealing in Finland and Sweden is anyway mostly characterised as having cultural and recreational roles in the coastal communities, rather than being trade oriented. Furthermore, in the UK (Scotland) the hunt is targeted at the killing of seals in the vicinity of

fishing, rather than for the use of the skin. However, the UK does process seal-skins where more than a third of this produce is sold on the EU market.

Table 5.3.1 Impacts of prohibition of placing on the market of skins of seals and products derived therefrom - EU Member States

Finland	Sweden	UK (Scotland)	Other EU
<u>Minor</u> - for sealers and seal product manufactures since only a small share is sold on EU markets.	<u>Minor</u> - for sealers and seal product manufactures since only a small share is sold on EU markets.	<u>Medium</u> - since more than a third of seal product exports go to other EU Member States; but no impact on local communities.	<u>Minor</u> - although some impact for a few manufactures of fur of sealskin in Denmark, Italy and Greece i.e. with respect to the sales on the EU market, since they still can import sealskins for manufacturing and sales to non-EU countries.

Source: COWI assessments.

... but slightly more non-EU range states

Table 5.3.2 shows that the impacts are assessed to be slightly higher for the non-EU range state. This is merely a result of that the sizes of the seal hunt in these countries are much larger than in the EU range states, and that the EU market - apart from for Russia - is of some importance. The assessment does not take into account the signal value, i.e. image effect, that an EU ban will have on the use of product of seal products - hereunder price levels if the products go out of fashion.

Table 5.3.2 Impacts of prohibition of placing on the market of skins of seals and products derived therefrom - non-EU range states

Canada	Greenland	Namibia	Norway	Russia
<u>Medium</u> - since a large share of exports to EU is for re-export outside the EU, but the significant amount that ends up in Italy via Finland will be affected to the extent the Italian produce is sold on the EU market.	<u>Medium</u> - since a fourth of exports are designated EU markets - and so local sealing communities will be affected.	<u>Medium</u> - since a fifth of exports are designated EU markets - and so local sealing communities will be affected.	<u>Medium</u> - covering no impact regarding raw sealskin exports and thus sealers in the local communities, while there is a significant export of tanned or dresses skins to the EU.	<u>Minor</u> - since few seal Russian seal-skins are assessed to end up on the EU market.

Source: COWI assessments.

Only products of harp and hooded seals

While a prohibition of market access for seal products will reduce the size of the hunting and thus the number of seals suffering - and thus increase animal welfare of seals - the 2006 declaration from the European Parliament actually focuses on the regulation of import, export and sale of products from harp and hooded seals only. Table 5.3.3 indicates that a limitation to these two species will relieve the negative impacts for Namibia and somewhat for Greenland. In contrast, the measure will almost fully affect the Canadian and Norwegian hunts.

Table 5.3.3 Number of seals caught in 2006

	Canada	Finland (2005)	Green- land (2005)	Namibia	Norway (2004)	Russia	Sweden	UK ⁽¹⁾ (Scotland)
Harp and hooded seals	354744	0	94447	0	15295	na	0	not relevant
Total seals	355521	514	184220	83100	15597	na	100	not relevant
Share of harp and hooded	99.8%	0.0%	51.3%	0.0%	98.1%	na	0.0%	not relevant

Source: Chapter 3.

Note: ⁽¹⁾ The hunt is targeted at the killing of seals in the vicinity of fishing, rather than for the use of the skin.

Prohibition - if not taken through measures that meet established standards for the hunting of seals

As mentioned several times already, the presentation of the seal hunt management systems in Chapter 3 provides - together with the results of the EFSA opinion - a basis for identifying 'best practices' or 'worst practices' of the hunt that can be used for establishing standards for the hunting of seals. Such precise references to practices have, however, still to be developed. Since the above assessed prohibition of placing on the market mainly have an impact on the non-EU range states, such limited measure will only make a real difference if it addresses elements of the hunt in these range states.

5.4 Impact of prohibition of imports into the Community of skins of seals and products derived therefrom

The second measure - which also is a legislative measure - prohibits any seal skins or seal products to enter the customs territory of the Community (with exception of imports of non-commercial nature). Similarly, seal skins and seal products may not leave the customs territory.

In principle, such formulation of a measure does not cover goods in transit - i.e. that are placed in a customs warehouse (purely for storage) or given temporary admission for trade fairs, temporary exhibitions, tests etc. However, some might argue that banning imports on the basis of public morality might not be go well together with allowing such transshipments. Hence, the below assessment looks also into the impact of extending such a ban to transit trade.

Medium impact on EU Member States ...

Table 5.4.1 shows that a total prohibition of imports and exports will have medium impacts on the EU Member States, although the impacts are considered significant for Finland and Germany if such ban is extended to also cover transit trade. Apart from this, the impacts of this measure are not expected to differ much from the impacts of a prohibition of placing on the market. However, a combination of the two measures - must be recognized to be the most comprehensive measure - will have some impact.

Table 5.4.1 Impacts of prohibition of imports (and exports) into the Community of skins of seals and products derived therefrom - EU Member States

Finland	Sweden	UK (Scotland)	Other EU
<u>Medium</u> - although the trade in Finnish product is small and exported to outside the EU, the trade of Canadian skins e.g. for the Italian market will partly cease.	<u>Minor</u> - for sealers and seal product manufactures, although most Swedish products are exported to outside the EU.	<u>Medium</u> - since more than 60% of seal product exports go outside the EU; and the UK also has a trade in non-UK skins for the Italian market, and some to Greece and Poland.	<u>Medium</u> - impact for a few manufactures of fur of sealskin in Denmark, Italy and Greece i.e. they will have to reduce production or shift to other types of skin.
<i>if extended to transit:</i> <u>Significant</u> - since the large transit trade, not only for the EU market, will cease.	<i>if extended to transit:</i> <u>No difference to above</u>	<i>if extended to transit:</i> <u>No difference to above</u> - since the limited transit trade seems to be for the EU market.	<i>if extended to transit:</i> <u>Significant</u> - since the large transit trade - primarily in Germany (Frankfurt), not only for the EU market, will cease.

Source: COWI assessments.

... but slightly more non-EU range states

Similar to for the prohibition of placing on the market, Table 5.4.2 shows that the impacts are assessed to be slightly higher for the non-EU range state. This is again merely a result of that the sizes of the seal hunt in these countries are much larger than in the EU range states, and that the EU market - apart from for Russia - is of some importance. However, if the ban is extended to transit trade Canada will in particular suffer unless this trade can be shifted away from Germany and Finland to outside the EU e.g. Norway. Hence, Norway may actually strengthen its position as a transit trader.

Table 5.4.2 Impacts of prohibition of imports (and exports) into the Community of skins of seals and products derived therefrom - non-EU range states

Canada	Greenland	Namibia	Norway	Russia
<u>Medium</u> - since a large share of exports to EU is for re-export outside the EU, but the significant amount that ends up in Italy via Finland will be affected.	<u>Medium</u> - since a fourth of exports are designated EU markets - and so local sealing communities will be affected.	<u>Medium</u> - since a fifth of exports are designated EU markets - and so local sealing communities will be affected.	<u>Medium</u> - covering no impact regarding raw sealskin exports and thus sealers in the local communities, while there is a significant export of tanned or dresses skins to the EU.	<u>Medium</u> - since the Russian market take in a large share of EU exports.
<i>if extended to transit:</i> <u>Significant</u> - since the large transit trade, not only for the EU market, will cease - unless it can be shifted to a non-EU country e.g. Norway	<i>if extended to transit:</i> <u>No difference to above</u>	<i>if extended to transit:</i> <u>No difference to above</u>	<i>if extended to transit:</i> <u>Positive impact</u> - since the position as transit trader might be strengthen e.g. more Canadian skins.	<i>if extended to transit:</i> <u>No difference to above</u>

Source: COWI assessments.

5.5 Impact of labelling system

The third measure can both be legislative and non-legislative - i.e. a harmonised, mandatory labelling system or a voluntary labelling systems / development of voluntary standards. In the present context any such label should refer to the animal welfare aspect of the seal hunt and thus to some established standards for the hunting of seals. However, as mentioned above regarding the possibility of a limited ban on placing on the market of seal products - precise references to 'best practices' or 'worst practices' of such hunt have still to be developed.

Possible impacts

However as described in Chapter 4, it is envisaged that benefits from such labelling systems might include a price mark-up on the consumer market and at the same time help to increase the image of seal hunting in general. If the system is voluntary it might encourage a natural self-selection process regarding compliance and thus maintain the balance between the environmental, economic and social dimension - i.e. those who pursue the label might benefit more than it costs, and the welfare of the seals is enhanced.

Furthermore, it is assessed that the impact will be largest if it is a widespread international labelling system rather than a specific EU system.

Finally as presented in Chapter 6, only around 5% of all respondents to the public consultation carried out within this study favour labelling as the preferred policy measure, while 80% favour a ban. 4.2% favour a label that informs the consumer that the product contains elements derived or originating from seals; while 1.2% favour a label that informs consumers of where the seal products come from. This indicates that it is unlikely to be straightforward to design a labelling system that will be acceptable for the majority of the population.

Experience of the International Fur Trade Federation

In 2007, the International Fur Trade Federation launched a new international labelling programme as part of its ongoing commitment to transparency. The Origin Assured label (OA) informs consumers that the fur or fur product comes from a country where national or local regulations or standards governing fur production are in force (<http://www.originassured.co.uk/>). The OA programme is a joint initiative between International Fur Trade Federation (IFTF), American Legend Cooperative, Finnish Fur Sales, Copenhagen Fur and North American Fur Auctions.

The OA labelling system is still so new that there are no evaluations of the label's impact on the sales of fur - and thus on the welfare of the animals. However, it is recommended to keep an eye on future experiences gained - as inspiration for a possible EU labelling system.

5.6 Impact of other measures

Finally, the EU may pursue other measures in order to improve the animal welfare aspects of the seal hunt. These are in brief:

Bi-/multilateral agreement(s) with range states

Bi-/multilateral agreements between the EU and one or more range states could be made, which could enlarge the geographical area not to be covered any legislative measures. The impact will be similar to that of a limited ban that allows trade if the hunting of the seals complies with some established standards as discussed above.

Table 5.6.1 provides a rough assessment of the impacts on the non-EU range states from bilateral agreements with the EU that excludes them from any prohibitions of imports and of placing on the market of skins of seals and products derived therefrom. In other words, how would the single range state be affected if the prohibitions only regard the other four range states? This result will of course be slightly different if more range states are exempted from such prohibitions via a multilateral agreement - i.e. no change to the present situation if all range states are covered by the multilateral agreement. The assessment - which must be taken with a grain of salt - points to minor positive impacts of being favoured compared to competing seal product producers. Greenland could be the largest beneficiary of being 'included in the EU', while Namibia and Russia are likely to experience the lowest impacts of such favouritism.

Table 5.6.1 Impacts of bilateral agreements with non-EU range states - excluding them from prohibitions of imports or placing on the market

Canada	Greenland	Namibia	Norway	Russia
Minor positive impact of shifting a part of the trade away from Asian markets to a higher-priced EU market, which suffers from the falling supply from the other range states. The positive impact will be somewhat offset by a decline in the exports of raw furskins to Norway that were destined for further processing and sales on the EU market.	Medium positive impact from selling a larger part of the raw furskins to a higher-priced EU market, which suffers from the falling supply from the other range states.	Minor positive impact in the niche EU markets for cape fur seal skins. However, it is likely that the EU market will completely change if all of Canadian, Greenlandic, and Norwegian produce are excluded; and so the assessment is very uncertain.	Minor since Norwegian processors of raw seal skins see an increase in the EU market share of processed seal skins. However, these producers are likely to suffer from the non-available supply of Canadian raw furskins.	Minor positive impact since the EU market is not central for Russia. Furthermore, it is likely that the EU market will completely change if all of Canadian, Greenlandic, and Norwegian produce are excluded; and so the assessment is very uncertain.

Source: COWI assessments.

Development of guidelines by an internationally recognised organisation

A non-legislative measure such as guidelines developed by an internationally recognised organisation would probably have a similar effect as a voluntary labelling system. Such guidelines could comprise best practices on seal hunting methods and seal hunt management systems - and in this context build upon the results of this study and the EFSA opinion. However, it is difficult to point out an organisation that could be labelled 'internationally recognised'.

Information campaigns

An EU information campaign targeted at consumers can, for example, benefit from the results of the public consultation carried out within the present study, while a campaign targeted at seal hunters and producers can, for example, benefit from the above mentioned guidelines. It is, however, difficult to say how information campaigns will affect the trade-offs across the economic, social and environmental dimensions - while such campaigns might seek to make improvements with respect to all three dimensions.

Public consultation
via the IPM tool

6 Public perception of seal hunt

A public consultation was conducted in the period 20th of December 2007 to the 13th of February 2008 via the Commission's Interactive-Policy Making (IPM) tool. The consultation provided the possibility of EU citizens as well as non-EU citizens to express their view on regulation of seal hunting - as an input to the policy process of the European Commission. Text-box 6.1 provides an overview of the content of the questionnaire used in the consultation process.

Text-box 6.1 Overview of content of questionnaire

The questionnaire contained 15 questions and were divided into:

- Introduction part informing about the background of the consultation process (the initiatives of various EU Member States, the European Parliament declaration) as well as presenting basic information on the seal hunting and the status of the various seal populations throughout the world.
- Questions on personal information (name, age, residence, etc.).
- Questions on the respondent's interest in seal hunting; attitude towards seal hunting compared to other ways of using natural resources; perception of killing of wild animals compared to slaughter of farm animals; questions on the weighing between animal welfare compared to concern over local communities; perceptions of killing methods; perceptions on how to use the hunted seals; perceptions on acceptability of seal hunting with reference to character of the hunter; attitudes towards regulation of seal hunting; and the respondents suggestion to decision-makers at European level on possible legislative measures to regulate the import of seal products of third countries where a choice should be made between five options:
 - 1 No supplementary measures needed
 - 2 A label that informs the consumers that the product contains elements derived or originating from seals, so that consumers can make the choice as to whether they wish to purchase a product which contains, for example, seal skin or seal oil
 - 3 A label that informs the consumers of where the seal products come from, so that consumers can make the choice of whether to purchase the product or not
 - 4 Only those seal products which come from countries where seal hunting is regulated and monitored with regard to animal welfare should be admitted on the European market
 - 5 The placing on the market of seal products, wherever they come from, should be banned

Representativeness
cannot be guaranteed

The consultation process shows the attitudes of those who responded - not necessarily of the entire populations. Analysing the results from the consultation, the scope of the consultation must therefore constantly be kept in mind. This

consultation does neither claim to provide an overview of the general opinion towards seal hunt of the citizens of Europe, nor a policy recommendation from the general public.

6.1 Questionnaire results

73,153 answers!

The European Commission received 73,153 answers to the public consultation from citizens in 160 different countries worldwide. The number is extremely high comparing with former consultations on animal welfare issues. In 2002, a consultation on "Protection of animals during transport" mobilised 4,141 respondents, and the consultation on the "Community Action Plan on Animal Welfare and Protection" from 2005 mobilised 44,491 respondents. This might on the one hand indicate that the awareness of the IPM tool and possibility to participate in consultation is increasing, but it might also indicate increased awareness on animal welfare issues. Also to be noted: a number of organisations have encouraged their members to participate in the consultation process and even provided guidelines to members/supporters on how to fill in the questionnaire. The huge interest in the consultations process was facilitated by the involvement of celebrities like Paul McCartney who encouraged participation.

6.1.1 Results for all respondents

General characteristics of respondents

Table 6.1.1 provides an overview of the characteristics of the respondents.

Table 6.1.1 General characteristics of the respondents

Number of respondents	73,153
Age	80% of the respondents are between 25 and 65
Urban/rural inhabitants	Approximately 50% of the respondents live in cities with more than 100,000 inhabitants, 17.6% live in rural areas
Hunters	4.4% of the respondents are hunters

Hunting vs. slaughter

The respondents are divided in two equal groups on the attitude towards hunting vs. slaughter. 46.5% find that there is a principal difference between the killing of wild animals and the killing of animals in slaughter houses, while an almost similar number of respondents do not see this difference (42.2%). Of the 42.2%, a majority of the respondents state that "killing an animal in the slaughterhouse causes an equal level of distress, pain and suffering" and thus there is no difference between killing in slaughter houses and in the wild. Only 7.1% state that it is acceptable to kill both wild and farmed animals for human use. Among the respondents (46.5%) that do see a difference between killing animals in slaughter houses and in the wild, a majority (56.6%) states that wild animals should not be killed for human use.

Seal hunting - similar to other usages of natural resources?

A majority of the respondents (63.7%) regard seal hunting to be different from making use of other natural resources. A clear majority of these (87.4%) state the reason to be that "hunting seals to use for fur and other non-essential products is not justified". This indicates that seal hunt is perceived to be driven by

the market for luxury goods, and that this is not accepted by the respondents. Less than 20% of all respondents argue that there is no difference between using seals and other sources of natural resources. The age of the hunted seals does not seem to be decisive for the respondents' attitude towards seal hunt as 76.3% of the respondents state that seals should not be killed, irrespective of their age. In contrast, 4.7% state that it is acceptable to hunt seals at any age. Hunts of adult seals are accepted by 7.1% of the respondents.

Possible knowledge gap on hunting methods

The respondents were asked about the main methods for killing seals. Most respondents (79.2%) stated that hitting weapons are most commonly used (which is incorrect). Also the respondents consider the use of striking weapons as the least acceptable and the least appropriate to avoid unnecessary pain, distress and suffering of the seal. This is not fully in line with the conclusions made by the EFSA opinion (EFSA, 2007) - according to which psychical hitting can be acceptable if exercised correctly. This finding therefore indicates a possible discrepancy between the perception of hunting methods and the facts. Shooting was regarded by the respondents to be the most appropriate killing method and the EFSA opinion considers likewise shooting to be appropriate when used correctly.

The struck and lost rate is also a factor when looking at the acceptability of the hunt. 60% of the respondents state that seal hunt can never be acceptable, no matter how low the struck and lost rate is; whereas 21.4% state that seal hunt is acceptable if there is no struck and lost or the rate is below 5%.

Acceptability of different uses of seal products

66.7% of the respondents state that all use of seal products is unacceptable and 15.9% state that it is most acceptable to use the whole seal, i.e. skins, meat and oil. Only a marginal part of the respondents accept to use parts of the seal, i.e. only skins and meat (0.9%) or either skin (0.1%) or meat (2.1%). Thus, it matters if seals are used for luxury clothing or food - and it is most acceptable to use the entire animal than just parts of it. Hunt for meat is accepted by 2.1% of the respondents. Seal is mainly hunted for meat in small communities, i.e. in Greenland or arctic Canada and in some regions it is important for the subsistence of the hunter.

Attitudes towards animal welfare vs. local communities

The respondents show some ambivalence on the issue of concerns over animal welfare vs. concerns of the well-being of local communities. 58% state that animal welfare is equally important as well-being of local communities, while 27.9% find that animal welfare is more important than the interests of local communities. Only 1.3% find the interests of local communities as more important than animal welfare. The result of this question seen in relation to the question above on the use of the animal shows the complexity of the issue.

This is also reflected in the answers to the question about the hunter and his/her reason to hunt. 62.1% state that seals should not be hunted for any reason, whereas 17.6% state that hunting is most acceptable when the hunter belongs to a traditional seal hunting culture/community or depend on seal hunt for his main income. There is thus a greater level of acceptance of the hunt if it is embedded in a traditional seal hunting culture. Inuit seal hunt is in this context more acceptable than non-traditional seal hunting. This opens up for the discus-

sion of what constitute a traditional seal hunting culture. Does it only cover the Inuit or also non-aboriginal citizens of certain communities? Does it depend on how many years seal hunt has been carried out, the role of hunt in the society, the use of the product, the hunting methods or other dimensions?

As is has been described in previous chapters, non-industrialised hunts generally lead to a fuller use of the seal than industrialised hunts, e.g. the Greenlandic hunt where the whole seal is used vs. the Canadian hunt, where sealers are requested to use either skins or meat, but not both.

Attitudes towards various forms of regulation of seal hunt

There is a tendency to a higher level of acceptability of seal hunt if the hunt is firmly monitored. Table 6.1.2 shows that the share of respondents that do not fully refuse seal hunting is increased from 18.2% to 24.2% if there is not only a legal framework but also requirements for independent inspections of the hunt.

Table 6.1.2 Seal hunting is acceptable if regulated by law setting...

	..requirements for seal hunting methods	..requirements for seal hunting methods and requirements for independent inspections
Fully disagree	62.9%	58.5%
Partly disagree	5.1%	5.6%
Partly agree	6.5%	11.8%
Fully agree	6.6%	6.8%
Do not know	2.0%	2.0%

Note: Response rate is respectively 83.0% and 84.6% of the total number of respondents.
Percentage of answers out of the total number of responses i.e. 73,153.

Overview of attitudes towards a ban on placing on the market

The European Commission is considering a ban as well as alternative measures to the request of a ban from the European Parliament. The consultation shows that a very significant majority of the respondents want a ban on the placing on the market of seal product. A mere 3.2% of the respondents suggest that no supplementary measures are needed.

Characteristics of respondents favouring different policy options

Table 6.1.3 shows the characteristics and main opinions of the respondents relative to policy recommendation. It shows that there is:

A pro-ban group - the main characteristics of which are:

- By far the biggest group, counting around 80% of all respondents.
- Around 50% of the pro-banners come from two non-EU countries: the US and Canada.
- A high degree of the respondents live in larger cities (51.5%) and much fewer in rural areas (16.5%) - and very few (1%) of them are hunters. They see seal hunting as different from other forms of use of natural resources and an overwhelming majority of them are against all forms of seal hunting - although close to 10% accept seal hunting if it is firmly monitored.

A 'soft' measures group (favouring a standard or a labelling system) - the main characteristics of which are:

- Totals 12% of all respondents.
- At most dimensions this group shows characteristics in-between the pro-ban group and the non-ban group.

A non-ban group - the main characteristics of which are:

- Totals only 3.2% of all respondent. In this group respondents are mainly from EU countries respectively France, Sweden and Belgium.
- Only 32% of them live in larger cities while 40% live in rural areas. 70% of the latter are hunters and only 11% do not accept hunting in principle.
- Respondents do not see the use of seals as different to other forms of usage of natural resources. 70% finds that seal hunting is acceptable if undertaken within the context of a legal framework and with firm monitoring.

Table 6.1.3 Respondents favour different policy recommendations

	Characteristics of the group of respondents favouring....				
	Ban ¹	Standard ²	Label on content ³	Label on origin ⁴	No measures ⁵
Number of respondents preferring	56,989	5,910	3,037	891	2,377
Percentage of total number of respondents preferring this policy measure	79.8%	8.1%	4.2%	1.2%	3.2%
Three most represented countries of residence of respondents preferring this policy measure	US 45.8% UK 13.2% Ca 4.4%	US 35.5% UK 12.2% Ca 7.1%	US 37.3% UK 12.5% Ca 7.4%	US 25.1% Sw 16.7% Ca 9.3%	Fr 46.0% Sw 9.5% Be 8.4%
Respondents living in cities with more than 100,000 citizens	51.5%	49.0%	49.9%	41.9%	32.3%
Respondents living in rural areas	16.5%	19.0%	18.0%	23.6%	40.3%
Hunters	1.0%	8.0%	9.4%	26.7%	69.8%
Do not accept hunting in principle	76.2%	41.3%	54.4%	42.3%	10.9%
Seal hunt is different from use of other natural resources	68.8%	59.9%	60.7%	41.3%	7.6%
Seal should not be hunted – at any age	86.4%	40.9%	59.9%	44.8%	10.7%
Acceptable to hunt – at all ages	0.8%	8.2%	9.6%	27.3%	78.5%
Acceptable if hunting methods are regulated (agree/disagree)	5.2% /79.8%	52.1% /19.2%	37.2% /47.7%	53.6% /34.4%	85.8% /11.2%
Acceptable if hunting methods are regulated + independent inspections (agree/disagree)	9.5% /74.8%	74.8% /15.8%	46.0% /42.0%	47.7% /39.2%	69.7% /22.4%

Note: All numbers are given in percent except "number of respondents". The percentage reflects the answers of the respondents of the given policy measure. It is thus the percentage of the number of respondents in row 1, unless other is mentioned

¹The placing on the market of seal products, wherever they come from, should be banned; ² Only those seal products which come from countries where seal hunting is regulated and monitored with regard to animal welfare should be admitted to the EU market; ³ A label that informs the consumer that the product contain elements derived or originating from seals.; ⁴ A label that informs consumers of where the seal products come from; ⁵ No supplementary measures needed.

6.1.2 Results by geographic regions

Some regional differences found

Due to the large number of non-EU residents answering the consultation, a separate analysis of the results for respondents living in other regions has been carried out. Table 6.1.4 shows the responses of respondents living in EU 27, the range states in total and each range state namely Canada, Denmark hereunder Greenland, Finland, Namibia, Norway, Russia, Sweden and UK.

Table 6.1.4 Responses relative to geographical residence

	Characteristics of the group of respondents living in...									
	EU 27	Range states	Canada	Denmark	Finland	Namibia ¹	Norway	Russia	Sweden	UK
Number of respondents	32,061	15,984	3,533	467	767	5	336	267	1,492	9,087
% living in cities > 100,000 citizens	43.6%	46.1%	65.3%	44.5%	41.8%	60.0%	41.0%	94.4%	40.2%	38.8%
% living rural areas	22.1%	25.5%	14.2%	10.3%	18.4%	-	18.6%	0.4%	23.9%	32.6%
Hunters	7.6%	6.8%	4.9%	2.0%	16.5%	25.0%	20.8%	2.4%	43.7%	0.5%
Do not accept hunting in principle	72.5%	70.4%	65.6%	64.9%	48.6%	20.0%	46.7%	80.1%	35.1%	80.9%
Seal hunt is different from use of other natural resources	54.7%	59.2%	56.4%	58.7%	49.5%	20.0%	39.9%	68.9%	60.8%	66.9%
Seal should not be hunted – at any age	73.1%	72.1%	68.6%	70.9%	60.6%	20.0%	57.1%	79.8%	42.2%	79.9%
Acceptable to hunt – at all ages	8.2%	8.0%	8.2%	3.0%	19.4%	80.0%	45.9%	2.2%	38.1%	1.7%
Acceptable if hunting methods are regulated + independent inspections (agree/ disagree)	23.8% /59.1%	22.0% /62.1%		31.7% /54.6%	32.2% /54.2%	80.0% /20.0%	31.9% /53.8%	18.3% /60.3%	25.3% /46.6%	17.5% /65.7%
Ban	73.0%	73.4%	70.4%	57.4%	56.5%	20.0%	54.4%	79.0%	40.8%	82.7%
Standard	8.8%	11.1%	11.9%	27.8%	16.6%	-	16.9%	6.7%	20.0%	8.0%
Label: content	4.2%	5.5%	6.4%	6.6%	5.2%	40.0%	7.9%	4.1%	11.3%	4.2%
Label: origin	1.5%	2.4%	2.3%	2.1%	5.3%	40.0%	5.2%	1.9%	10.0%	0.8%
No measures needed	6.1%	3.7%	5.5%	2.8%	9.5%	-	13.4%	1.5%	15.1%	0.3%

Note: All numbers are given in percent except "number of respondents". The percentage reflects the answers of the respondents of the given policy measure. It is thus the percentage of the number of respondents in row 1, unless other is mentioned; ¹it should be noted that each respondent from Namibia get a disproportionately big influence due to the limited number of respondents.

Interesting differences and common features are found across the countries. These are:

- The aggregated responses from all the EU countries do not significantly differ from the answers from all the respondents - although the share of EU

respondents wanting a ban is slightly lower than for all respondents (79.8% total vs. 73.0% for EU citizens).

- Among the range states there are similarities in the responses from Finland, Norway and Sweden. The habitation patterns of the respondents are alike, and the share of respondents that accept hunting is above 50% in all countries, a result not seen in any other of the countries analysed. The share of respondents wanting a ban is in the range of 41%-57%; lowest for Sweden. On the other hand, there are parallels in the answers of the respondents in Canada, Denmark, Russia and UK.
- The UK stands out from the other range states in several ways. Firstly, it is the only country in the study that does not have a hunt for seals but kills seals for pest control, in order to reduce the damage of fisheries. Secondly, the number of respondents is significantly higher than from any range states. Thirdly, a high number of respondents are against hunt in principle just as a high number of respondents prefer a ban (82.7%).
- Regarding policy recommendations, over 50% of respondents in each single country - but Sweden and Namibia - prefer a ban, particularly respondents from Canada, UK and Russia. In the EU, 14.5% prefer alternative measures while 6.1% see no need for further measures.

6.2 Observations from e-mails submitted to the Commission

In addition to the questionnaire, around 1,350 e-mails were sent to the Commission. These e-mails can be divided into two subgroups:

Many standard letters received

Firstly, around 60% of e-mails forwarded to the Commission are standard e-mails, some of which were translated into different languages. In general, the main message of these is to ban all seal products. An example of this kind of e-mail is shown in Text-box 6.2.

Text-box 6.2 Example of standard e-mail submitted to the Commission in French and English

French: "Bien que j'eusse préféré que le questionnaire soit également disponible en français, je souhaite néanmoins exprimer mon opinion sur cette question. J'ai bien compris que le questionnaire a pour but de me demander quelle position j'aimerais voir prise par l'UE quant au commerce des produits dérivés du phoque. Je souhaite que l'UE prononce un embargo sur le commerce des produits à base de phoque car la chasse commerciale aux phoques est une pratique cruelle en soi. J'espère que mon opinion sera prise en considération. "

English: "Even though I would prefer that the questionnaire was also available in Dutch, I would still like to give my views on this issue. I understand the questionnaire asks what action I would like to see the EU take about the trade in seal products. I would like the EU to ban the trade in seal products because commercial seal hunts are inherently inhumane. I expect my views to be taken in to account."

Critical comments and elaborations to the questionnaire

Secondly, key messages from the e-mails are:

- Some respondents felt that the questionnaire did not reflect the opinion of some respondents, some of whom therefore have submitted an e-mail.
- The questionnaire was only available in English, and this was criticised.
- Several respondents stressed that it is wrong to hunt seals for financial benefit - pointing in particular to the Canadian seal hunt while others argued for a stop for any seal hunt whenever the purpose of the hunt. Words like "inhumane", "innocent" and "greed" are recurring. Furthermore, conservation is pointed to as a key reason for stopping the killing of seals.
- Many respondents have addressed a possible post-hunt situation arguing for the need to protect local societies depending on seal hunt, and promoting alternative careers and livelihoods.

6.3 Conclusions for public consultation

Massive criticisms of seal hunting

The high number of responses (questionnaires and e-mails) indicates that seal hunting is a very salient issue to a large number of citizens. The responses show massive dissatisfaction with current seal hunting practices - and a clear majority of respondents in nearly all the geographical areas analysed would prefer a ban. However, it is also clear that the majority of respondents reside in the Anglo-Saxon countries UK, US and Canada, and when looking at the results from respondents in other countries, the results are somewhat less stringent.

Regarding the policy recommendation, over 50% of respondents in each single country - but Sweden and Namibia - prefer a ban, particularly respondents from Canada, UK and Russia, whereas the Nordic range states show more diversified answers. In the EU 14.5% prefer alternative measures while 6.1% see no need for further measures.

Acceptability depends partly on seal hunting practices and motivations

The results show that many respondents are against seal hunting for principal reasons - which again may be rooted in a certain perception of the human-nature relation. However, the results also show that for some respondents the level of acceptability of seal hunting is influenced by how the seal hunt is managed and undertaken - and for what reasons. Hence, the results can also be used to develop a list of factors that - if fulfilled - will tend towards increasing the acceptability of seal hunting, namely:

- Motivation of hunt: Seal hunting undertaken for subsistence purposes are more acceptable than hunt for profit.
- The hunter: Seal hunting that are embedded in a traditional seal hunting culture is more acceptable than a hunt disconnected from local culture and communities.
- The use of the seal: Seal hunting that utilises the entire animal is more acceptable than seal hunting using only the skins (acceptance for use of skins only is under 1% - if the whole seal is used acceptance is over 15%).
- Enforcement and monitoring: Seal hunting is more acceptable if it is firmly monitored by an independent inspection authority.

- Struck and lost: Any seal hunting that lead to more than even a very low level of struck-and-lost is not acceptable to the respondents.

Gaps between perception and scientific knowledge

It is important in these conclusions to also highlight again the possible knowledge gap on hunting methods - i.e. public perception vs. scientific knowledge (EFSA findings) and linked thereto the attitudes towards animal welfare vs. local communities. These are quite striking and underline clearly the complexity of the seal hunting issue from an animal welfare perspective.

7 Conclusions and recommendations

7.1 Conclusions

Seal hunt management systems differ between range states

This study documents - for the first time - the extent to which seal hunt management systems differ between range states, hereunder according to the conditions under which the hunt is carried out and the size of the hunt. The main lessons learnt are:

- The documented differences facilitate a new insight into the importance of national seal hunt management systems as a key factor in determining animal welfare. From the perspective of the EU Commission, the study results can also stimulate a consideration whether restrictions should be imposed selectively upon seal products that are produced within the context of weakly developed national seal hunt management systems.
- Seals are hunted within substantially different contexts signifying the type and size of the hunt, and the hunts are taking place within different regulatory environments. Some range states have implemented comprehensive management systems aimed at minimising the conflict between production and animal welfare whereas other range states' management systems are less well-developed and to a lesser degree indicate concern of animal welfare. Within all systems improvements can be made.
- The range states can roughly be grouped into three groups. Seal hunting is comprehensively regulated in Norway and it has the most developed management system. A second group is made up of Canada, Finland, Greenland, Namibia and Sweden - all of these range states have relatively well-developed legal frameworks. There are, however, pronounced insufficiencies particularly regarding enforcement and training requirements. A third group consists of Russia and the UK. For both of these, data are insufficient to make conclusions.
- Measured against the recommendations in the EFSA opinion, it seems to be clear that there is room for improvement within many dimensions for almost all the range states covered by the study. In order to stimulate policy learning between the range states the study has identified a number of best practices, cf. Text-box 7.1.

Text-box 7.1 Identified best practices

- On animal welfare principles: Animal welfare principles are highlighted in the applicable hunting legislation - whether this targets seal hunting specifically or hunting in general.
- On hunting tools: The characteristics of the weapons used to kill seals are specified. It is made explicit in the legislation which weapons are allowed for stunning and/or killing pups and which are allowed for stunning and/or killing adult seals. The requirements to the weapons are made in accordance with the recommendations of the EFSA opinion.
- On assuring death by monitoring: Legislation should specifically outline requirements for monitoring and thereby oblige the hunter to assure that the seal is irrevocably unconscious before bleeding it out and before continuing to the next seal.
- On bleeding-out animals shot or stunned: Bleeding-out of all animals is required directly following stunning i.e. before proceeding to stun another seal.
- On environmental factors: Requirements are specified as to secure that the seal and/or the hunter is sufficiently stable and that the target can be properly visualised. Other environmental factors, relevant for the hunt in question, are also regulated.
- On training of hunters: A defined level of knowledge and ability of the hunter regarding seal biology, hunting methods and the three step procedure, hereunder practical use of the hunting tools, e.g. shooting tests are required.
- On independent monitoring: A system for monitoring and observation of the hunt, securing regular supervision of the hunt and that secures independency of the inspectors is provided for.
- On ability of third party to monitor: Third party monitoring of the hunt is possible, with a minimum of administrative or logistic barriers.
- On reporting requirements: Clear requirements for reporting targeting both hunters and inspectors. There are requirements to where and when animals are killed and weapons and ammunition used. Also the range of relevant environmental factors (weather conditions, etc.) should be reported.
- On sanctions and compliance: Statistical information on the hunt should be compiled and systemised.

Different policy measures have different - although mostly minor - impacts

The study addresses both policy measures that are not linked directly to the seal hunt management systems - such as a total prohibition of placing on the market or of imports/exports, and measures that could be linked to the management systems:

- Total prohibition of placing on the market of seal products is assessed to have minor impacts on the EU Member States. This minor impact assumes, however, that transshipments of sealskins and other seal products and imports of sealskins for further processing and exports continue ...
- ... while the impacts are assessed to be slightly higher for the non-EU range state. This is merely a result of that the sizes of the seal hunt in these countries are much larger than in the EU range states, and that the EU market - apart from for Russia - is of some importance.
- A focus in the regulation on harp and hooded seals only will relieve the negative impacts for Namibia and somewhat for Greenland. In contrast, the measure will almost fully affect the Canadian and Norwegian hunts.

- Total prohibition of imports and exports will have medium impacts on the EU Member States, although the impacts are considered significant for Finland and Germany if such ban is extended to also cover transit trade ...
- ... while the impacts are assessed to be slightly higher for the non-EU range state. This is again merely a result of that the sizes of the seal hunt in these countries are much larger than in the EU range states, and that the EU market - apart from for Russia - is of some importance. However, if the ban is extended to transit trade Canada will in particular suffer unless this trade can be shifted away from Germany and Finland to outside the EU e.g. Norway. Hence, Norway may actually strengthen its position as a transit trader.
- Denmark and Italy are by far the two largest EU importers of raw furskin from seal for further processing/sales on the EU market, and will thus also be affected by such regulation. Denmark absorbs the raw furskins directly coming from Canada and Greenland (that are not categorised as goods in transit), while Italy absorbs the raw furskins from Russia, Finland and the UK (Scotland) - where many of the skins from the latter two originates from outside the EU borders. Greece also has a noticeable share of the skins coming from the two latter range states.
- It is envisaged that benefits from a labelling system might include a price mark-up on the consumer market and at the same time help to increase the image of seal hunting in general. If the system is voluntary it might encourage a natural self-selection process regarding compliance and thus maintain the balance between the environmental, economic and social dimension - i.e. those who pursue the label might benefit more than it costs, and the welfare of the seals is enhanced. Furthermore, it is assessed that the impact will be largest if it is a widespread international labelling system rather than a specific EU system.
- Bi-/multilateral agreements between the EU and one or more range states could be made, which could enlarge the geographical area not to be covered any legislative measures. The impact will be similar to that of a limited ban that allows trade if the hunting of the seals complies with some established standards as discussed above. The assessment - which must be taken with a grain of salt - points to minor positive impacts of being favoured compared to competing seal product producers. Greenland could be the largest beneficiary of being 'included in the EU', while Namibia and Russia are likely to experience the lowest impacts of such favouritism.
- The impacts on local economies can mainly be derived from the impacts on trade. The local-economy focus is thus on how this impact will be felt by certain groups of the society - i.e. from a distributional impact viewpoint.
- But not surprisingly - a somewhat discouraging picture is given, when it comes to the feasibility of carrying out assessment of impacts for local economies that are dependent on seal hunting or seal product manufactur-

ing. However, this picture is in itself valuable for the policy makers - i.e. that not all envisaged impacts can be fully assess, and so any policies will have to be based on limited information.

Public consultation reveals criticisms of seal hunting, while acceptability depend on practices

The European Commission received 73,153 answers to the public consultation from citizens in 160 different countries worldwide. It revealed that:

- There is a massive dissatisfaction with current seal hunting practices - and a clear majority of respondents in nearly all the geographical areas analysed would prefer a ban. However, it is also clear that the majority of respondents reside in Anglo-Saxon countries UK, US and Canada, and when looking at the results from respondents in other countries, the results are somewhat less stringent.
- The results show that many respondents are against seal hunting for principal reasons - which again may be rooted in a certain perception of the human-nature relation. However, the results also show that for some respondents the level of acceptability of seal hunting is influenced by how the seal hunt is managed and undertaken - and for what reasons.
- It is important to also highlight a knowledge gap on hunting methods - i.e. public perception vs. scientific knowledge (EFSA findings) and linked thereto the attitudes towards animal welfare vs. local communities. These are quite striking and underline clearly the complexity of the seal hunting issue from an animal welfare perspective.

7.2 Recommendations

Recommendations for the Commission's way forward

The above conclusions underline that this study contributes with an element to the Commission's own progress towards a proposal for measures (if any) that will improve the animal welfare aspects of seal hunting. In this light, a few recommendations for the Commission's way forward seem to be in place. They concern the usage of the study results in the design of possible policy measures:

- The Commission should recognize the value of the new insight into the differences between the range states' seal hunt management systems. Hence, the designs of policy measures should aim to pursue good practices and avoid bad practices.
- This implies that any labelling schemes or prohibitions on imports or on placing on the market of seal products should address such good and/or bad practices and so should be targeted - also in the sense that the economic and social impacts as far as possible are limited to the areas where the targeted hunting practices take place.
- However, it must be acknowledged that the public perception of seal hunting at large is against seal hunting for principal reasons - which again may be rooted in a certain perception of the human-nature relation. Hence, ex-

tensive information campaigns will be needed to obtain public acceptance of a distinction between 'good' and 'bad' seal products.

- In any case, the Commission should establish a deadline for range states regarding the fulfilment of the criteria of being covered by a labelling scheme or being exempted from any prohibitions - for example of three years.
- Finally, the Commission should accept that assessments of the impacts of policy measures are connected with much uncertainty - in particular because of a lack of data to analyse the consequences for local economies. Hence, the policy makers will have to base their decisions on incomplete information.

Appendix 1: References

Range states	Firstly, the sources of information are organised according to the range state covered by the given source. However, some sources have primarily cross-range-state coverage. These are organised into EU sources and other sources.
Type of source	Secondly, the sources of information are organised according to type: documents and websites.
Type of information provider	Thirdly, the sources of information are organised into type of information provider - i.e. whether the source is of formal legislative nature, or whether it is provided by a governmental or a non-governmental institution.
Using hyperlinks	The electronic version of this appendix makes extensive use of hyperlinks to websites but also to documents stored together with the electronic version on a CD-Rom.

1. Canada

Legislation

Legislative Act	Year
Marine Mammal Regulations, SOR/93-56 (MMR)	1993
Fisheries Act P.C. 1993-186 4 February, 1993	1993
Firearms Act, S.C. 1995, c. 39	1995
The penal code	

Governmental Sources

Author	Title	Year
Department of Fisheries and Oceans (DFO)	Comments to the COWI draft report supplied 22.01.08	2008a
DFO	Meeting with Mr Guy Beaupré, Ms Andrea Asbil and Mr Peter Van Brakel, Kongens Lyngby, 04.02.2008	2008b
DFO	Personal correspondence with Ms Andrea Asbil, 06.03.08 1	2008c
DFO	Personal correspondence with Ms Andrea Asbil, 06.03.08 2	2008d
DFO	Personal correspondence with Ms Andrea Asbil, 13.12.07	2007a
DFO	Personal correspondence with Ms Andrea Asbil, November 2007	2007b
DFO	Commercial Landings Database	2007c
DFO	Seal Management Plan 2006-2010 highlights	2006
DFO	Atlantic Seal Hunt 2003-2005 Management Plan	2003
House of Commons	Ensuring a sustainable and humane seal harvest	2007
Indian and Northern Affairs Canada	E-mail from Ms Mary Tobin Oates 13 December 2007	2007a
Indian and Northern Affairs Canada	E-mail from Mr Brian Roberts, 8 December 2007	2007b
Province of Newfoundland	An overview of the Newfoundland and Labrador Sealing Industry	2007
Nunavut Wildlife Management Board	The Nunavut Wildlife Harvest Study	2004
Report of the Royal Commission	Seals and sealing in Canada Vol 1-3	1986

Websites

Host	Address
DFO	Seals and Sealing in Canada - Frequently asked questions 2007i
DFO	Seals and Sealing in Canada - Canadian Seal Hunt A Timeline 2007ii
DFO	Seals and Sealing in Canada - Socio Economic impacts of Seal Hunt 2007iii
DFO	Seals and Sealing in Canada - Facts about seals 2007 2007iv
DFO	Fisheries and Aquaculture Management - Review of the Marine Mammal Regulations 2007v
DFO	Fisheries and Aquaculture Management - Consultations on the proposed amendments to sections 32-33 of the Marine Mammal Regulations 2007vi

2. Finland

Legislation

Legislative Acts	Year
Hunting decree 812/2003	2003
Hunting Act 615/1993	1993
Act on Game Management Fee and Hunting Licence Fee 616/1993	1993
Law on animal protection 247/1996	1996
The penalty code 39/1889	1889
Lag om gränsbevakningsväsenets forvaltning 2005/577	2005

Governmental Sources

Author	Title	Year
Game Management District of Swedish Osterbithnia	Meeting with Mr. Mathias Lindström; Kongens Lyngby, 30.01.2008	2008
Game Management District of Swedish Osterbithnia	E-mail from Stefan Pellas 291007	2007a
Game Management District of Swedish Osterbithnia	E-Mail from Stefan Pellas 011107	2007b
MMM	Written comments to the COWI Draft report, received 17.01.2008	2008
MMM	Management Plan for the Finnish seal population in the Baltic sea	2007a
MMM	E-mail correspondence with Ms Madeleine Nyman, 10.12.2007	2007b

3. Greenland

Legislation

Legislative Act	Year
Landstingslov nr 12 af 29. oktober 1999 om fangst og jagt	1999
Landstingslov nr 25 af 18. december 2003 om dyrever	2003
Landstingslov nr 29 af 18. december 2003 om naturbeskyttelse	2003
Protection of harbour seal during breeding season	1959
Hjemmestyrets bekendtgørelse nr 20 af 27. november 2003 om erhvervsjagtbeviser	2003
Hjemmestyrets bekendtgørelse nr 21 af 28. november 2003 om fritidsjagtbeviser	2003

Governmental Sources

Author	Title	Year
Greenland Home Rule	Management and Utilisation of seals in Greenland	2006
Greenland Home Rule	Report of seal Seminar - Seals in the Marine Eco System March 20 and 21, Nuuk, Greenland	2001a
Department of Fisheries and Hunting	Redegørelse om Grønlands jagt- og fiskeribetjentordning	2004
DFHA	Comments submitted to the COWI draft report, received the 22.01.2008	2008a
DFHA	Meeting with Ms Amalie Jessen and Mr Jens Jakobsen, 24.01.2008	2008b
DFHA	E-mail from Jens Jakobsen 30.11.2007	2007b
DFHA	Piniarnq 2008 - Jagtinformation og Fangstregistrering	2007c
DFHA Jens Jakobsen	E-mail from Jens Jakobsen 07.12.2007	2007e
DFHA Lars Geråe	Definitioner af forskellige begreber i relation til sælfangst i Grønland samt lovgivning om beskyttelse og fangst af sæler	2007f
DFHA	Piniarnq 2007 - Jagtinformation og Fangstregistrering	2006

Websites

Host	Address
NAMMCO	The North Atlantic Marine Mammal Commission 08.02.2008i

4. Namibia

Legislation

Legislative Act	Year
Regulations relating to the exploitation of marine resources (Act 27 of 2000)	2001
Promulgation of Marine Resources Act, 2000 (Act 27 of 2000) of the Parliament	2000

Governmental Sources

Author	Title	Year
Ministry of Fisheries and Marine Resources (MRMR)	Comments to the COWI draft report, received 21.01.2008	2008a
MFMR	Namibia's Marine Resource Policy - Towards Responsible Development and Management of the Marine Resource Sector	2004

5. Norway

Legislation

Legislative Act	Year
J-53-2007 Forskrift om regulering av fangst av sel i Vesterisen og Østisen 2007	2007
J-54-2007 Forskrift om adgang til å delta i fangst av sel i Vesterisen og Østisen i 2007.	2007
Forskrift om kvoter i jakt på kystsel i 2007	2006
Forskrift av 11 februar 2003 om utøvelse av selfangst Vesterisen og Østisen	2003
LOV 1999-03-26 nr 15: Lov om retten til å delta i fiske og fangst (deltakerloven).	1999
1996-05-06 nr 414: Forskrift om forvaltning av sel på norskekysten.	1996
LOV-1983-06-03-40: Lov om saltvannsfiske m.v.	1983
LOV 1966-06-17 nr 19: Lov om forbud mot at utlendinger driver fiske m.v. i Norges territorialfarvann.	1966

Governmental Sources

Author	Title	Year
Directorate of Fisheries	Inspektørrapport 2007	2007a
Directorate of Fisheries	Instruks 2007	2007b
Directorate of Fisheries	Instruks til kvotekontr vedr mailadr selfangst	2007c
Directorate of Fisheries	Overtredelsesrapport	2007d
Directorate of Fisheries	Uttlysning inspektører 2007	2007e
Directorate of Fisheries	E-mail correspondence with Ms Hild Ynnesdal 21.11.2007	2007f
MFCA	Stml n27 2003 2004 Norsk sjøpattedyrpolitikk	2004
MFCA	Om lov om endring i lov 17.jubu 1966 nr19 om forbud mot at utlendinger driver fiske m.v. i Norges territorialfarvann	2004b
Ministry of Fisheries and Coastal Affairs (MFCA)	Comments to the COWI draft report, received 24.01.2008	2008

6. Russia

Governmental Sources

Author	Title	Year
Scientific-Consulting Board of the Federal State Enterprise (FGU)	Interdepartmental ichthyologic commission" and "Sea mammals commissions", Moscow, 22.02.2007	2007

Websites

Host	Address
Convention of Migratory Species (CMS)	CMS - Parties to the Convention 2008i
CITES - Convention on International Trade in Endangered Species of Wild Fauna and Flora	Alphabetical List of Parties 2008i

7. Sweden

Legislation

Legislative Acts	Year
Hunting Act (Jaktlagen (1987:259))	1987
Hunting Ordinance (Jaktförordningen (1987:905))	1987
Swedish EPAs Regulation and guideline on hunting and the game species belonging to the state (Naturvårdsverkets föreskrifter och Allmänna Råd om jakt och statens vilt (NFS 2002:18))	2002
The Swedish Environmental protection Agency's Decision on controlled hunting of grey seals for 2007, adopted on 11 April 2007	2007
The Weapon Act (Vapenförordning (1996:70))	1996
The Swedish Environmental protection Agency's Regulation on hunting examination (Naturvårdsverkets föreskrifter om jägarexamen, (NFS 2005:4))	2005

Governmental Sources

Author	Title	Year
Fiskeriverket	"Seal behaviour around fishing gear and its impact on Swedish fisheries", Prepared by Sara Köningson Department of Marine Ecology, Göteborg University	2007
Ministry of Agriculture	Comments to the COWI draft report supplied 24.01.08	2008
Swedish EPA (Naturvårdsverket)	E-mail from Per Risberg, 21.02.2008	2008
Swedish EPA	Telephone interview with Per Risberg 05.12.2007	2007b
Swedish EPA	Telephone interview with Per Risberg 22.11.07	2007a
Swedish EPA	Nationell förvaltningsplan for gråsälsbeståndet i östersjön (National plan for grey seal stock in the Baltic sea - The grey seal (Halichoerus grypus))	2001

8. United Kingdom - Scotland

Legislation

Legislative Acts	Year
Conservation of Seals Act 1970 (c.30)	1970
The Conservation of Seals (Scotland) Order 2004	2007
The Conservation of Seals (Scotland) Order 2007	2007

Governmental Sources

Author	Title	Year
DEFRA	E-mail from Mr Simon Harding, DEFRA, 07.02.2008	2008
DEFRA	E-mail correspondence Mr Simon Harding, DEFRA, 13.12.2007	2007
Joint Nature Conservation Committee (JNCC)	Second Report by the UK under Article 17 on the implementation of the Habitats; Special assessment grey seal	2007a
Joint Nature Conservation Committee (JNCC)	Second Report by the UK under Article 17 on the implementation of the Habitats special assessment common seal	2007b
Scottish Marine Directorate	E-mail from Mr Ian Walker, 22.11.2007	2007

Websites

Host	Address
Scottish Government, 2007i	The Scottish Government - Environment - Scottish Seals

9. EU Sources

Legislation

Legislative Acts	Year
Council Directive 83/129/EEC of 28 March 1983 - OJ No L 091, 09/04/1983, as amended by Council Directive 89/370/EEC of 8 June 1989 – OJ No L 163, 14/06/1989 concerning the importation into the Member States of skins of certain seal pups and products derived there from.	1983
Council Directive 92/43/EEC of 21 May 1992, OJ L 206, 22/07/1992, on the conservation of natural habitats and of wild fauna and flora.	1992

Official Sources

Author	Title	Year
European Food Safety Authority (EFSA)	Scientific Opinion of the Panel on Animal Health and Welfare on a request from the Commission on the Animal Welfare aspects of the killing and skinning of seals. <i>The EFSA Journal</i> (2007) 610, 1-122.	2007
European Commission	Communication from the Commission to the European Parliament and the Council on a Community Action Plan on the Protection and welfare of Animals 2006-2010	2006
European Commission	Annex Impact Assessment	2006
European Commission	Working Document on a Community Action Plan on the Protection and Welfare of Animals 2006-2010	2006
EP	0038/2006 Written declaration on banning seal products in the EU	2006
EP	Final reply DCL-0038 seals EN	2006

10. Other Sources

Author	Title	Year
Agafonova E. et al.	The Ringed Seal in Lake Ladoga and the Valaam Archipelagi	2007
Butterworth A. et. al.	Welfare aspects of the Canadian seal hunt - final report	2007
Daoust, Crook, Bollinger, . Camp	Animal Welfare and Canadian Seal Hunt	2002
Grahn A. , Swedish Association for Hunting and Wildlife Man- agement,	Personal correspondence, 11.12.2007	2007
Hebridean Partnership,	Telephone conversation with Carter, M., 01.02.2008	2008
HELCOM	HELCOM : Grey Seal 09.04.2008	2008a
HELCOM	HELCOM : Baltic Ringed Seal 09.04.2008	2008b
HELCOM	HELCOM : Conservation of seals in the Baltic Sea Area	2006
Humane Society Interna- tional	Comments to the COWI draft report, received 22.01.2008	2008
International Fund for Ani- mal Welfare (IFAW)	Comments submitted to COWI Draft report , received 22.01.2008	2008
IFAW; Fink, S.	Input from IFAW on legislation and enforcement E-mail correspondence November 2007	2007a
IFAW	Overview of the Russian "Stop the Seal Hunt campaign"	2004
Independent Veterinaries Group - WG on Canadian Harp Seal Hunt (IVWG)	Improving humane practice in the Canadian Harp Seal Hunt	2005
Institute of Marine Research (MIR)	Kyst og Havbruk 2007, Kapittel 2 Kystressurser	2007
Mats Olsson,	Säl och fiske - en gammal konflikt i Östersjön Naturhistoriska Riksmu- seet, Stockholm, (from Östersjö 95)	Year un- known
NAMMCO	E-mail correspondence with Ms C. Winsnes, 03.01.08	2008a
NAMMCO	Telephone conversation with Ms C. Winsnes, 21.01.2008	2008b
NAMMCO	AGREEMENT on Cooperation in Research, Conservation and Man- agement of Marine Mammals in the North Atlantic	1992
NAMMCO	Provisions of the joint NAMMCO control scheme for the hunting of ma- rine mammals	1998a
Rasmussen O. R.	Analyse af fangererhvervet i Grønland	2005a
Seal Alert	Comments to the COWI draft report, received 22.01.2008	2008a
Seal Alert	Namibian seal killing, trade, legal and socio-economic aspects	2007a
Seal Alert	E-mail from seal alert 071107	2007b
Statistics Greenland	Population of Greenland	2007
The Working Group on Seals	Study Group on the Development of Fish Pots for Commercial Fisheries and Survey Purposes	2007
VNIIRO	Interview with Mr Vladimir Zabavnikov	2007
Wilson S. et.al	THE CONSERVATION OF SEALS ACT 1970: THE CASE FOR REVIEW; Prepared for the Seals Forum, 2 March 2007	2007
WSPA	Comments to the COWI draft report, received 24.01.2008	2008
WSPA	WSPA EFSA Namibian seal hunt submission	2007