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**REPORT OF THE MEETING OF THE
MANAGEMENT COMMITTEE FOR CETACEANS**

1 September 2010, Tórshavn, Faroe Islands

1. CHAIRPERSON'S OPENING REMARKS

The Chair of the Management Committee for Cetaceans, Ásta Einarsdóttir (Iceland), opened the meeting and welcomed all participants (Section 5. 3).

2. ADOPTION OF AGENDA

The agenda (Appendix 1) was adopted.

3. APPOINTMENT OF RAPPORTEUR

The Secretariat was appointed as rapporteur.

4. CONSERVATION AND MANAGEMENT MEASURES FOR WHALE STOCKS

The Chair summarised past proposals for conservation and management and responses with reference to document NAMMCO/19/MC/3 (Section 2.2 ANNEX 2) and past requests to the Scientific Committee and responses with reference to document NAMMCO/19/MC/4 (Section 2.2 ANNEX 3). Appendix 2 lists documents. All new recommendations to member countries on scientific research arising and approved by the Management Committee for Cetaceans are contained in Appendix 3.

The Chair of the Scientific Committee, Lars Witting, presented the information on whale stocks from the Scientific Committee report (NAMMCO/19/6; Section 3.1).

Estimates from T-NASS 2007 surveys were presented as reported in NAMMCO/19/6 Table 2 (Section 3.1). The Scientific Committee Chair underlined that for the first time it has been possible to estimate abundance of certain species hence the high value of the results. Among others, though negatively-biased, point estimates of the total abundances for the whole North Atlantic are:

- 50,000 fin whales
- 15,000 humpback whales
- 150,000 minke whales.

Preferred years for the next large-scale survey would be 2013 to 2015. The Scientific Committee recommended a Working Group on future surveys to initiate planning as soon as feasible, provide directions and start negotiations with all potential partners, considering coordination at or beyond the T-NASS level.

The Management Committee for Cetaceans **endorsed** the recommendation from the Scientific Committee to begin preparations/planning for the next T-NASS surveys.

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In light of recent changes in distribution of some cetacean species the Management Committee for Cetaceans **recommended** that consideration should be given to extending survey areas.

4.1. Fin whales

Status of past proposals for Conservation and Management

In 2007 The Management Committee for Cetaceans concluded that a catch of 150 whales from the West Iceland (WI) sub-stock would be sustainable, and considered that this should conclude the Scientific Committee's work on the EGI stock until new information becomes available.

Requests for advice from the Scientific Committee

R-3.1.7 – NAMMCO/17-2008 - There was one ongoing request to the Scientific Committee to complete an assessment of fin whales in the North Atlantic and also include an estimation of sustainable catch levels in the Central North Atlantic.

Responses by the Scientific Committee

The Scientific Committee completed an assessment of North Atlantic fin whales at its 2010 meeting (Section 3.1). It considers 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. It noted that the RMP-variant with a 60% tuning level has yet to be simulation-tested for trials involving stock structure uncertainty in the long term, thus it recommends that simulation trials be carried out as soon as possible and the sustainability of this advice beyond 5 years be reconsidered in the light of these results.

New proposals and recommendations for scientific research

The Management Committee for Cetaceans **recommended** that the simulation trials required for checking whether catch levels for 60% tuning are sustainable in the long term should be carried out as soon as possible.

The Management Committee for Cetaceans also **recommended** that further studies be carried out to help distinguish between alternative stock structure hypotheses, particularly in and around the area of proposed whaling, using several different approaches such as genetics, satellite telemetry and photo-identification.

Proposals for conservation and management

The Management Committee for Cetaceans **noted** the assessment performed by the Scientific Committee and concluded that an annual strike up to 154 fin whales from the WI Sub-area is sustainable at least for the immediate 5-year period.

4.2. Humpback whales

Status of past proposals for Conservation and Management

The Management Committee recommended in 2008 and 2009 that the total quota of humpbacks in West Greenland in 2009, including by-catches, should not exceed 10 animals (NAMMCO 17; NAMMCO 18).

Requests for advice from the Scientific Committee

R.3.2.5 NAMMCO/18 - In 2009 the Management Committee for Cetaceans requested the Scientific Committee to assess the sustainability of yearly catches of 5, 10, 20 humpback whales off West Greenland.

Responses by the Scientific Committee

The Scientific Committee found that the AWMP-C procedure (Section 3.1) would be appropriate for providing management advice for West Greenland humpback whales.

Using the fully corrected 2007 estimate of 3,270 humpback whales off West Greenland, the Scientific Committee concluded that strikes of up to 20 humpback whales per year from 2010 to 2015 would be sustainable. Should management advice on West Greenland humpback whales turn out to be a re-occurring request, the Scientific Committee noted the need to consider more detailed simulation testing of the AWMP-C procedure, including a change of the procedure to apply a time-series of abundance estimates rather than just the most recent estimate. Such testing should be carried out before the procedure is used for the third time to provide management advice for a 5-year period.

Greenland noted that the inclusion of by-catches in the advice creates a challenge for the reporting system. The Scientific Committee Chair responded that all advice from the Scientific Committee involves total removals.

New proposals and recommendations for scientific research

The Management Committee for Cetaceans **recommended** running detailed simulation testing of the AWMP-C procedure, including a change of the procedure to apply a time-series of abundance to provide management advice for a 5-year period and the analysis of the 2007 Greenland shipboard surveys.

Proposals for conservation and management

The Management Committee for Cetaceans **agreed** to recommend that a total removal of up to 20 humpback whales per year 2010-2015 would be sustainable.

4.3. Sei whales

Requests for advice from the Scientific Committee

R.3.5.3 NAMMCO/18-2009 (replacing R.3.5.1 and R.3.5.2) - Council requested the Scientific Committee to make a state of the art investigation about the possibility of providing a status assessment for sei whales in East and West Greenlandic waters and in waters west of Iceland.

Responses by the Scientific Committee

Abundance estimates are available from the NASS surveys in the Central North Atlantic (1989 and 1995) and one more could be produced from the 2007 surveys. In addition, estimates for the East and West Greenland areas are available from the 2005 survey. These estimates are incomplete in temporal and spatial coverage and cannot be used for a formal assessment of the stock's maximum sustainable yield. The estimates, however, could be used as minimum estimates. The Scientific Committee concluded

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that assessments with minimum estimate of sustainable yield rates should be feasible once a minimum abundance estimate from the 2007 surveys has been produced.

New proposals and recommendations for scientific research

R.3.5.3 amended - The Management Committee for Cetaceans recommended that the Scientific Committee assess the status of sei whales in West Greenland waters and the Central North Atlantic, and provide minimum estimates of sustainable yield.

4.4. Minke whales

Status of past proposals for Conservation and Management

The Management Committee for Cetaceans recommended in 2009 that a catch of 200 minke whales per year was the largest catch that should be contemplated over the short term: 2 – 5 years. This catch level refers to total removals from the CIC or Central Medium areas, both Icelandic and others.

Greenland reported that a quota of 178 minke whales in West Greenland has been implemented from 2010 in response to the advice of the Scientific Committee of the IWC.

Requests for advice from the Scientific Committee

R.3.3.4 NAMMCO/17-2008 – The Scientific Committee was requested to conduct a full assessment, including long-term sustainability of catches, of common minke whales in the Central North Atlantic once results from the 2009 survey become available.

Responses by the Scientific Committee

Based on the RMP and a temporal series of abundance estimates between 1987 and 2007 the Scientific Committee completed a new assessment. Comparing the latter with the previous assessments (NAMMCO 2000, 2005, 2010) the Scientific Committee concluded that the stock represents a resource reduced only slightly below its pre-exploitation level and that new abundance estimates are unlikely to change the overall result.

The Scientific Committee concluded that annual removals of up to 216 minke whales from the CIC area are sustainable and precautionary. Similarly, an annual removal of 121 minke whales from the CM area is considered sustainable and precautionary.

The Scientific Committee concluded that these levels can apply for the next 5 years before a revision is needed. However, in case further data become available, the management advice could be revised sooner. The Scientific Committee requested guidance on the required duration of the advice.

The Management Committee for Cetaceans **recommended** that the advice be valid for 5 years unless the Scientific Committee considers that there are sufficient reasons for an earlier revision of the advice.

New proposals and recommendations for scientific research

The Management Committee for Cetaceans **recommended**:

- To calculate, as soon as possible, catch limits based on running the RMP on the Central North Atlantic medium area, with catch cascade allocation of catches to small areas.
- That the 2009 survey be corrected for $h(0)$ as soon as possible and that the management advice be adjusted in accordance with this estimate.
- That the 2007 aerial survey abundance estimate be corrected for $h(0)$ and error in distance measurements as far as possible *e.g.* using the methods applied to the 2001 survey.
- That line transect density should be estimated for 2007 and 2008 and 2009 surveys.
- That the relationship between the fluctuations in abundance estimates around Iceland and the simultaneous ecological and environmental changes be examined for possible explanations of the suggested large-scale re-allocations of minke whales between different parts of the North Atlantic.
- That further studies on stock structure of North Atlantic minke whales should be conducted using genetic techniques and satellite tracking.

Proposals for conservation and management

The Management Committee for Cetaceans **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 the Management Committee for Cetaceans **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.

4.5 Narwhal – West Greenland

Status of past proposals for Conservation and Management

At last year's meeting of the Management Committee for Cetaceans, Greenland reported that it would continue with its multi-year management plan for narwhals using 70% probability of increase – total 310 for West Greenland and 85 narwhals for East Greenland. This quota plan is based on NAMMCO scientific advice and the Management Committee for Cetaceans welcomed the fact that Greenland had followed the advice of the NAMMCO Scientific Committee and the recommendations of the Management Committee.

Requests for advice from the Scientific Committee

R.3.4.10 NAMMCO/14-2005 - There was one on-going request to the Scientific Committee. NAMMCO recommends that future surveys for beluga and narwhal should be planned using the international expertise available through the NAMMCO Scientific Committee, and with input from hunters at the planning stage. In addition, if and when new survey methods are applied, they should be calibrated against previously used methods so that the validity of the survey series for determining trends in abundance is ensured.

Responses by the Scientific Committee

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A narwhal survey was conducted in the North Water polynya in May 2009 and it will be repeated in 2010 due to unusually large amounts of open water in 2009. The next winter/spring survey off West Greenland for narwhal and beluga is planned for 2012. A tagging programme for narwhals in East Greenland is scheduled for August 2010, and tagging in West Greenland continues in Qaanaq (June-July 2010) and Uummannaq (November-December 2010).

The Scientific Committee Chair informed the Committee that R.3.4.10 has not been followed for these surveys for practical reasons as the timing of the surveys did not match the schedule of the Abundance Estimate Working Group.

It was questioned if this request should be closed, however the Management Committee for Cetaceans **agreed** that this matter should remain open for possible future consideration.

New proposals and recommendations for scientific research

The Management Committee for Cetaceans at its 2009 meeting agreed to support an Ageing Workshop for standardizing ages in belugas and narwhals using growth layers with new methods involving Aspartic Acid Racemisation, and to proceed with its organisation following the lines provided by the NAMMCO / JCNB Joint Scientific Working Group. Progress in this direction involved a pre-meeting in October 2009. The Scientific Committee had recommended proceeding with the organisation of the workshop and that the working papers from the meeting be considered for collection in an "Age determination" volume of the NAMMCO Scientific Publication Series. It encouraged the General Secretary to proceed in contacting potential authors for expressions of interest and compile a tentative chapter outline for approval at the NAMMCO 19 Council meeting. There has not been any progress on the last matter as this item is premature in relation to the developments in the organisation of the workshop.

The Scientific Committee recommended a joint meeting of the "NAMMCO Scientific Committee Working Group on narwhal and beluga" and the "Canada/Greenland Joint Commission on the conservation and management of narwhal and beluga scientific working group" meeting with assessment updates no later than the winter 2013/14, maybe with a short meeting already during the winter 2010/11 or 2011/12.

The Scientific Committee informed the Management Committee for Cetaceans that the JWG chairs and key participants have suggested 12-18 February, 2012 as suitable dates.

The Scientific Committee reiterated that all "struck and lost" animals should be included in the advice, and again strongly recommends that "struck and lost" data shall be collected from all areas and types of hunt.

The Management Committee for Cetaceans **agreed** to reiterate previous recommendations for scientific research.

The Management Committee for Cetaceans **agreed** to the following new request:

R.3.4.12 - The Scientific Committee is requested to provide advice on sustainable takes of narwhal from the Kane Basin in spring, summer and fall.

Proposals for conservation and management

The Management Committee for Cetaceans **strongly recommends** 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.

4.6 Beluga - West Greenland

Status of past proposals for Conservation and Management

The Chair reminded the Management Committee for Cetaceans that last year Greenland reported that the government had commenced on a new multi-year quota plan. This quota plan was based on advice of the NAMMCO / JCNB Scientific Working Group given a 70% probability level of continued population increase for the following 5 years until 2014 with a take of 310 belugas annually.

The Management Committee for Cetaceans welcomed these multi-annual catch quotas introduced by Greenland for beluga stocks based on advice from the Scientific Committee and noted that these quotas were intended to rebuild the level of the stocks in coming years and therefore ensure the long-term sustainability of the catches.

Requests by Council for advice from the Scientific Committee

There were two ongoing requests to the Scientific Committee:

- **R.3.4.9 NAMMCO/15- 2005** - NAMMCO asked its Scientific Committee to provide advice on the effects of human disturbance, including noise and shipping activities, on the distribution, behaviour and conservation status of belugas, particularly in West Greenland. In 2009 (NAMMCO/18) it was further specified that there was no need for a broad assessment for all marine mammals, and that focus would be on walrus, narwhal and beluga.
- **R.3.4.10 NAMMCO/15- 2005** - NAMMCO recommends that future surveys for beluga and narwhal should be planned using the international expertise available through the Scientific Committee of NAMMCO, and with input from hunters at the planning stage. In addition, if and when new survey methods are applied, they should be calibrated against previously used methods so that the validity of the survey series for determining trends in abundance is ensured.

Responses by the Scientific Committee

With respect to R.3.4.9, this request had been forwarded to the Joint NAMMCO/ JCNB Scientific Working Group. The outcome was a recommendation for extending to a more general request with the Scientific Committee establishing a Working Group on the impacts of human activities other than hunting on marine mammals in the North Atlantic. Terms of Reference for the first meeting would be the evaluation of impact of seismic, shipping and tourist activities on the distribution, behaviour and conservation of marine mammals specifically in the Arctic. At last year’s meeting the Management Committee for Cetaceans took note of this advice but did not see the need for a broad

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assessment of these questions for all marine mammals and it was anticipated that focus would be on walrus, beluga and narwhal.

With respect to R.3.4.10, advice from hunters was sought in organising the 2006 and 2007 aerial surveys off West Greenland. However the Scientific Committee regrets that the survey plans had never been submitted to the Abundance Estimates Working Group as indicated. This request was answered under point 4.5.3.

The Scientific Committee reiterated that all “struck and lost” animals should be included in the advice, and again strongly recommended that “struck and lost” data be collected from all areas and types of hunt. It also reiterated that in relation to advice on other stocks, not included in the previous advice, it recommends that catches should not be permitted:

- south of 65°N
- in May to October between Sisimiut and Maniitsoq
- in June to October in Disko Bay
- in June to August between Uummanaq and Qaanaaq.

The Chair of the Scientific Committee informed the Committee that the advice for temporal and spatial restriction on the beluga hunt in Greenland is advice related to the conservation of fractions of stocks of beluga other than those for which the advice on sustainable takes are provided. Although there is a general lack of new information on these fractions, all evidence suggests that they are small and that they require protection in order to recover.

New proposals and recommendations for scientific research

The Management Committee for Cetaceans agreed to the following request:

R.3.4.13 - Noting the conclusions of the Scientific Committee, and in view of recent dynamic changes in the environment, the Council requests the Scientific Committee to reconsider its advice on the temporal and geographical restrictions on the takes of beluga from West Greenland within the framework of the NAMMCO / JCNB Joint Scientific Working Group.

4.7 Northern bottlenose whales

Comments by the Scientific Committee

In 2009 the Scientific Committee reiterated its recommendation that Faroese and Icelandic feeding data be prepared in a paper and urged its presentation as a document to the next Scientific Committee meeting. Preliminary feeding data were presented at the 2010 meeting on 36 whales stranded/landed/by-caught in the Faroe Islands and 6 whales stranded in Iceland (NAMMCO Scientific Committee/17/17). These pointed towards the possibility that the Faroese whales, although thought to be in their southward migration at that time of the year, could actually have been through warmer waters before passing through the Faroe Islands. Alternatively, the distribution of squid prey could be wider than previously known.

New proposals and recommendations for scientific research

The Scientific Committee reported that the analysis of the feeding data was ongoing and recommended that the analysis be completed and that the publication should be presented to the next meeting of the Scientific Committee in 2011.

The Scientific Committee recommended that the analysis of the distribution and sighting rate data from the T-NASS Icelandic-Faroese area (26 sightings) be looked at in combination with simultaneous survey data and compared with earlier surveys for possible trend information.

The Management Committee for Cetaceans **agreed** to recommend the above proposals for scientific research.

4.8 Killer whales

Requests by Council for advice from the Scientific Committee

R.3.7.1 NAMMCO/2 – 1993 - The Scientific Committee was requested to review the knowledge on the abundance, stock structure, migration and feeding ecology of killer whales in the North Atlantic, and to provide advice on research needs to improve this knowledge. Priority should be given to killer whales in the West Greenland – Eastern Canada area.

Responses by the Scientific Committee

The status of knowledge on this species is unchanged and the Scientific Committee reported that it is unlikely that substantial progress will be made in the near future.

4.9 Long-finned pilot whales

Requests for advice from the Scientific Committee

The Faroe Islands reported that plans were underway to implement a monitoring programme, based on previous recommendations by the Management Committee and the valuable guidance provided by the Scientific Committee in 2008 for a detailed and cost-effective programme.

At its 2009 meeting, the Committee underlined the importance of finalising the updated abundance estimate for pilot whales and noted that this was expected to be dealt with by the Scientific Committee's Working Group on Abundance Estimates in October 2009, and was expected to be available for the review of the Scientific Committee at its 2010 meeting. However, the calculations presented at the above-mentioned working group meeting did not meet the requirements necessary for approval and the working group advised on a revision providing detailed guidelines for further action.

Noting that a new abundance estimate for pilot whales based on T-NASS data had still to be finalised, the Management Committee **reiterated** the importance for the Scientific Committee to complete this work, and further stressed that this should be the first priority for the next meeting of the Working Group on Abundance Estimates.

The Faroe Islands noted that, while the existing abundance estimate was now 20 years-old and urged that an updated estimate based on more recent surveys should be available as soon as possible, annual levels of catches of pilot whales in the Faroe

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Islands over the past 10 years have been at the same level as the long-term annual average recorded in the historical series of annual catch data dating back over 400 years.

Responses by the Scientific Committee

An endorsed estimate from West Greenland was welcomed as the first estimate in this area where the species is harvested. The different surveys from 2007 as well as the mosaic Norwegian surveys are considered additive, when estimates become available.

New proposals and recommendations for scientific research

Noting the comprehensive international scientific research sampling of all pilot whales caught in the Faroes from 1986 to 1988, the Management Committee once again underlined the value of building on and updating this valuable information by ensuring on-going sampling of pilot whales in the Faroes.

The Management Committee for Cetaceans agreed on the following new request:

R. 3.8.5 - The Scientific Committee is requested to assess the status of long-finned pilot whales in West Greenland waters and provide minimum estimates of sustainable yield.

4.10 White-beaked, white-sided and bottlenose dolphins

Requests for advice from the Scientific Committee

R.3.9.6 NAMMCO/13-2004 - In 2004 the Management Committee asked the Scientific Committee to carry out assessments of these species, noting that until that time insufficient information was available on stock delineation, distribution, abundance and biological parameters to initiate the work. At that time the Committee was pleased to note that considerable progress had been made in the Faroes in describing the ecology and life history of white-sided dolphins and that new information on white-beaked dolphins should have been available from Iceland and Norway in about 2 years. Abundance estimates were lacking in all areas except Icelandic coastal waters, and no information on stock delineation or pod structure was available. The SCANS survey planned for 2005/6 and coastal surveys planned for Norway (see 9.3) should have provided information on distribution and abundance in some areas. At its 2004 meeting the Committee endorsed the plan of the Scientific Committee to proceed with the assessments once the above-mentioned studies had been completed.

Responses by the Scientific Committee

The Scientific Committee noted that the data on life history and abundance for any of the three species is still not sufficient for an assessment and recommended that Faroese samples for diet and life history parameters from 350 white-sided dolphins be finalised and at the same time that an abundance estimate from the 2007 survey should be attempted.

New proposals and recommendations for scientific research

The Management Committee for Cetaceans **endorsed** the recommendations for scientific research from the Scientific Committee as indicated above.

4.11 Harbour porpoise

Requests for advice from the Scientific Committee

R.3.10.1 NAMMCO/7-1997 – The Management Committee recommended a comprehensive assessment of the harbour porpoise throughout its range. In 2007, the Management Committee noted that there was not sufficient information base to provide advice on sustainable removals for this species for any of the NAMMCO member countries and 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 removals, including by-catch, for this species. Subsequently the sustainability of removals should be assessed by the Scientific Committee. This was considered particularly urgent for Greenland, where directed catches are in the low thousands annually (NAMMCO/16 2007).

Responses by the Scientific Committee

The Scientific Committee recommended that an assessment meeting for harbour porpoises in all areas be held during the winter 2011/12.

The Scientific Committee further recommended that reliable reporting of takes of harbour porpoises in the Faroe Islands is ensured.

New proposals and recommendations for scientific research

The Management Committee for Cetaceans **endorsed** the recommendation that total removal estimates should be obtained for all areas before the planned Working Group meeting. It also **recommended** that abundance estimates from the 2007 survey in Iceland and the 2010 survey in the Faroe Islands become available before the meeting.

4.12 Bowhead whale

Status

For West Greenland an annual quota of 2 bowhead whales has been enforced for the period 2008-2012 with a carry-over possibility of 2 animals. No whales were caught in 2008, and this quota was transferred to 2009. Three whales were caught in 2009 and the remaining whale was transferred to 2010. A catch of 3 bowhead whales is planned for 2010. Thanks to good collaboration with the hunters, biological samples have been secured from all the bowhead whales taken so far.

Responses by the Scientific Committee

The spring aggregation of this species in the Disco Bay area in West Greenland will be covered by a planned 2012 survey for beluga, narwhal and bowhead whales.

Any other business

The Management Committee for Cetaceans **noted** that the stock is shared with Canada and that there is a need for coordination with Canada regarding its exploitation.

4.13 Sperm whale

New proposals and recommendations for scientific research

The Management Committee for Cetaceans **recommended** that integrated model-based analyses of acoustics and visual data from Iceland and Faroes for this species be undertaken as soon as possible.

9. Election of officers

Ásta Einarsdóttir, Iceland, was re-elected as Chair for the Management Committee for Cetaceans for the next 2 years.

10. Any other business

Greenland noted that the National Progress Report (NAMMCO-19-NPR-Faroe Islands, Section 4.1) from the Faroes submitted to the meeting, reported a catch of 3 Risso's dolphins in 2009, and requested information from the Faroese delegation on management measures for this species in the Faroe Islands.

The Faroe Islands informed the Committee that this species had not before been known to occur in Faroese waters and was not therefore referred to in relevant Faroese legislation or regulations. A large group was driven into the bay of Klaksvík in 2009. After 3 animals had stranded and it was confirmed that this was not a familiar species, the responsible local authorities stopped the drive and ordered the rest of the group to be driven out again. The 3 stranded animals were taken by the Museum of Natural History for full biological investigation, which would provide new data on a species not previously sampled in this region of the Northeast Atlantic.

AGENDA

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NAMMCO/19/MC/1	List of Documents	
NAMMCO/19/MC/2	Agenda	2.
NAMMCO/19/MC/3	Status of Past Proposals for Conservation and Management	4.
NAMMCO/19/MC/4	Summary of Requests by NAMMCO Council to the Scientific Committee, and Responses by the Scientific Committee	4.
NAMMCO/19/MC/5	Recommendations to member countries 2009	4.
NAMMCO/19/6 and ANNEXES	Report of the Sixteenth Meeting of the Scientific Committee	4., 5. and 6.

RECOMMENDATIONS TO MEMBER COUNTRIES 2010

All stocks –all countries:

All:

Begin preparations/planning for the next T-NASS surveys. In light of recent changes in distribution of some cetacean species the Management Committee for Cetaceans **recommended** that consideration should be given to extending survey areas.

Fin whale

Iceland:

The simulation trials required to check if catch levels for 60% tuning are sustainable in the long term should be carried out as soon as possible.

Further studies should be carried out to help distinguish between alternative stock structure hypotheses, particularly in and around the area of proposed whaling, using several different approaches such as genetics, satellite telemetry and photo-identification.

Humpback whale

Greenland:

Run detailed simulation testing of the AWMP-C procedure, including a change of the procedure to apply a time-series of abundance to provide management advice for a 5-year period and the analysis of the 2007 Greenland shipboard surveys

Sei whale

Greenland and Iceland:

Assess the status of sei whales in West Greenland waters and the Central North Atlantic, and provide minimum estimates of sustainable yield.

Minke whale

Iceland:

The advice should be valid for 5 years unless the Scientific Committee considers that there are sufficient reasons for an earlier revision of the advice and the expense of surveys.

- Calculate, as soon as possible, catch limits based on running the RMP on the Central North Atlantic medium area, with catch cascade allocation of catches to small areas.
- Correct for $h(0)$ the 2009 survey as soon as possible and adjust the management advice in accordance with this estimate.
- Correct for $h(0)$ and error in distance measurements the 2007 aerial survey abundance estimate as far as possible e.g. using the methods applied to the 2001 survey.
- Estimate line transect density for the 2007, 2008 and 2009 surveys.
- Examine the relationship between the fluctuations in abundance estimates around Iceland and the simultaneous ecological and environmental changes for

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possible explanations of the suggested large-scale re-allocations of minke whales between different parts of the North Atlantic.

- Conduct further studies on stock structure of North Atlantic minke whales using genetic techniques and satellite tracking.

Narwhal

Greenland:

- Previous recommendations for scientific research were reiterated.
- Provide advice on sustainable takes of narwhal from the Kane Basin in spring, summer and fall.
- Collect “struck-and-lost” data from all areas and types of hunt and include these in the advice on all “struck and lost” animals.

Beluga

Greenland:

Gather information on biology, abundance and stock status with the view to an assessment.

Northern bottlenose whales

Faroe Islands:

Analyse the distribution and sighting rate data from the T-NASS Icelandic-Faroese area (26 sightings) in combination with simultaneous survey data and compare these with earlier surveys for possible trend information.

Long-finned pilot whales

Faroe Islands:

- Complete and finalise the abundance estimate for pilot whales based on T-NASS.
- Assess the status of long-finned pilot whales in West Greenland waters and provide minimum estimates of sustainable yield.

White-beaked, white-sided and bottlenose dolphins

Faroe Islands:

Finalise the analysis of Faroese samples for diet and life history parameters from 350 white-sided dolphins and at the same time attempt an abundance estimate from the 2007 survey.

Harbour porpoise

Iceland and Faroe Islands:

- Obtain total removal estimates for all areas before the planned Working Group meeting.
- Make available before the meeting the abundance estimates from the 2007 survey in Iceland and the 2010 survey in the Faroe Islands.

Sperm whale

Iceland and Faroe Islands:

Undertake an integrated model-based analysis of acoustics and visual data from Iceland and Faroes for this species.

