2.1

REPORT OF THE MEETING OF THE MANAGEMENT COMMITTEE FOR CETACEANS

14 September 2011, Oslo, Norway

1. CHAIRPERSON'S OPENING REMARKS

The Chair, Ásta Einarsdóttir (Iceland), opened the meeting and welcomed all participants (Address 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 (Section 2.2 Annex 1) and past requests to the Scientific Committee and responses with reference to document (Section 2.2 Annex 2). Documents for the meeting are listed in Appendix 2. Past recommendations to member countries are provided in NAMMCO/20/MC/5. 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 (Section 3.1).

4.1. Fin whales

Requests from Council for advice from the Scientific Committee

There was one ongoing request to the Scientific Committee:

R-3.1.7 – **NAMMCO/17-2008:** 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.

Advice from the Scientific Committee

The 2007 abundance estimates for all areas, but Norway, have now been provided to, reviewed and endorsed by the Scientific Committee. A revised combined estimate for the North Atlantic can be calculated as soon as the revised estimates from the combined SCANS-II/CODA/Faroese analysis and the estimates for the latest Norwegian mosaic surveys and the SNESSA becomes available.

At NAMMCO/19-2010 the Management Committee recommended Iceland to carry out simulation trials required to check if catch levels for 60% tuning are sustainable in the long term as soon as possible. Further studies should be carried out to help distinguish between alternative stock structure hypotheses, using several different approaches such as genetics, satellite telemetry and photo-identification

Iceland plans to rerun the trials for the 0.60 tuning level in 2011, and it was decided to first review the results from that process, and the acceptability of the RMP performance indicated, before deciding on possible further related analyses.

Extensive biological sampling was conducted by Iceland from all fin whales landed in 2010, and a DNA registry was initiated to develop a tissue bank and a DNA database for all genetic samples.

Conclusions by the Management Committee

The Management Committee **noted** the report from the Scientific Committee and **reiterated its endorsement** of the management advice for the next 5 years *i.e.* that an annual strike of up to 154 fin whales from the WI (West Iceland) Sub area is sustainable. It also noted that its long-term request for advice is still ongoing.

4.2. Humpback whales

Requests by Council for advice from the Scientific Committee

There was one pending request to the Scientific Committee:

R-3.2.4 - NAMMCO/15-2006: to conduct a formal assessment following the completion of the T-NASS. Furthermore to investigate the relationship between the humpback whales summering in West Greenland and other areas and incorporate this knowledge into the estimate of sustainable yields of West Greenland humpback whales.

Advice from the Scientific Committee

The 2007 abundance estimates for all areas, but Norway, have now been provided to, reviewed and endorsed by the Scientific Committee.

The possibility for responsive movement to survey vessels remains a point to be investigated for the Icelandic-Faroese shipboard survey and further analyses was recommended.

At NAMMCO/19-2010 the Management Committee recommended to run detailed simulation testing of the AWMP-C procedure. The development and simulation testing of management procedures for humpback whales in West Greenland is ongoing in the IWC, and it is recommended that NAMMCO relies on this work to avoid duplication.

Conclusions by the Management Committee

The Management Committee **noted** the report and **endorsed** the recommendations.

4.3. Sei whales

Requests from Council for advice from the Scientific Committee

There was one ongoing request to the Scientific Committee:

R-3.5.3 amended NAMMCO/19-2010: to assess the status of sei whales in West Greenland waters and the Central North Atlantic, and provide minimum estimates of sustainable yield.

Advice from the Scientific Committee

Abundance estimates for the 2001 and 2007 surveys (NASS abundance estimates of sei whales already exist for 1987, 1989 and 1995) has been reviewed and endorsed by the Scientific Committee, and the 2007 survey is considered the best recent estimates.

With the exception of NASS-89, the NASS has not been ideal for estimating sei whale abundance, both due to area coverage and timing, and it was recommended that member countries decide whether sei whale is a target species for the next surveys.

When considering minimum estimates of sustainable yield, the Scientific Committee noted that the RMP could be applied using the existing data, but would require an initial assessment and likely the development of implementation trials. A prerequisite for initial assessment work is the recalculation of abundance estimates for a comparable area and assessing the extent of negative bias for the reasons mentioned above.

Conclusions by the Management Committee

The Management Committee **noted** that the response from the Scientific Committee implies that although an assessment of sei whales can in theory be conducted it is not likely to result in a realistic estimate of sustainable yield. This is primary due to the lack of recent abundance estimates that cover more than a fraction of the distribution area for this stock. Therefore the Management Committee **recommends** that the Scientific Committee monitors the development and proceeds with an assessment as soon as sufficient data becomes available.

The Management Committee furthermore **recommends** that member countries decide whether sei whale is a target species for the next survey.

4.4. Minke whales

Status of past proposals for Conservation and Management

In 2010 the Management Committee agreed that annual removals of 216 minke whales from the CIC (Central Iceland Coastal) area are sustainable and precautionary and that annual removals of 121 minke whales from the CM (Central Jan Mayen) area are sustainable and precautionary. Furthermore the Management Committee 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.

Requests from Council for advice from the Scientific Committee

There was one ongoing request to the Scientific Committee:

R-3.3.4 - **NAMMCO/17-2008:** 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.

Advice from the Scientific Committee

The 2007 abundance estimates for all areas, but Norway, have now been provided to, reviewed and endorsed by the Scientific Committee.

In addition corrected total estimates for the 2007 and 2009 Icelandic aerial surveys have also been endorsed. It was agreed that the new evidence strengthened the conclusion that the observed decline in minke whale abundance in coastal Icelandic areas represents a real decline. The inclusion of the 2008 survey demonstrates that minke whale abundance exhibits great fluctuations from year to year. Several conclusions were agreed upon (see Section 3.1, page 239).

At NAMMCO/19 2010 the Management Committee for Cetaceans recommended a correction for h(0) and error in the 2007 and 2009 survey as soon as possible to adjust the management advice. Based on the corrected estimates plus the 2010 catch of 60 minke whales, it was concluded that annual removals of up to 229 minke whales from the CIC area are safe and precautionary. The advice may apply for the next 5 years (2011-2016).

In 2010 the Management Committee also recommended calculating, 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. The Scientific Committee concludes that, as a first step, decisions must be made on input parameters.

The Scientific Committee reiterated the recommendation that all genetic samples in the NAMMCO area be analysed for kin comparisons in order to obtain a better understanding of stock structure.

Conclusions by the Management Committee

The Management Committee **noted** the report from the Scientific Committee and **endorsed** its recommendations.

Proposals for conservation and management

The Management Committee endorsed the new estimates and concluded that annual removals of up to 229 minke whales from the CIC area are safe and precautionary at least for the period 2011 – 2016.

4.5 Narwhal – West Greenland

Status of past proposals for Conservation and Management

In 2010 the Management Committee strongly recommended 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 management advice.

Greenland drew attention to the revised Executive order no 7 of 29 March 2011 on protection and hunting of beluga and narwhals, which incorporates the request for "struck and lost" data. The recommendation has been implemented for several years prior to the Executive order via the reporting scheme on hunting.

Requests for advice from the Scientific Committee

There were one standing request, one ongoing and one new request to the Scientific Committee:

R-3.4.11 – **NAMMCO/17-2008:** to update the assessment of both narwhale and beluga when new data is available (standing).

R-3.4.10 - NAMMCO/14-2005: future surveys for beluga and narwhal should be planned using the international expertise available through the 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 (ongoing).

R-3.4.12 - **NAMMCO/19-2010:** to provide advice on sustainable takes for narwhal from the Kane Basin in spring, summer and fall.

Advice from the Scientific Committee

R-3.4.12: The request is part of the Terms of Reference for the NAMMCO/JCNB JWG meeting scheduled for 12 - 18 February 2012.

An aerial survey in West Greenland is scheduled for the spring 2012. The primary targets will be narwhal and beluga, and the secondary target will include bowhead whale and walrus.

A Narwhal and Beluga Age Estimation Workshop is planned as 3 separate submeetings: *i*) a symposium style workshop over 2 days immediately prior to the Society for Marine Mammalogy (SMM) conference in Tampa, Florida, 26-27 November 2011, *ii*) a hands-on laboratory-based beluga tooth workshop of 4-5 days after the SMM conference, and *iii*) a narwhal tusk workshop over a day in Copenhagen in conjunction with the JWG meeting (12-18 February).

Conclusions by the Management Committee

The Management Committee **noted** the report and also that new information would likely be available after the planned meeting of the NAMMCO/JCNB JWG.

4.6 Beluga - West Greenland

Greenland reiterated the information given under agenda item 4.5 Narwhal.

Requests by Council for advice from the Scientific Committee

There were two ongoing and one new request to the Scientific Committee:

- **R-3.4.9 NAMMCO/15-2005:** 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 (ongoing).
- **R-3.4.10 NAMMCO/15–2005:** 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 (ongoing).
- **R-3.4.13 NAMMCO/19–2010:** to reconsider the temporal and geographical restrictions on the takes of beluga from West Greenland within the framework of the NAMMCO/JCNB JWG in view of recent dynamic changes in the environment.

Advice from the Scientific Committee

R-3.4.13: The request is part of the Terms of Reference for the NAMMCO/JCNB JWG meeting scheduled for 12 - 18 February 2012.

Conclusions by the Management Committee

The Management Committee **noted** that new information would likely be available after the planned meeting of the NAMMCO/JCNB JWG.

4.7 Northern bottlenose whales

The Management Committee noted that that the T-NASS and CODA data will be combined for a model-based reanalysis and that Faroese data will be included.

4.8 Killer whales

Requests by Council for advice from the Scientific Committee

There is one ongoing request:

R-3.7.2-NAMMCO/13-2004: 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.

Advice from the Scientific Committee

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

Conclusions by the Management Committee

The Management Committee **noted** the update and that the request is pending.

4.9 Long-finned pilot whales

Past proposals for conservation and management

The Management Committee recalled that in 1997, the general Management Committee had concluded the following:

"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, 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.

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%.

Based on the comprehensive advice which had now been provided by the Scientific Committee to requests forwarded from the Council, the Management Committee concluded that the drive hunt of pilot whales in the Faroe Islands is sustainable."

Requests by Council for advice from the Scientific Committee

There was one ongoing and one new request for advice from the Scientific Committee:

R-3.8.4 - NAMMCO/16-2007: to complete an updated abundance estimate for pilot whales based on new data from T-NASS as a matter of priority (ongoing).

R-3.8.5 - NAMMCO/19–2010: to assess the status of long-finned pilot whales in West Greenland waters and provide minimum estimates of sustainable yield.

Advice from the Scientific Committee

Abundance estimates for all areas but Norway, including a Conventional Distance Sampling abundance estimate for the Iceland-Faroese shipboard area, have been provided to, reviewed and endorsed by the Scientific Committee. There are no firm conclusions on trends, due to difficulties in inferring from the index areas and possible changes in operational biases among the surveys. It was recommended that future surveys must have a clear and carefully designed protocol for defining pilot whale groups and estimating group sizes.

Conclusions by the Management Committee

The Management Committee **welcomed** the new abundance estimate of 128,093 (95% CI:75,682 to 216, 802) pilot whales in the Iceland-Faroese survey area, based on data from T-NASS in 2007, noting the conclusions of the Scientific Committee that this is currently the best available estimate.

The Management Committee endorsed the recommendations for further research to

improve the basis for providing more robust estimates of pilot whale abundance, which include:

- tracking animals from as many schools as possible
- additional work on trends, abundance, and stock structure
- timely implementation of a long-term monitoring programme.

The Management Committee **noted** that although this new estimate gives a figure much lower than the former best estimate from the 1989 survey, it cannot be interpreted as an indication of a decrease in the stock. The survey area from which the new estimate derives was much smaller and the survey was conducted earlier in the year. No firm conclusions about trends in pilot whale abundance could be inferred from a review of data from the entire series of sightings surveys since 1987. The Management Committee therefore concluded that, given this information, there was no reason to assume that the pilot whale stock utilised in the Faroe Islands is being overexploited.

New proposals and recommendations for scientific research

The Management Committee **agreed** to request the Scientific Committee to continue work to complete a full assessment of pilot whales in the North Atlantic and provide advice on the sustainability of catches, as soon as necessary further information becomes available, with particular emphasis on the Faroese area and East and West Greenland.

The Management Committee **noted** that the utilization of pilot whales in the Faroe Islands continues to be an opportunistic catch, as has been the case for centuries. Total catches of pilot whales may vary from year to year and setting a total allowable annual catches is not considered appropriate for this form of utilisation. Noting that it could take some time before an updated full assessment can be completed, the Management Committee **agreed** to request the Scientific Committee to provide a general indication of the level of abundance of pilot whales required to sustain an annual catch equivalent to the annual average of the Faroese catch in the years since 1997.

4.10 White-beaked, white-sided and bottlenose dolphins Requests from Council for advice from the Scientific Committee

There was one pending request to the Scientific Committee:

R-3.9.6 - NAMMCO/13-2004: to carry out assessments of these species when sufficient information was available on stock delineation, distribution, abundance and biological parameters to initiate the work.

Advice from the Scientific Committee

Abundance estimates are missing for dolphins in the Icelandic-Faroese area, the Icelandic coastal area and off Norway. Endorsed estimate for **white-beaked dolphins** in West Greenland is 9,827 (6,723 – 14,365). It was recommended that the analysis of the Icelandic and Faroese shipboard survey data as well as the analysis of the last two Icelandic coastal aerial surveys be carried out as soon as possible.

Preliminary estimates of life history parameters for **white-sided dolphins** from the Faroe Islands had been reviewed, together with information on movements and genetics. Updated information on diet reveals that fish predated by white-sided dolphin are small, most frequently between 3 and 10 cm.

Data are still not sufficient for an assessment and the recommendation was reiterated that the Faroese samples for diet and life history parameters from 350 **white-sided dolphins** be finalised.

Conclusions by the Management Committee

The Management Committee **noted** that data are still lacking in order to make an assessment. It furthermore **endorsed** the recommendation that the Faroese samples for diet and life history parameters be finalised.

Risso's dolphin

The 24 dolphins killed in the Faroe Islands (8 males and 16 females) have been examined and sampled, and the completion and publication of this work was encouraged in order to add to the understanding of the species poorly known biology and ecology in the North Atlantic.

Conclusion by the Management Committee

The Management Committee **noted** the presented information.

4.11 Harbour porpoise

Requests for advice from the Scientific Committee

One ongoing request to the Scientific Committee:

R-3.10.1 - NAMMCO/7-1997: to conduct a comprehensive assessment of the harbour porpoise throughout its range.

Advice from the Scientific Committee

2007 abundance estimates for all areas, but Norway, have now been provided to, reviewed and endorsed by the Scientific Committee, including an additional aerial estimate for the Faroese coastal area from 2009.

The Icelandic survey had produced the best available estimate for this area, which is a large improvement relative to previous NASS surveys. Given the differences in survey methods between years, the trend analysis in previous studies is likely not applicable. To estimate trends, further surveys optimized for harbour porpoises are required.

Analysis of harbour porpoises caught in West Greenland in 2009 showed a better body condition and more varied diet than porpoises caught in 1988-1995. It was noted that this could be due to a difference in the timing of the sampling.

The Scientific Committee recommended that an assessment meeting for harbour porpoises in all areas be held during the fall of 2012. Prior to this meeting total

removal estimates for all areas, and abundance estimates from the 2007 survey in Iceland and the 2010 survey in the Faroe Islands should be available.

Conclusions by the Management Committee

The Management Committee **noted** the update of information and recommended that an assessment meeting be held in 2112.

4.12 Bowhead whale

Update by the Scientific Committee

Observations of bowhead whales around Svalbard Norway from 1940 to 2009 show an increase during the last decade. This could be due both to an increase in the numbers of whales, or due to increased tourism and a dedicated reporting system.

Studies conducted in Disko Bay will continue, and acoustic monitoring in Baffin Bay will start in the fall 2011. Bowhead whales will be a secondary target species of an aerial survey planned for spring 2012 in Greenland.

Conclusions by the Management Committee

The Management Committee **noted** the presented information.

4.13 Sperm whale

Update by the Scientific Committee:

No abundance estimates are available from T-NASS.

The T-NASS acoustic data from Iceland have been analysed following a methodological course in November 2009 sponsored by NAMMCO. Subsequently a technical problem has been discovered with the data. This can be solved but a reprocessing of the data is required. The Scientific Committee recommended that the reanalysis of the data is carried out and abundance estimate finalised, and it urged the Secretariat to find a suitable agreement with the Sea Mammal Research Unit (SMRU).

Greenland also welcomed the recommendations from the Scientific Committee, especially the development of common sampling protocols for epidemic disease outbreaks and informed about the incidence of dead sperm whales from March and May 2011, where there were samples from one animal. It informed that there was no conclusion at the moment on the evaluation of samples.

Conclusions by the Management Committee

The Management Committee **noted** the update and **recommended** that the data be reprocessed.

4.14 Survey planning

In 2010, the Management Committee for Cetaceans tasked the Scientific Committee to begin planning the next surveys.

The Management Committee **commended** the efforts made by the Scientific Committee in the planning of the next survey. It welcomed the idea of mounting

another international large synoptic survey, with a strong will to coordinate with other ongoing surveys in the area, especially the European CODA/SCANS and the USA SNESSA.

The next survey year will depend on several factors, and it is anticipated that the first possible year will be 2014 and the period 2014- 2017. While recognising 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 (synoptic survey within the same year). This will make the survey comparable to the previous five NASS. The Management Committee endorsed the idea of appointing an overall Survey Coordinator.

Norway informed the Committee that it would as with the T-NASS not alter their survey plans *i.e* would not survey the same year and that they would have minke whales as the only target species.

The Management Committee **requested** the Scientific Committee to continue their diligent planning of the survey, taking care to ensure that the coverage of the survey and the methodology would be adequate for obtaining reliable data for the main target species.

5. PROCEDURES FOR DECISION-MAKING ON CONSERVATION AND MANAGEMENT MEASURES

5.1 General Models

In 2010 the Management Committee recommended that the Scientific Committee investigate how NAMMCO can take over a larger and more direct role in developing advice for conservation and management of baleen whales. The Management Committee recognised that the RMP-like approach previously endorsed (NAMMCO/18-2009) in most cases cannot be applied immediately to stocks of baleen whales in the NAMMCO area. Although considerable work has already been done by the Scientific Committee of the IWC as part of RMP implementation for some stocks (North Atlantic minke and fin whales) further simulation testing is needed for the modifications recommended by NAMMCO (*e.g.* different tuning levels). As described in Table 2 (Section 3.1, pages 285-6) for many species/stocks that have not been subject to the RMP implementation process, more work would be required before an RMP-like management procedure could be implemented.

The Management Committee **noted** that as described in the Scientific Committee report, there can be considerable costs related to the implementation of a RMP-like approach for the management of all whale stocks in the North Atlantic. However, the implementation has to a large degree been completed for minke and fin whales in the Central and North East Atlantic, and a RMP-like approach could possibly also be implemented for humpback whales in this area without too many resources.

JOINT SESSION OF BOTH MANAGEMENT COMMITTEES

6. ECOSYSTEM BASED MANAGEMENT

No issues were raised under this agenda item.

7. USER KNOWLEDGE IN MANAGEMENT DECISION-MAKING

Greenland informed that it had started to implement the Greenland relevant recommendation given during the NAMMCO workshop on User Knowledge from 2003. The implementations can be seen in revised executive orders, and that it has started information campaigns on the importance of delivery of catch data, including struck and lost and by-catches in connection with meetings with municipalities and relevant organisations and during the public hearings along the coast.

Greenland also informed that it is involved in a project where there is collection of hunter observation of presence of natural resources, and that some of the recommendations transformed to the municipalities.

8. RELATED MANAGEMENT ISSUES

8.1 Marine-mammal – fisheries interaction

In 2009 the Management Committee endorsed the recommended project "Modelling of marine mammals in the Ecosystem – the Barents sea and Icelandic waters". The Management Committee noted that some funding had been secured from the Nordic Council of Ministers to create a network and to write the application for the overall project. The project has a Steering Committee outside of NAMMCO but with participation from the Secretariat and the Scientific Committee (Walløe), and Matís in Iceland has been contracted to coordinate and write the application. The project reports to the Scientific Committee. The management Committee noted that there would be a meeting of the network just following the NAMMCO 20.

Greenland emphasised the importance of ecosystem-based management issues, noting that several agenda items deal with these issues and regrets that there are no substantial debate.

The Management Committee **reiterated** its support for the progress of this project and **urged** that financing bodies are identified and the application for funding is submitted.

8.2 Environmental questions

No issues were raised under this agenda item.

8.3 By-catch data and monitoring

The NAMMCO-ICES workshop on by-catch monitoring reviewed indirect and direct by-catch monitoring, data collection, and fleet data needed for raising estimates to fleet level. Development of a Guidelines manual on best practices in by-catch monitoring as an ICES Cooperative Research Report is still ongoing.

The Management Committee **reiterated** that accurate estimates of total removals are essential for the assessment of all species and **strongly recommends** that Norway and Iceland provide estimates of by-catch. It was also noted that a reliable abundance estimate of porpoises had been endorsed for Iceland but that such abundance estimate was still missing for Norway.

The Management Committee **encouraged** Iceland, Norway and the Faroe Islands to proceed with the implementation and results analysis of their by-catch monitoring systems, and it reiterates its recommendation to Greenland to investigate the degree to which by-catch is reported as catch.

PINRO in the Russian Federation has plans to implement by-catch monitoring in the White Sea.

Norway informed the Committee that after the Joint NAMMCO-ICES workshop, Norway has extrapolated by-catches from the monitored segment of the fleet to the entire fleet. Based on a 3-year average, this provides an estimate of by-caught harbour porpoises with a coefficient of variance of about 30%. This implies that the current Norwegian method for estimating marine mammal by-catches provides estimates of acceptable precision.

A small revision of the reporting system on catch, by-catch and "struck and lost" is still underway in Greenland. A process of digitalization of the hunting license system and the reporting system might incorporate these issues.

Iceland and Norway have introduced and implemented the electronic logbook on all vessels over a certain size making reporting of by-catch mandatory. In the Faroe Islands the electronic logbook system is also introduced, and makes by-catch mandatory, but it has not been installed in all vessels yet.

The Management Committee **endorsed** the recommendations from the Scientific Committee and **noted** the updates from member countries.

8.4 Other topics - Catch reporting system

Greenland informed that the recommendation of data collection of "struck and lost" is being followed by a campaign and that all hunters have been made aware of the importance of catch reporting.

Iceland reported that contrary to the statement in the Scientific Committee report it already has a reporting system for small cetaceans and seals, for all boats with a fishing permit. Hunters are obliged to report all catches.

The Management Committee **endorsed** the recommendation from the Scientific Committee that all takes of all species should be reported and that a reporting system for all species with an allowed hunt should be in place for all areas. It also **noted** the update from member countries.

Appendix 1

AGENDA

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- 3. APPOINTMENT OF RAPPORTEUR
- 4. CONSERVATION AND MANAGEMENT MEASURES FOR WHALE STOCKS
- 4.1 Fin whales

East-Greenland –Iceland stock

W.Greenland

Faroe Islands

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- Requests by Council for advice from the Scientific Committee
- Responses by the Scientific Committee
- New proposals and recommendations for scientific research
- Proposals for conservation and management
- 4.2 Humpback whales

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- Requests by Council for advice from the Scientific Committee
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- 4.3 Sei whales
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West Greenland

- Status of past proposals
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4.5 Narwhal

West Greenland

- Status of past proposals
- Requests by Council for advice from the Scientific Committee
- Responses by the Scientific Committee
- New proposals and recommendations for scientific research
- Proposals for conservation and management

4.6 Beluga

West Greenland

- Status of past proposals
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- Responses by the Scientific Committee
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4.7 Northern bottlenose whales

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4.9 Long-finned pilot whales

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4.10 White-beaked, white-sided and bottlenose dolphins

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4.11 Harbour porpoise

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4.12 Bowhead whale

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4.13 Sperm whale

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5. PROCEDURES FOR DECISION-MAKING ON CONSERVATION AND MANAGEMENT MEASURES

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- 6. ECOSYSTEM-BASED MANAGEMENT
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- 8.4 Other topics
- 9. ANY OTHER BUSINESS

Appendix 2

LIST OF DOCUMENTS

Document no	Title	Agenda item
NAMMCO/20/MC/1	List of Documents	
NAMMCO/20/MC/2	Agenda	2.
NAMMCO/20/MC/3	Status of Past Proposals for Conservation and Management	4.
NAMMCO/20/MC/4	Summary of Requests by NAMMCO Council to the Scientific Committee, and Responses by the Scientific Committee	4.
NAMMCO/20/MC/5	Recommendations to member countries 2010	4.
NAMMCO/20/6 and ANNEXES	Report of the Eighteenth Meeting of the Scientific Committee	4., 5., 6. And 8.

RECOMMENDATIONS TO MEMBER COUNTRIES 2011

Next Survey – all countries:

The Management Committee for Cetaceans **recommended** that member countries decide whether the sei whale is a target species for the next survey.

Humpback whale - Iceland and Faroes:

The Management Committee for Cetaceans **recommended** to undertake further analysis of the possibility for responsive movement to survey vessels for the Icelandic-Faroes shipboard survey.

Sei whale – all countries:

The Management Committee for Cetaceans **recommended** that member countries decide whether the sei whale is a target species for the next survey.

Minke whale - all countries:

The Management Committee for Cetaceans **recommended** that all genetic samples in the NAMMCO area be analysed for kin comparisons in order to obtain a better understanding of stock structure.

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:

The Management Committee for Cetaceans recommended

- Tracking animals from as many schools as possible.
- Additional work on trends, abundance and stock structure
- Implementation of long-term monitoring programme.

White-beaked, white-sided and bottlenose dolphins -

Iceland and Faroe Islands:

As soon as possible to carry out analysis of the Icelandic and Faroese shipboard survey data as well as analyses of the last two Icelandic coastal aerial surveys.

Faroe Islands:

Finalise the analysis of Faroese samples for diet and life history parameters from 350 white-sided dolphins.

Harbour porpoise – all countries

Faroe Islands and Iceland:

Make available before the meeting on harbour porpoise total removal estimates for all areas, the abundance estimates from the 2007 survey in Iceland and the 2010 survey in the Faroe Islands.