

**ANNEX 1: STATUS OF PAST PROPOSALS FOR CONSERVATION AND MANAGEMENT**

This table provides a summary of all proposals for conservation and management made by the Management Committees, and the responses of member countries to these proposals as stated at later meetings. This document will be continually updated to serve as a resource for both the Council and the Management Committees. See List of References for sources of meeting documents. Codes beginning with: 1 – relevant to all Management Committees; 2 – relevant to seals; 3 – relevant to whales.

<b>CODE</b>	<b>PROPOSAL FOR CONSERVATION AND MANAGEMENT</b>	<b>MANAGEMENT MEASURES/RESPONSE BY MEMBER COUNTRIES</b>
<b>1.1.0</b>	<b>Incorporation of the users' knowledge in the deliberations of the Scientific Committee</b>	
1.1.1	The Management Committee endorsed the proposals and viewpoints contained in section 6 in the Scientific Committee report, and suggested that the "Draft Minke Whale Stock Status Report" (NAMMCO/9/7) could usefully serve as a pilot project for cooperation with the hunters. (NAMMCO/9).	Status Reports under development.
1.1.2	The Management Committee had previously asked the Secretariat to proceed with a proposal by the Scientific Committee to use stock status reports as a starting point for discussions with resource users to incorporate their knowledge in advice to Council, and to use the stock status report on minke whales as a pilot project. However, in 2000 the Management Committee recommended that a proposal for a conference on incorporating user knowledge and scientific knowledge into management advice should proceed, and asked the Conference Advisory Group to plan this conference to evaluate whether and how the previous proposal for incorporating user knowledge into the Scientific Committee's deliberations could be incorporated into the Conference (NAMMCO/11).	Greenland informed the Committee that a person had been hired at the Greenland Institute of Natural Resources to deal with these issues, and that this employee is also on the Advisory Board of the Conference. (NAMMCO/11)
1.1.3	The Management Committee re-established the Working Group on User Knowledge in Management and provided new Terms of Reference for the Group (NAMMCO/15). However, in 2006 the Committee had not met and no progress has	

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	<p>been made. The Management Committee reaffirmed the importance of this issue, and considered that the process might be facilitated by focussing on a few key species at first. The Management Committee therefore <b>recommended</b> that the Working Group focus narwhal and beluga in the near term. It was also noted that this Working Group will report to the Council henceforth (NAMMCO/16).</p> <p>The Management Committee agreed that the issue of user knowledge in management decision-making, while also being a general item on the Council agenda, should be included on future agendas of the Committee to allow for the presentation of relevant new information from member countries and discussion in relation to the management of specific species and stocks. Council agreed to this recommendation from the MC and as a result agreed to dispense with the associated Working Group, noting that any further dedicated treatment of this issue would be decided in relation to deliberations in the respective MC's at future meetings (NAMMCO 17).</p>	
<b>1.2.0</b>	<b>Marine mammal – fisheries interactions</b>	
1.2.1	<p>The Management Committee noted (NAMMCO/16) the long-standing requests to the Scientific Committee in this area, and the conclusion of the Scientific Committee that no further progress was likely unless more resources were dedicated to modelling efforts already begun in Iceland and Norway, and to gathering the data necessary as model input previously identified by the Scientific Committee. In this respect it was noted that the Icelandic Research Program, which will provide required data on the feeding ecology of minke whales, will be completed by 2007. The Management Committee therefore agreed to recommend that the Scientific Committee review the results of the Icelandic program on the feeding ecology of minke whales and multispecies modelling as soon as these become available</p>	<p>The Management Committees <b>expressed</b> a general support for the modelling exercise proposed and <b>recommended</b> the Secretariat and the Scientific Committee to continue the planning. The four modelling approaches proposed are:</p> <ol style="list-style-type: none"> <li>1. Minimal realistic model implemented using GADGET</li> <li>2. Ecopath with Ecosim</li> <li>3. Time series regression</li> <li>4. A simple biomass-based model such as one recently applied in eastern Canada.</li> </ol>

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	(NAMMCO/16).	<p>Potential candidates have been identified to undertake the work.</p> <p>The exercise should be carried out preferably for two areas. Likely candidates include the Barents Sea and the region around Iceland. The projected investigation would require a funded multi-year project. Once funding is obtained, selection of appropriate area(s) should, if necessary, be decided by a working group of experts knowledgeable in the data requirements and availability.</p> <p>The tentative schedule provided for the work was articulated around 4 key-step meetings with a 2-year period as a realistic time-span for the whole process (NAMMCO 18).</p>
<b>1.3.0</b>	<b>By-catch</b>	
1.3.1	<p><i>Norway:</i> The Management Committee supported the recommendation of the Working Group on by-catch that Norway provide the report of the March 2007 evaluation meeting to the NAMMCO Scientific Committee at their next meeting, and provide estimates of by-catch from fisheries to NAMMCO as soon as they become available (NAMMCO/16).</p> <p><i>Faroes:</i> The WG supported the Faroese plan of conducting a questionnaire of fishermen to gather information about the magnitude of marine mammal by-catch as a useful first step (NAMMCO/16).</p>	<p>Norway reported that it has a reference fleet as a trial for by-catch reporting. It is hoped that data will be available and analysed at the end of 2009. The findings should be available for reporting next year (NAMMCO 18).</p> <p>Efforts are being made to include mandatory reporting of marine mammal by-catch in all fishing vessel logbooks in the Faroe Islands. It should be noted that logbooks are already</p>

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	<p><i>Iceland:</i>                      The Management Committee supported the advice of Working Group on by-catch that recommendations for improving the Icelandic monitoring program be accepted and implemented by Iceland in a timely fashion (NAMMCO/16).</p> <p>The Management Committee agreed in 2007 that the design of monitoring programs that will provide accurate and precise estimates of by-catch is in the main a scientific issue, and that such advice could therefore be provided by the Scientific Committee. The Management Committee agreed therefore to disband the standing Working Group on By-catch, as its role would now be fulfilled by the Scientific Committee (NAMMCO/16).</p> <p>The Management Committee agreed to the need for further guidance from Council in relation to priority of requests and workload of the Scientific Committee, before endorsing a review of by-catch systems (NAMMCO 17).</p>	<p>mandatory on all vessels over 15 tonnes (NAMMCO 18).</p> <p>In Iceland there had been progress in monitoring but no results as yet (NAMMCO 18).</p> <p>There was still uncertainty whether by-catch in Greenland was reported as such or as catch (NAMMCO 18).</p> <p>The Management Committees <b>noted</b> the work undertaken by the Scientific Committee for organising a joint workshop with ICES, focussing on by-catch monitoring systems and reviewing the advantages and disadvantages of existing observation schemes for marine mammals, and <b>recommended</b> moving forward on this matter (NAMMCO 18).</p> <p>A Workshop on By-Catch Monitoring of marine mammals and seabirds, co-convened by NAMMCO and ICES was held successfully in Copenhagen in July 2010, and guidelines for best practices in monitoring by-catch are being developed and will be published (NAMMCO 19).</p> <p>Iceland reported new information on by-catch monitoring from 2009 (porpoise, harbour seal, bearded seal, grey seal and harp seal). Efforts are ongoing to improve reporting systems</p>

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		<p>(NAMMCO 19).</p> <p>The Faroe Islands reported that a new electronic logbook system for vessels larger than 15 BRT is being developed and should be implemented in 2011 when reporting of marine mammal by-catch will become mandatory. (Conventional logbooks are already mandatory on vessels larger than 15 BRT.) (NAMMCO 19).</p> <p>Greenland reported that by-catches are reported as catches but a revised reporting system allowing discrimination of origin is underway (NAMMCO 19).</p>
<b>1.4.0</b>	<b>Joint NAMMCO control scheme</b>	
1.4.1	The Management Committee agreed that the provisions of the Scheme should be amended to integrate requirements for observer training to ensure observer safety onboard vessels, and to take account of recent technological developments in automated monitoring. In addition the provisions should be modified to support it reporting to the Council rather than the Management Committee. (NAMMCO/16).	The revision of the provisions were finalised and adopted at NAMMCO 18.
<b>1.5.0</b>	<b>Enhancing ecosystem-based management</b>	
1.5.1	The Management Committee recommended that the Working Group on Enhancing ecosystem-based management meet in 2007, and noted that it will be reporting to the Council henceforth. Nevertheless this item is of course of interest in a management context, and will remain on the agenda of the Management Committees. (NAMMCO/16).	

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	<p>Noting the conclusion of the Scientific Committee that no further progress was likely in this area unless more resources were dedicated to modelling efforts already begun in Iceland and Norway, and to gathering the data necessary as model input, the Management Committee recommended that these activities be a priority for member countries (NAMMCO/16).</p> <p>Development of ecosystem models for use in management is a time-consuming process,. However enough progress has been made recently to warrant new consideration and a broader terms of reference in the Scientific Committee Working Group on marine mammal-fisheries interactions. Council therefore decided to discontinue the <i>ad hoc</i> Working Group on ecosystem-based management. Discussions of a general nature on the management level in recent years had been useful, and the efforts of the members of the <i>ad hoc</i> Working Group were appreciated. However, the continued scientific and management focus on these issues was more appropriate for detailed discussion in the respective Management Committees. It was however also agreed to keep this item on the Council agenda as an opportunity to follow developments in more general terms and to review how other relevant international bodies are addressing both the concepts and the practicalities of ecosystem-based management (NAMMCO 17).</p>	
<b>2.1.0</b>	<b>Harp seals</b>	
2.1.1	<p>The Management Committee requests that the Scientific Committee annually discusses the scientific information available on harp and hooded seals and advice on catch quotas for these species given by the ICES/NAFO Working Group on Harp and Hooded Seals. The advice by the Scientific Committee on catch quotas should not only be given as advice on replacement yields, but also levels of harvest that would be helpful in light of ecosystem management requirements</p>	<p>Greenland informed that a new executive order on seals will come into force in 2010 (NAMMCO 18).</p>

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	<p>For the Barents/White Sea and Greenland Sea stocks, in addition to the advice on replacement yields, advice should be provided on the levels of harvest that would result in varying degrees of stock reduction over a 10 year period (NAMMCO/13).</p>	
<p>2.1.2</p>	<p><i>Northwest Atlantic</i></p> <p>The Management Committee noted that a new abundance estimate for Northwest Atlantic harps seals of 4.8 million was available, based on a pup production estimate for 1994 of 702,900. The Management Committee also noted the conclusion that the Northwest Atlantic population of harp seals has been growing at a rate of 5% per year since 1990, and that the 1996 population was estimated to be 5.1 million, with a calculated replacement yield of 287,000.</p> <p>The Management Committee <u>concluded</u> that catch levels of harp seals in Greenland and Canada from 1990 to 1995 were well below the calculated replacement yields in this period (NAMMCO/6).</p> <p>The Management Committee <u>noted</u> that combined estimated catches of harp seals in Canada and Greenland are in the order of 300,000 and that these catches are near, or at, the established replacement yields (NAMMCO/8).</p> <p>Noting that Canada has instituted a multi-year management plan with a 3- year allowable catch of harp seals totalling 975,000 (not including the catch by Greenland), the Management Committee requested the Scientific Committee to provide advice on the likely impact on stock size, age composition, and catches in West Greenland and Canada under the conditions of this plan (NAMMCO/13).</p>	<p>Canada brought to the attention of the Committee the recently completed Report of the Eminent Panel on Seal Management, which contains a full review of research and management of seals in Canada, with a primary focus on Northwest Atlantic harp and hooded seals. The Report is available at the following web site: <a href="http://www.dfo-mpo.gc.ca/seal-phoque/reports/index.htm">http://www.dfo-mpo.gc.ca/seal-phoque/reports/index.htm</a>. Canada also noted that an abundance survey of the Northwest Atlantic harp seals had been completed in 1999, and that published results were now available. (NAMMCO/11).</p> <p>Greenland commented that sustainable catches may be obtained at other catch levels than those that provide replacement yields. (NAMMCO/11).</p> <p>The Observer for Canada presented information on a multi-year management plan for the Atlantic seal hunt, which was announced in February 2003. For harp seals total allowable catch is set at 975,000 over a 3-year period. If the full quota were taken and Greenlandic harvests were as forecast, the total</p>

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	<p>The Management Committee noted that the request from advice from NAMMCO/14 “Evaluate how a projected decrease in the total population of Northwest Atlantic harp seals might affect the proportion of animals summering in Greenland” was still open. The SC gave partial answer and had recommended again the request to be addressed to the ICES-NAFO WG. The Management Committee recommended that Greenland take the initiative of forwarding this request to ICES. (NAMMCO/16).</p>	<p>take should result in a slight population reduction over the period, while still maintaining the population well above the conservation reference points adopted (NAMMCO/12).</p> <p>Greenland informed the Management Committee that bilateral discussions with Canada on the Canadian Management Plan had taken place over the past year (NAMMCO/13).</p> <p>Greenland noted that there had still been no bilateral consultations with Canada on management of this stock, which is shared between the two countries. The Observer for Canada informed the Committee that a new multi-year management plan is in preparation, and that consultations with Greenland would be arranged in the near future (NAMMCO/15).</p>
2.1.3	<p><i>North Atlantic, White/Barents Sea</i> The Management Committee noted the stock status and catch options presented by the Scientific Committee, and concluded that the catch level in 1998 was well below the calculated replacement yield. Catches at the same level in the future may result in population increase. From a resource management point of view, future quota levels approaching the replacement yield are advised. (NAMMCO/9).</p>	<p>Norway informed the Committee that measures were being considered to improve the efficiency of the seal harvest in this area. The possibility of introducing smaller vessels into the seal hunt is being pursued. The long-term goal will be to reduce the need for subsidising the hunt and increase the take of seals from this stock (NAMMCO/13, NAMMCO/14, NAMMCO/15).</p>
2.1.4	<p><i>Greenland Sea</i> The Management Committee noted the stock status and catch options presented by the Scientific Committee, and concluded that the catch level in 1998 was well below</p>	<p>Norway informed the Committee that, similar to the situation for the White/Barents Sea stock, efforts are being made to improve the efficiency of harvesting. Recent harvests have been</p>

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	<p>the calculated replacement yield. Catches at the same level in the future may result in population increase. From a resource management point of view, future quota levels approaching the replacement yield are advised. (NAMMCO/6).</p>	<p>a small fraction of available quotas. Again the long-term goal will be to reduce the need for subsidising the hunt and increase the take of seals from this stock (NAMMCO/13).</p> <p>Norway reported that quotas for this stock have been roughly doubled since 2005, based on advice from NAMMCO and ICES. However at present there is insufficient capacity to take higher quotas, so catches are expected to be much lower than the quotas (NAMMCO/15).</p>
2.1.5	<p>The Management Committee noted the conclusion of the Scientific Committee that the framework for the management of these species proposed by the ICES/NAFO Working Group would not be useful for NAMMCO for technical reasons and because the management objectives inherent in the framework were inflexible. In the case of harp and hooded seals, where management goals may in the future be defined in relation to ecosystem based objectives, more flexibility will be required than is allowed in this framework (NAMMCO/15).</p> <p>As suggested by the Scientific Committee in 2004, the Management Committee recommended that NAMMCO explore the possibility with ICES and NAFO of assuming a formal joint role in the Working Group on Harp and Hooded Seals. The Secretariat should contact ICES and NAFO in this regard. As a starting point, the Working Group, jointly with the NAMMCO Scientific Committee, should be asked to provide advice on outstanding requests (see NAMMCO Annual Report 2004, p. 27) (NAMMCO/15).</p>	

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2.1.6	The Management Committee also <b>endorsed</b> the WGHARP recommendation to implement the four-tiered management strategy which aligns with the Norwegian management strategy for Greenland Sea harp seals, once the population becomes data rich (NAMMCO 18).	
<b>2.2.0</b>	<b>Hooded seals</b>	
2.2.1	<i>Northwest Atlantic</i> Noting the Scientific Committee's review of available analyses of hooded seal pup production, which recognised that calculations are dependent on the particular rate of pup mortality used, as well as the harvest regimes, the Management Committee <u>concluded</u> that present catches of hooded seals in the Northwest Atlantic (1990-1995) were below the estimated replacement yields of 22,900 calculated for a harvest of pups only, and 11,800 calculated for a harvest of 1-year and older animals only (NAMMCO/6).	
2.2.2	<i>Northwest Atlantic</i> The Management Committee <u>noted</u> that the total catch of hooded seals in the Northwest Atlantic in 1996 slightly exceeded the replacement yield while in 1997 the total number of seals taken was much lower (NAMMCO/8).	Greenland noted that this stock was shared with Canada and that the two countries hold regular bilateral discussions on management of this stock, including an exchange of information on harvest statistics, utilisation and stock assessment. (NAMMCO/11).
2.2.3	<i>Greenland Sea</i> The Management Committee noted the stock status and catch options presented by the Scientific Committee, and concluded that the catch level in 1998 was well below the calculated replacement yield. Catches at the same level in the future may result in population increase. From a resource management point of view, future quota levels approaching the replacement yield are advised (NAMMCO/9).	While supporting the past conclusion of the Management Committee that catch levels for this stock are below replacement yield, Norway noted that the abundance estimate for this stock is dated and that it hoped that new information should soon be available from surveys planned for 2002.

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		<p>(NAMMCO/11).</p> <p>Norway informed the Committee that quotas in this area have been reduced on the advice of the ICES/NAFO Working Group on Harp and Hooded Seals, mainly because there is no recent abundance estimate for the stock. Consequently it is expected that the quota may be fully utilised this year (NAMMCO/13).</p> <p>Norway informed the Committee that a hooded seal survey covering all stocks will be carried out jointly with Canada and Greenland in 2005 (NAMMCO/14).</p> <p>A survey covering all stocks was carried out in 2005. Norway reported that, based on preliminary results from these surveys, quotas have been reduced for the Greenland Sea stock. A new survey will be carried out in the near future. Greenland noted that it had given Norway permission to take seals within the Greenland EEZ in 2006 (NAMMCO/15).</p>
<b>2.3.0</b>	<b>Ringed seals</b>	
2.3.1	<p>The Management Committee noted the conclusions of the Scientific Committee on the assessment of ringed seals in the North Atlantic, which had been carried out through the Scientific Committee Working Group on Ringed Seals. In particular, the Management Committee noted that three geographical areas had been identified for assessing the status of ringed seals, and that abundance estimates were only available for Area 1 (defined by Baffin Bay, Davis Strait, eastern Hudson Strait, Labrador Sea, Lancaster, Jones and Smith sounds (NAMMCO/6).</p>	

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2.3.2	While recognising the necessity for further monitoring of ringed seal removals in Area 1, the Management Committee <u>endorsed</u> the Scientific Committee's conclusions that present removals of ringed seals in Area 1 can be considered sustainable (NAMMCO/6).	The Greenland government is presently undertaking a regulatory initiative which will deal with hunting of all seals in Greenland, rather than just harbour seals as at present (NAMMCO/11).
<b>2.4.0</b>	<b>Grey seals</b>	
2.4.1	<p>The Management Committee noted the concern expressed by the Scientific Committee with regard to the observed decline in the grey seal stock around Iceland, where harvesting has been above sustainable levels for more than 10 years, with the apparent objective of reducing the size of the stock. The Management Committee agreed to recommend that Iceland should define clear management objectives for this stock.</p> <p>The Management Committee noted the conclusion of the Scientific Committee that the new quota levels implemented for Norwegian grey seals would, if filled, almost certainly lead to a rapid reduction in population in the area. The Management Committee agreed to recommend that Norway should define clear management objectives for this stock.</p> <p>For the Faroe Islands, the Management Committee supported the recommendation of the Scientific Committee to obtain better information on the level of catch (NAMMCO/13).</p>	<p>Iceland reported that the management objective for grey seals would be to maintain the stock size close to the current level, and that protective measures would be taken should further declines continue. A precondition to this objective will be careful monitoring of the stock size.</p> <p>Norway reported that a management plan for grey seals is presently under development. Recent catches have been lower than the quota levels in most areas (NAMMCO/14).</p> <p>Norway reported that a management plan for grey seals is still under development. Recent catches have been lower than the quota levels in most areas. In response to a query from Greenland, Norway informed the Committee that grey seals are not managed in cooperation with other jurisdictions as there is believed to be little exchange among stocks (NAMMCO/15).</p> <p>The Faroe Islands noted that a drastic decline in salmon aquaculture had likely led to a decline in killing of grey seals</p>

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	<p>The Management Committee recommended Greenland to protect grey seals from hunting given the likely isolation of the small stock in southeast Greenland (NAMMCO 19).</p>	<p>that were a nuisance to the industry (NAMMCO/15).</p> <p>The Faroes reported that there would be a satellite tracking programme for grey seals starting in the spring of 2007 with a view to further studies on feeding ecology and abundance. This information was welcomed by the Committee (NAMMCO/16).</p> <p>Norway informed that a quota of 25% of the population has been established taking into consideration the estimated by-catch levels. A new population estimate for the period 2006-8 will soon be available, and a management plan, complemented by a genetic study, will be presented to the next Scientific Committee meeting in 2009 (NAMMCO 17).</p> <p>Norway reported that national management plans are presently ready to be fully implemented for both grey and harbour seals (NAMMCO 19).</p> <p>Management plans for both grey and harbour seals has been implemented in Norway since late autumn 2010 (NAMMCO 20).</p> <p>Greenland reported that the recommendation of a total ban on hunting of grey seals has already been incorporated in a new Executive Order from 1<sup>st</sup> December 2010 (NAMMCO 19 and 20).</p>

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2.4.2	<p>With regards to the present estimate of a harvest up til 40% of the population annually, the Scientific Committee <b>urged</b> the Faroe Islands to estimate their present removals and abundance off their coast. The Scientific Committee <b>strongly recommended</b> that all efforts be made in providing a proper estimate of population size and catch at its next meeting (NAMMCO 18).</p> <p>The Scientific Committee also <b>recommended</b> that the Faroe Islands define clear management objectives for grey seals, and that the reporting of grey seal catches in the Faroe Islands be made mandatory and enforced (NAMMCO 18).</p> <p>The Management Committee for Seals and Walruses <b>noted</b> the considerations and all suggestions by the Scientific Committee and <b>recommended</b> the convening of a WG on Coastal Seals to review the Norwegian Management plan in view of an assessment. The Management Committee for Seals and Walruses also <b>supported</b> the recommendations concerning the compilation and reporting of Faroese removal and abundance data, and the Icelandic research data (NAMMCO 18).</p> <p>The Management Committee urged the Faroe Islands to estimate removals and abundance of grey seals around their coast, and to provide proper estimates of population size and catches for 2011 (NAMMCO 19).</p>	<p>The Faroese reported that efforts were being undertaken to obtain better information on population, removals and breeding sites for this species, and that satellite tagging of grey seals has been attempted and is in progress. Private companies possess data on this and other species. With regards to the present estimate of a harvest up til 40% of the population annually, the Scientific Committee <b>urged</b> the Faroe Islands to estimate their present removals and abundance off their coast. The Scientific Committee <b>strongly recommended</b> that all efforts be made in providing a proper estimate of population size and catch at its next meeting (NAMMCO 18).</p> <p>The Scientific Committee also <b>recommended</b> that the Faroe Islands define clear management objectives for grey seals, and that the reporting of grey seal catches in the Faroe Islands be made mandatory and enforced (NAMMCO 18).</p> <p>The Management Committee for Seals and Walruses <b>noted</b> the considerations and all suggestions by the Scientific Committee and <b>recommended</b> the convening of a WG on Coastal Seals to review the Norwegian Management plan in view of an assessment. The Management Committee for Seals and Walruses also <b>supported</b> the recommendations concerning the compilation and reporting of Faroese removal and abundance data, and the Icelandic research data (NAMMCO 18). (NAMMCO 17).</p>

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		Iceland reported that the management objective is to maintain the grey seal stock at the 2004 level of 4,100 animals. The latest estimate is 6,200 animals and well above the management objective (NAMMCO 19).
<b>2.5.0</b>	<b>Harbour seals</b>	
2.5.1	<p>The Committee noted a request from NAMMCO 16: to define management objectives for harbour seals in Norway, Iceland and Greenland (NAMMCO 17).</p> <p>A total ban on hunting for this species in Greenland is <b>recommended</b>, and a formal assessment of the stocks in all areas and the establishment of clear management objectives should be undertaken (NAMMCO 18).</p> <p>The Management Committee <b>reiterated a recommendation</b> for a formal assessment of the Icelandic stock and the establishment of clear management objectives (NAMMCO 18).</p> <p>Concerning the new Norwegian Management plan, the Management Committee <b>recommended</b>, as for the grey seal management plan, that a better way of taking uncertainties into consideration be developed and that an expert working group make an in depth evaluation of the plan, including a comparison with existing management models for e.g. harp and hooded seals (NAMMCO 18).</p>	<p>Norway is currently working on a management plan for harbour seals (NAMMCO/16).</p> <p>The Faroe Islands took note of the SC report and recommendations but have no priority for a specific management plan at this time because the species no longer occurs in the Faroes (NAMMCO/16).</p> <p>Greenland is working on management plans for a number of species, including harbour seal. Until now work has focused on polar bears, walrus, narwhal and beluga. However, the next priority will be given to harbour seals. Reported catches have been very high, probably due to misreporting. Greenland has moved harbour seal to a different place on the list used to report catches, and only a catch of 24 was reported for 2006 (NAMMCO/16).</p>

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		<p>In Iceland, new abundance estimates are available, but there is still insufficient information on by-catch. Norway implemented a system for assessment of the two coastal seal species that secures updated information about abundance approximately every 5 yr. This system has provided two abundance estimates after 1996. As a third point estimate is needed for an assessment for harbour seals another survey is needed and will probably be performed by 2010 (NAMMCO 17).</p> <p>Greenland informed that a draft of an executive order on protection and hunting of seals in Greenland is under construction and in this a ban on hunting of harbour seal is included (NAMMCO 17).</p> <p>Iceland reported that management objectives for harbour seals had been set to maintain the stock close to the 2006 level (NAMMCO 19).</p> <p>Norway reported that national management plans are presently ready to be fully implemented for both grey and harbor seals (NAMMCO 19).</p> <p>Management plans for both grey and harbour seals has been implemented in Norway since late autumn 2010 (NAMMCO 20).</p>
<b>2.6.0</b>	<b>Atlantic walruses</b>	
2.6.1	The Management Committee examined the advice of the Scientific Committee on	Greenland provided the Management Committee with

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	<p>Atlantic Walrus and noted the apparent decline which the Scientific Committee identified in respect to "functional" stocks of walrus of Central West Greenland and Baffin Bay.</p> <p>While recognising the over all priority of further work to clarify and confirm the delineation and abundance of walrus stocks in the North Atlantic area, the Management Committee <u>recommends</u> that Greenland take appropriate steps to arrest the decline of walrus along its west coast.</p> <p>Taking into account the views of the Scientific Committee that the Baffin Bay walrus stock is jointly shared with Canada and that the West Greenland stock might be shared, the Management Committee encourages Canada to consider working co-operatively with Greenland to assist in the achievement of these objectives (<i>NAMMCO Annual Report 1995: 49</i>).</p>	<p>information on further measures recently implemented through legislation by the Greenland authorities for the conservation of the West Greenland stock. These regulations include: the restriction of walrus hunting to people with valid professional hunting licences only; a year-round ban on walrus hunting south of 66° N; limitations on the means of transport used in connection with walrus hunting to dog sleds and vessels of 19.99 GRT/31.99 GT or less; and the sale of walrus products limited to direct sales at open markets or for personal use only. Municipal authorities now also have the possibility of implementing further restrictions if circumstances require. (NAMMCO/8).</p> <p>Greenland noted that in addition to the regulatory measures that were taken in 1999, it had been decided to introduce quotas on walrus. A new regulatory proposal has been drafted and public hearings will be held in the near future. The final regulatory proposal will take these hearings into account. (NAMMCO/11).</p> <p>Greenland informed the Committee that the regulatory initiative to introduce quotas and other hunting regulations for this species had been delayed, and comprehensive public hearings have been conducted. The draft regulations have now been submitted to the Council of Hunters. It is expected that a final decision on the initiative will be taken later in 2003</p>

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		<p>(NAMMCO/12).</p> <p>Greenland informed the Committee that a regulatory initiative that will restrict walrus hunting to those holding valid hunting licences, and allow the introduction quotas and other hunting regulations for this species was now in progress, and that public hearings were being conducted. The regulation will go to the Greenlandic government for approval this year (NAMMCO/13).</p> <p>Greenland announced that they plan introducing quotas for walrus, possibly in 2005. Greenland is awaiting the findings of the Scientific Committee in their assessment of walrus. (NAMMCO/14).</p> <p>Greenland noted that the planned regulatory initiative had been delayed but was expected to be introduced in 2006 (NAMMCO/15).</p>
2.7.2	<p>The Management Committee noted that there was an ongoing request for advice for an assessment of this stock. Present removals were likely not sustainable for the North Water and West Greenland stocks, and it was recommended that new assessments for these stocks be completed as soon as identified research recommendations were fulfilled (survey reanalysis, new surveys, stock structure, and complete corrected catch series) (NAMMCO/16).</p>	<p>Greenland had made considerable progress in this area of assessment through implementation of hunting regulations and the Greenland Institute for Natural Resources (GINR) developing a Research Plan for 2007-10 (NAMMCO/16).</p> <p>Greenland informed that quotas and other regulations had been introduced under a new Executive Order, finalised in 2006. Thereafter, the government introduced 3-year quotas for the</p>

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	<p>The Management Committee agreed that the relationship between JCNB and NAMMCO regarding walrus would be revisited next year. (NAMMCO/16).</p> <p>The Management Committee agreed that total removals for all areas should be set under consideration of a probability of sustainability that is higher than or equal to 70% (NAMMCO 19).</p> <p>The Management Committee also agreed that managers should consider establishing a more robust system for monitoring the sex and age composition of the catch (NAMMCO 19).</p> <p>The Management Committee agreed that a common management regime should be established between Greenland and Canada on shared stocks of walruses (NAMMCO 19).</p>	<p>period 2007 – 2009. The approved 3-year quotas are designed to allow for a gradual reduction of catches that by 2009 will result in removals that will be within the sustainable levels recommended by the Greenland Institute of Natural Resources (NAMMCO/16).</p> <p>Greenland explained that the JCNB dealt originally with narwhal and beluga, and deals now also with walrus. NAMMCO has agreed that JCNB gives management advice for stocks of narwhal and beluga in West Greenland. A similar agreement could be reached about walrus. However, the interaction between JCNB and NAMMCO regarding management advice for walrus should be addressed. (NAMMCO/16).</p>

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<b>2.8.0</b>	<b>Bearded seal</b>	
	The Management Committee <b>recommended</b> that the status of this species be assessed (NAMMCO 18).	
<b>3.1.0</b>	<b>North Atlantic fin whales</b>	
3.1.1	<p><i>East Greenland-Iceland Stock</i></p> <p>The Management Committee accepted that for fin whales in the East Greenland – Iceland (EGI) stock area, removals of 200 animals per year would be unlikely to bring the population down below 70% of its pre-exploitation level in the next 10 years, even under the least optimistic scenarios. However, catches at this level should be spread throughout the EGI stock area, roughly in proportion to the abundance of fin whales observed in the NASS surveys. Furthermore, the Management Committee stressed that the utilization of this stock should be followed by regular monitoring of the trend in the stock size.</p> <p>The Management Committee also noted the conservative nature of the advice from the Scientific Committee on which the conclusion of the Management Committee was based (NAMMCO/9).</p>	
3.1.2	<p><i>East Greenland-Iceland Stock</i></p> <p>The Management Committee noted the conclusion of the Scientific Committee that projections under constant catch levels suggest that the inshore substock will maintain its present abundance (which is above MSY level) under an annual catch of about 150 whales. It is important to note that this result is based upon the assumption that catches are confined to the “inshore” substock, <i>i.e.</i> to the grounds from which fin whales have been taken traditionally. If catches were spread more widely, so that the “offshore” substock was also harvested, the level of overall sustainable annual</p>	

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	<p>catch possible would be higher than 150 whales. (NAMMCO/13).</p> <p>In 2007 The Management Committee noted the conclusion of the Scientific Committee that there was no reason to change their previous conclusion that a catch of 150 whales from the West Iceland sub-stock would be sustainable, and considered that this should conclude the SC’s work on the EGI stock until new information becomes available (NAMMCO/16).</p> <p>The Management Committee noted that it had previously asked that the Scientific Committee continue with its assessments of fin whale stocks in the areas of interest to NAMMCO countries with existing and new information on abundance and stock delineation as it becomes available, and endorsed the plan of the Scientific Committee to complete an assessment for the Northeast Atlantic stocks as a next step in this process (NAMMCO/16).</p> <p>The Management Committee noted the assessment performed by the SC and concluded that an annual strike of up to 154 fin whales from the WI Sub area is sustainable at least for the immediate 5 year period. (NAMMCO/19).</p>	
3.1.3	<p><i>Faroe Islands</i></p> <p>The Management Committee noted that the conclusion of the Scientific Committee had not changed from the previous assessment, that the uncertainties about stock identity are so great as to preclude carrying out a reliable assessment of the status of fin whales in Faroese waters, and thus the Scientific Committee was not in a position to provide advice on the effects of various catches. It may also be necessary to obtain clearer guidance on the management objectives for harvesting from what is</p>	

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	likely to be a recovering stock before specific advice can be given (NAMMCO/13).	
<b>3.2.0</b>	<b>Minke Whales - Central North Atlantic</b>	
3.2.1	The Management Committee <u>accepted</u> that for the Central Stock Area the minke whales are close to their carrying capacity and that removals and catches of 292 animals per year (corresponding to a mean of the catches between 1980-1984) are sustainable. The Management Committee noted the conservative nature of the advice from the Scientific Committee (NAMMCO/8).	
3.2.2	<p>The Management Committee took note of the conclusions of the Scientific Committee with regard to the Central Atlantic Stock, that, under all scenarios considered, a catch of 200 minke whales per year would maintain the mature component of the population above 80% of its pre-exploitation level over that period. Similarly, a catch of 400 per year would maintain the population above 70% of this level. This constitutes precautionary advice, as these results hold even for the most pessimistic combination of the lowest MSYR and current abundance, and the highest extent of past catches considered plausible. The advice applies to either the CIC Small Area (coastal Iceland), or to the Central Stock as a whole (NAMMCO/13).</p> <p>Noting that a full assessment, including the 2009 estimate, will be conducted at the next meeting of the Large Whale Assessment WG in January 2010, the Management Committee for Cetaceans recommends that 200 minke whales per year be considered as the largest short-term catch that should be contemplated over the short-term, 2-5 years. This catch level refers to total removals from the CIC or CMA, both Icelandic and others (NAMMCO 18).</p>	

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	<p>The Management Committee agreed that annual removals of 216 minke whales from the CIC area are sustainable and precautionary and that annual removals of 121 minke whales from the CM area are sustainable and precautionary. Furthermore it was agreed that this management advice should apply for the next 5 years unless the Scientific Committee considers that new scientific evidence is likely to change the basis of the advice (NAMMCO 19).</p> <p>The Council took note of the Endorsement by the Management Committee for Cetaceans that annual removals of up to 229 minke whales from the CIC area are safe and precautionary for the next 5 years (NAMMCO 20).</p>	
	<b>- West Greenland</b>	
3.2.3		Greenland reported that a quota of 178 minke whales in West Greenland had been implemented from 2010 in response to the advice of the Scientific Committee of the IWC (NAMMCO 19).
<b>3.3.0</b>	<b>Narwhal - West Greenland</b>	
3.3.1	<p><i>Avanersuaq</i> The Management Committee noted that the present exploitation level in Avanersuaq of 150/yr seems to be sustainable, assuming that the same whales are not harvested in other areas</p> <p><i>Melville Bay – Upernavik</i> The Management Committee noted that the Scientific Committee could give no status for the Melville Bay – Upernavik summering stock.</p>	<p>As for beluga, harvest quotas will be introduced for West Greenland narwhal in the near future (NAMMCO/11).</p> <p>Greenland informed the Committee that the regulatory initiative to introduce quotas and other hunting regulations for this species had been delayed, and comprehensive public hearings have been conducted. The draft regulations have now</p>

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	<p><i>Uummannaq</i> The Management Committee noted that the substantial catches (several hundreds) in some years do cause concern for the status of this aggregation. The Management Committee further noted that the abundance of narwhal in this area should be estimated.</p> <p><i>Disko Bay</i> The Management Committee noted that present catches in this area are probably sustainable.</p> <p><i>Catch Statistics</i> The Management Committee noted that for both narwhal and beluga it is mandatory for future management that more reliable catch statistics (including loss rates) are collected from Canada and Greenland (NAMMCO/9).</p>	<p>been submitted to the Council of Hunters. It is expected that a final decision on the initiative will be taken later in 2003 (NAMMCO/12).</p>
3.3.2	<p>The Management Committee accepted that the JCNB would provide management advice for this stock, which is shared by Canada and Greenland. The Management Committee therefore recommended that closer links be developed with the JCNB on this and other issues of mutual concern. (NAMMCO/10).</p>	<p>Greenland informed the Committee that the new regulations mentioned under 5.8 for beluga will also apply to narwhal, and that quotas will be introduced in July 2004 (NAMMCO/13).</p>
3.3.3	<p>The Management Committee noted the conclusions of the Scientific Committee, that the West Greenland narwhal have been depleted, and that a substantial reduction in harvest levels will be required to reverse the declining trend. These are preliminary conclusions, and more research and assessment work will be required. Nevertheless the Management Committee expressed its grave concern over the status of the West Greenland narwhal, and noted that the JCNB, which provides management advice</p>	<p>Greenland informed the Committee that quotas of 200 in West Greenland and 100 in Qaanaaq had been introduced in 2004. After implementation the catch was lower than the quota level (NAMMCO/14).</p> <p>Greenland noted that a quota system for narwhal had been</p>

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	<p>for this stock, would be considering this information in the near future. The Management Committee also noted that it will be important for NAMMCO to monitor the situation closely and update the assessment as soon as more information is available (NAMMCO/13).</p>	<p>introduced in 2004, and the quota for 1 July 2004 to 30 June 2005 of 300 had been nearly fully taken. The quota for 2005/2006 of 260 had been raised to 310 during the hunting season, mainly because hunter observations suggested that narwhal numbers were larger than expected and because the original quota levels were exceeded (NAMMCO/15).</p>
<p>3.3.4</p>	<p>In 2005 the Scientific Committee provided similar advice to that given in 2004, that the total removal of narwhals in West Greenland should be reduced to no more than 135 individuals. This advice was provided with even greater emphasis due to the fact that all models reviewed suggested total annual removals even lower than this. This conclusion was reached in a joint meeting with the JCNB Scientific Working Group, using the best scientific advice available.</p> <p>It is apparent that there continues to be considerable disagreement between scientists and hunters on narwhal stock structure, life history, and especially abundance and trends. While recognising the existence of this disagreement, the Management Committee concluded that it is nevertheless necessary to manage narwhals in a precautionary manner in the face of uncertainty and apparently contradictory evidence. In this regard it was noted that the 2004/2005 quota was 300 and that the quota for 2005/2006 of 260 was raised to 310. These quotas are more than two times the level recommended by the Scientific Committee.</p> <p>While commending Greenland for the recent introduction of quotas and reduction in the harvest, the Management Committee expressed serious concern that present takes of narwhal in West Greenland, according to the advice of both the NAMMCO Scientific Committee and the JCNB Scientific Working Group, are not sustainable</p>	

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	<p>and will lead to further depletion of the stock.</p> <p>In 2000 NAMMCO accepted that the Canada/Greenland Joint Commission on Conservation and Management of Narwhal and Beluga (JCNB) would provide management advice for this stock. The Management Committee therefore strongly urged the JCNB and the Government of Greenland to take action to bring the removals of narwhals in West Greenland to sustainable levels (NAMMCO/15).</p> <p>In 2007, Norway, Iceland and the Faroes shared the concern expressed by the Scientific Committee, that the narwhal quota for West Greenland remained well above the recommended level of 135 and that the quota had increased since it was introduced in 2004. It was also noted in this respect that the JCNB in 2006 had expressed grave concern at the status of this stock, and recommended the development of a work plan with a time frame for the reduction in total removals of narwhal to the recommended level (NAMMCO/16).</p> <p>The Management Committee welcomed the development of a monitoring plan but reiterated the serious concern expressed in previous years that present takes of narwhal in West Greenland, according to the advice of both the NAMMCO Scientific Committee and the JCNB Scientific Working Group, are not sustainable and will lead to further depletion of the stock. While accepting that there remains considerable disagreement between scientists and hunters with regard to the status of the stocks, it was nevertheless considered advisable to manage in a precautionary manner in the face of such uncertainty. The Management Committee therefore once again strongly urged the JCNB and the Government of Greenland to take action to bring the removals of narwhals in West Greenland to sustainable levels as quickly as</p>	<p>In 2007, the Minister of Fisheries for Greenland responded that decisions regarding catch limitations are taken with consideration of the views of scientists and hunters, and that in this case the two groups have a very different perception of the status of the stock. Narwhal are seasonally abundant in some areas and it has proven difficult up to now to reach a consensus between scientists and hunters on stock status. Hunting is very important to the culture and economy of Greenland. The minister also stated that belugas and narwhals consume</p>

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	possible. (NAMMCO/16).	<p>Greenland halibut and disturb the fisheries. Jessen added that, in order to avoid inflicting undue hardship on hunting families, Greenland has opted for a gradual reduction of quotas, with the aim of reaching recommended sustainable levels.</p> <p>Greenland has also developed a monitoring and survey plan to obtain better information on the status of beluga, narwhal and walrus, for which funding is being sought. In addition Greenland is developing a multi-year management plan for narwhal (NAMMCO/16).</p>
3.3.5	<p>The Management Committee for Cetaceans <b>noted</b> that the quotas given for the period July 2008 - June 2009 of 260 narwhals in West Greenland (WG) and 130 narwhals in Melville Bay (MB), gave a lower probability of population increase than the 70% recommended for West Greenland narwhals (70% chance of increase corresponds to a total take of 229 and 81 narwhals in WG and MB) (NAMMCO 18).</p> <p>The Management Committee for Cetaceans, based on advice from the Scientific Committee, <b>recommended</b> that catches be set so that there is at least a 70% probability that management objectives will be met for West and East Greenland narwhals, i.e. maximum <b>total removals</b> of 310 and 85 narwhals in West and East Greenland respectively (NAMMCO 18).</p>	<p>The Management Committee <b>noted</b> that NAMMCO is the competent body to advise on East Greenland, and that Greenland has followed the advice of the NAMMCO Scientific Committee, which is now endorsed. The Management Committee welcomed the fact that Greenland has followed the NAMMCO advice (NAMMCO 18).</p> <p>Greenland stated that it will continue with its multi-year management plan for narwhals using 70% probability of increase – total 310 for W.Greenland and 85 narwhals for East Greenland. Greenland commented that collaboration between managers, hunters and scientists has improved (NAMMCO 18).</p>
3.3.6	The Management Committee strongly <b>recommends</b> that “struck and lost” data be collected from all areas and types of hunt and that all “struck and lost” animals be included in the advice (NAMMCO 19).	

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<b>3.4.0</b>	<b>Beluga - West Greenland</b>	
3.4.1	<p><i>Maniitsoq – Disko</i> The Management Committee noted that a series of surveys conducted since 1981 indicate a decline of more than 60% in abundance in the area Maniitsoq to Disko. It further noted that with the present harvest levels (estimated at 400/yr) the aggregation of belugas in this area is likely declining due to overexploitation.</p> <p><i>Avanersuaq – Upernavik</i> The present harvest in the area Avanersuaq - Upernavik is estimated to be more than 100/yr. The Management Committee noted that since this beluga occurrence must be considered part of those wintering in the area from Maniitsoq to Disko, it is considered to be declining due to overexploitation.</p> <p>Finally the Management Committee noted the conclusion by the Scientific Committee that with the observed decline a reduction in harvesting in both areas seems necessary to halt or reverse the trend (NAMMCO/9).</p>	<p>Greenland stated that this issue again will be thoroughly discussed with the hunters, and that the Greenland Government does share the concerns expressed. (NAMMCO/10).</p> <p>Greenland informed the Committee that in November 2000 the government made a decision to introduce harvest quotas for beluga and narwhal. Public hearings on a draft regulatory proposal were held in spring 2001. The results of these hearings are being taken into account in the drafting of a revised regulatory proposal, and a final set of regulations is expected to be introduced sometime in 2002 (NAMMCO/11).</p> <p>Greenland informed the Committee that the regulatory initiative to introduce quotas and other hunting regulations for this species had been delayed, and comprehensive public hearings have been conducted. The draft regulations have now been submitted to the Council of Hunters. It is expected that a final decision on the initiative will be taken later in 2003 (NAMMCO/12).</p>
3.4.2	It was accepted that the Canada/Greenland Joint Commission on Conservation and Management of Narwhal and Beluga (JCNB) would provide management advice for this stock, which is shared by Canada and Greenland. The Management Committee therefore <u>recommended</u> that closer links be developed between NAMMCO and the JCNB on this and other issues of mutual concern. (NAMMCO/10).	
3.4.3	In 2000 the Management Committee accepted that the JCNB would provide	Greenland informed the Committee that a regulatory framework

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	<p>management advice for this stock, which is shared by Canada and Greenland. The Management Committee noted with pleasure that a joint meeting of the NAMMCO Scientific Working Group on the Population Status of North Atlantic Narwhal and Beluga and the JCNB Scientific Working Group had been held in May 2001, and recommended that this co-operation at the scientific level should continue. The Management Committee also reiterated its recommendation that closer links be developed between NAMMCO and the JCNB on this and other issues of mutual concern. (NAMMCO/11).</p>	<p>allowing the government to set quotas and other limitations on hunting has now been passed. The new regulations provide protection for calves and females with calves and limit the size of vessels that are involved in beluga and narwhal hunting as well as hunting methods. The Municipalities will have the power to limit or prohibit the use of nets for narwhal/beluga harvesting. It is expected that quotas will be introduced for beluga and narwhal by July 2004. The municipalities will be involved in the allocation of the quotas (NAMMCO/13).</p> <p>Greenland informed the Committee that a quota of 320 had been introduced in West Greenland and Qaanaaq year-round from 1<sup>st</sup> July 2004. After implementation the catch was lower than the quota level, mainly due to poor weather conditions (NAMMCO/14).</p> <p>Greenland noted that a quota system for beluga had been introduced in 2004, and the quota for 1 July 2004 to 30 June 2005 of 320 had not been fully harvested due mainly to poor weather conditions. The quota for 2005/2006 is 220 (NAMMCO/15).</p>
3.4.4	<p>In 2005 the Scientific Committee provided similar advice to that given previously, that reducing catches to 100 per year will have an 80% chance of halting the decline in beluga numbers by 2010. Maintaining higher catches reduces the probability of halting the decline. This conclusion was reached in a joint meeting with the Canada/Greenland Joint Commission on Conservation and Management of Narwhal and Beluga (JCNB) Scientific Working Group, using the best scientific advice</p>	

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	<p>available. Similar advice was first provided in 2000 and has been confirmed and reiterated in meetings held in 2003 and 2004.</p> <p>It is apparent that there continues to be considerable disagreement between scientists and hunters on beluga stock structure, life history, and especially abundance and trends. While recognising the existence of this disagreement, the Management Committee concluded that it is nevertheless necessary to manage beluga in a precautionary manner in the face of uncertainty and apparently contradictory evidence. In this regard it was noted that the present quota of 200 was twice that recommended by the Scientific Committee.</p> <p>While commending Greenland for the recent introduction of quotas and reduction in the harvest, and recognising that the actual catch in 2004/2005 was within the level recommended, the Management Committee expressed serious concern that present quotas for beluga in West Greenland, according to the advice of both the NAMMCO Scientific Committee and the JCNB Scientific Working Group, are not sustainable and will lead to further reduction of the stock.</p> <p>In 2000 NAMMCO accepted that the JCNB would provide management advice for this stock. The Management Committee therefore strongly urged the JCNB and the Government of Greenland to take action to bring the removal of belugas in West Greenland to sustainable levels (NAMMCO/15).</p> <p>In 2007 the Management Committee noted the concern of the Scientific Committee that the quota for West Greenland beluga remained above the recommended level of 100, at 140 annually. In this respect the conclusion of the JCNB from their meeting</p>	

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	<p>in 2006, that the population is depleted and that further action is required to halt the decline, was also noted. However it was also noted that the quota has been reduced since its introduction in 2004. The Management Committee therefore commended Greenland for their management efforts to improve the conservation status of beluga in this area, and strongly urged Greenland to continue their efforts to bring the catch to sustainable levels. The Management Committee also welcomed the development of the monitoring plan mentioned above for narwhal which also applies to beluga (NAMMCO/16).</p>	<p>The Management Committee for Cetaceans welcomed the multi-annual catch quotas recently introduced by Greenland for beluga stocks and based on advice of the Scientific Committee that an annual take of 310 belugas over 5 years up to 2014 was sustainable, and <b>noted</b> that these are intended to rebuild the level of the stocks in coming years and therefore ensure the long-term sustainability of catches (NAMMCO 18).</p>
<b>3.5.0</b>	<b>Northern bottlenose whales</b>	
3.5.1	<p>The Management Committee discussed the advice of the Scientific Committee on the status of the northern bottlenose whale and noted that this was the first conclusive analysis on which management of the northern bottlenose whale could be based.</p> <p>The Management Committee <u>accepted</u> that the population trajectories indicated that the traditional coastal drive hunt in the Faroe Islands did not have any noticeable effect on the stock and that removals of fewer than 300 whales a year were not likely to lead to a decline in the stock (NAMMCO/5).</p>	
<b>3.6.0</b>	<b>Long-finned pilot whales</b>	

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3.6.1	<p>The Management Committee noted the findings and conclusions of the Scientific Committee, through its review of the ICES Study Group Report and the analysis of data from NASS-95 with respect to the status of long-finned pilot whales in the North Atlantic (Section 3.1, item 3.1), which also confirmed that the best available abundance estimate of pilot whales in the Central and Northeast Atlantic is 778,000. With respect to stock identity it was noted that there is more than one stock throughout the entire North Atlantic, while the two extreme hypotheses of i) a single stock across the entire North Atlantic stock, and ii) a discrete, localised stock restricted to Faroese waters, had been ruled out.</p> <p>The Management Committee further noted the conclusions of the Scientific Committee that the effects of the drive hunt of pilot whales in the Faroe Islands have had a negligible effect on the population, and that an annual catch of 2,000 individuals in the eastern Atlantic corresponds to an exploitation rate of 0.26%.</p> <p>Based on the comprehensive advice which had now been provided by the Scientific Committee to requests forwarded from the Council, the Management Committee <u>concluded</u> that the drive hunt of pilot whales in the Faroe Islands is sustainable (NAMMCO/7).</p> <p>In 2007, noting the comprehensive international scientific research sampling of all pilot whales caught in the Faroes from 1986 to 1988, the Management Committee underlined the value of building on and updating this valuable information by ensuring ongoing sampling of pilot whales in the Faroes (NAMMCO/16).</p>	<p>In 1997 the Management Committee concluded that the Faroese drive hunt of pilot whales is sustainable. There have been no changes in annual take, new abundance estimates or other information that warrant any change in this conclusion. (NAMMCO/11).</p> <p>The Faroe Islands reported that plans are underway to implement a monitoring programme, the aim of which is to update the existing comprehensive biological data on pilot whales that was provided by the dedicated international research programme in the Faroe Islands in 1986-1988 (NAMMCO 18).</p>
<b>3.7.0</b>	<b>Humpback whales</b>	
3.7.1	In 2006 new abundance estimates for West Greenland were available from surveys	

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	<p>conducted in 2005. The Management Committee accepted the conclusion of the Scientific Committee that a removal (including by-catch) of up to 10 animals per year in West Greenland would not harm the stock in the short or medium term. The Management Committee therefore proposed that Greenland limit annual removals of humpback whales, including by-caught and struck and lost whales, to 10 off West Greenland. (NAMMCO/16).</p> <p>The Management Committee <b>noted</b> that in 2008, the Scientific Committee reconsidered its interim advice from 2006 for West Greenland humpbacks on the basis of the estimate of the survey conducted in 2007, noting that the abundance estimate was higher than that of the 2005 survey, on which the 2006 interim advice was based.</p> <p>The Management Committee <b>recommended</b> that the total quota of humpbacks in West Greenland in 2009, including by-catches, should not exceed 10 animals (NAMMCO 17; NAMMCO 18).</p> <p>The Management Committee <b>recommended</b> that a total removal of up to 20 humpback whales per year 2010-2015 would be sustainable (NAMMCO/19).</p>	
<b>3.8.0</b>	<b>Harbour porpoises</b>	
3.8.1	<p>The Management Committee noted in 2007 there was not a sufficient information base to provide advice on sustainable removals for this species for any of the NAMMCO member countries. Noting this, the Management Committee recommended that member countries conduct surveys to produce reliable estimates of abundance for harbour porpoises in their areas. In addition the Management Committee recommended that member countries provide reliable estimates of total</p>	<p>The Management Committee <b>endorsed</b> the Scientific Committee recommendations that Iceland and Greenland co-ordinate their analyses of the 2007 data with regard to this species, that any survey undertaken in the Faroe Islands should be designed to be compatible with the SCANS surveys, and that there should be adequate monitoring of by-catches in all areas.</p>

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	<p>removals, including by-catch, for this species. Once this information is available for any area, the sustainability of removals can be assessed by the Scientific Committee. This was considered particularly urgent for Greenland, where directed catches are in the low thousands annually (NAMMCO/16).</p>	<p>Iceland underlined that harbour porpoises were included in the 2007 survey and analyses will be presented to the next Scientific Committee meeting in 2009. This will provide the first reliable abundance estimate in the Icelandic coastal area.</p> <p>Greenland informed the Management Committee that a new executive government order on small cetaceans is being prepared that will include harbour porpoises, pilot whales and dolphins.</p> <p>Norway reported that porpoise by-catch data will be available after validation of their by-catch monitoring programme (NAMMCO 17).</p>
<b>3.9.0</b>	<b>T-NASS</b>	
3.9.1	<p>While recognizing national priorities, the Management Committee recommended that NAMMCO countries make every effort possible to ensure the coordination of the survey in terms of timing and coverage (spatial contiguity). The Management Committee also recommended that member countries assist the Committee in obtaining additional funding to support the T-NASS Extension and Acoustic subprojects. (NAMMCO/16).</p> <p>The Management Committee endorsed the Scientific Committee's recommendations for the next survey would be within the 2013-2015 time frame, and that a working group for planning of future surveys be set up as soon as possible, along with negotiations with all potential partners, and a consideration of extending the survey</p>	<p>Estimates from T-NASS 2007 surveys had allowed for the first time estimates of abundance for the following species in the whole North Atlantic:</p> <ul style="list-style-type: none"> <li>50,000 fin whales</li> <li>15,000 humpback whales</li> <li>150,000 minke whales (NAMMCO 19).</li> </ul>

CODE	PROPOSAL FOR CONSERVATION AND MANAGEMENT	MANAGEMENT MEASURES/RESPONSE BY MEMBER COUNTRIES
	areas (NAMMCO 19).	
<b>4.0.0</b>	<b>General Models</b>	
4.0.1	The Management Committee <b>endorsed</b> the Scientific Committee recommendation to use an “RMP implementation simulation process (IST)-like approach – as modified by Norway” as a general model for conservation and management of baleen whales in NAMMCO (NAMMCO 18).	

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