



## **NORTH ATLANTIC MARINE MAMMAL COMMISSION**

### **SECTION 2 - MANAGEMENT COMMITTEE**

#### **2.1 Report of the Management Committee**

15 March 2006, Selfoss, Iceland

#### **1.-3. CHAIRMAN'S OPENING REMARKS**

The Chair of the Management Committee, Halvard P. Johansen, welcomed delegations and observers to the meeting. Participants to the meeting are listed in Appendix 1 of the Report of the Council. The agenda, as contained in Appendix 1, was adopted. Documents available to the meeting are listed in Appendix 2. The Secretariat was appointed as rapporteur for the meeting.

#### **4. NATIONAL PROGRESS REPORTS**

National Progress Reports for the year 2004 were available from the Faroe Islands, Greenland, Iceland and Norway. In addition a Progress Report was provided by Canada and brought to the Management Committee as an information item. The Management Committee expressed its appreciation to Canada for providing the report. Greenland informed the Committee that information that was noted as lacking in a previous report would be provided. Norway suggested that in future, information on management systems should be provided in National Progress Reports – a proposal that was supported by the Faroes who also wanted more comprehensive coverage of management aspects. Greenland drew attention to the fact that the Committee on Hunting Methods regularly included a listing of hunting regulations and that perhaps this could be circulated more widely. It was agreed that such information should be included in all subsequent National Progress Reports.

#### **5. STATUS OF PAST PROPOSALS FOR CONSERVATION AND MANAGEMENT**

The Committee considered document NAMMCO/15/MC/3 (Appendix 3) which was a record of past proposals for conservation and management put forward by the Management Committee. The Chair asked the Committee to comment on any regulatory or other measures that had been taken in response to these proposals.

##### **5.1 Atlantic walrus**

Last year Greenland informed the Committee of a planned regulatory initiative that would establish quotas for walrus. Greenland noted that the

regulatory initiative had been delayed but was expected to be introduced this year.

## **5.2 Ringed seal**

There was nothing to report under this item.

## **5.3 Harp seal**

### *5.3.1 Northwest Atlantic*

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.

### *5.3.2 White/Barents Sea*

Last year Norway reported on a joint venture project between Russian and Norwegian commercial interests to conduct sealing in the White Sea using small vessels, as is done in Canada. The project is underway and Norway will continue to keep NAMMCO informed on progress in this area.

### *5.3.3 Greenland Sea*

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.

## **5.4 Hooded seal**

A survey covering all stocks was carried out in 2005. Norway reported that, based on preliminary results from these surveys, which suggested that pup production was lower than expected, 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 this year.

## **5.5 Grey seal**

In 2004 the Management Committee recommended that both Iceland and Norway should define clear management objectives for grey seals.

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. 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.

The Faroe Islands noted that a drastic decline in salmon aquaculture had likely led to a decline in killing of grey seals that were a nuisance to the industry.

## **5.6 Northern bottlenose whales**

There was nothing to report under this item.

**5.7 Long-finned pilot whales**

There was nothing to report under this item.

**5.8 Minke whales – Central North Atlantic**

There was nothing to report under this item.

**5.9 Beluga - West Greenland**

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.

**5.10 Narwhal - West Greenland**

Greenland noted that a quota system for narwhal had been 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.

**5.11 Fin whales - East Greenland - Iceland stock area**

There was nothing to report under this item.

**5.12 Incorporation of users' knowledge in the deliberations of the Scientific Committee**

There was nothing to report under this item (but see item 10).

**6. STATUS OF PAST REQUESTS TO THE SCIENTIFIC COMMITTEE**

The Chair drew the attention of the Committee to the updated summary of requests by the NAMMCO Council to the Scientific Committee, and responses by the Scientific Committee (NAMMCO/15/MC/4, Appendix 4). In addition the Chairman of the Scientific Committee updated the Management Committee on the status of outstanding requests from the 2005 meeting of the Scientific Committee:

**Marine mammal – fisheries interactions**

In 2004 the Management Committee agreed that the Scientific Committee should monitor progress made in multi-species modelling and in the collection of input data and decide when enough progress has been made to warrant further efforts in this area. There has not been enough progress to warrant a working group meeting in 2006.

**White-beaked, white-sided and bottlenose dolphins**

There was still insufficient information to move forward on this request for an assessment. This may become feasible once feeding, genetic and life history studies have been completed in Iceland, the Faroes and Norway, and when new abundance estimates become available from the SCANS II, NASS and other sightings surveys. In addition a cooperative international

satellite tagging program will be conducted in Iceland in 2006. An assessment could probably be conducted by 2008 at the earliest.

### **Humpback whales**

In 2005, the Scientific Committee was requested to assess the sustainable yield levels for humpback whales, particularly those feeding in West Greenlandic, Icelandic and Norwegian waters. The Scientific Committee decided to postpone the provision of advice for West Greenland until a new abundance estimate is available, probably in 2006. Sufficient information on historical catch, abundance and stock structure is available at present to conduct assessments for the Icelandic and Norwegian stocks. However, given other priorities, the Committee considered it advisable to delay this assessment until after the completion of the NASS-2007 survey (TNASS), when an additional estimate of abundance should become available

## **7. NEW PROPOSALS FOR CONSERVATION AND MANAGEMENT, REQUESTS FOR ADVICE FROM THE SCIENTIFIC COMMITTEE AND RECOMMENDATIONS FOR SCIENTIFIC RESEARCH.**

There was no comment on the following items:

- 7.1 Economic aspects of marine mammal - fisheries interactions**
- 7.3 Grey seals**
- 7.5 Harbour porpoise**
- 7.8 Fin whales**
- 7.9 Minke whales**
- 7.10 White-beaked, white-sided and bottlenose dolphins**
- 7.11 Humpback whales**
- 7.12 Killer whales**
- 7.14 Harbour seals**
- 7.15 Ringed seals**

However, the Management Committee endorsed the research recommendations outlined in the Scientific Committee report, where applicable.

### **7.2 Harp and hooded seals**

#### *7.2.1 Proposals for conservation and management*

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.

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 (Appendix 4, items 4.9.6 and 4.9.7; also NAMMCO Annual Report 2004 p. 27).

Greenland specifically stressed the importance of these outstanding requests, and indicated that they would expect a more complete discussion next year.

#### **7.4 Walrus**

##### *7.4.1 Proposals for conservation and management*

##### *7.4.2 New requests for advice*

The Management Committee recommended that the Scientific Committee should provide advice on the effects of human disturbance, including fishing and shipping activities, in particular scallop fishing, on the distribution, behaviour and conservation status of walrus in West Greenland.

##### *7.4.3 Recommendations for scientific research*

The recommendations for research contained in Section 9.13.1 of the Report of the Scientific Committee were endorsed.

#### **7.6 Beluga - West Greenland**

##### *7.6.1 Proposals for conservation and management*

This year 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 available. Similar advice was first provided in 2000 and has been confirmed and reiterated in meetings held in 2003 and 2004.

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 recognizing 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.

While commending Greenland for the recent introduction of quotas and reduction in the harvest, and recognizing 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.

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.

#### *7.6.2 Requests for scientific advice*

The Management Committee recommended that the Scientific Committee 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.

#### *7.6.3 Recommendations for scientific research*

The recommendations for research contained in Annex 1, Section 6.5 of the Report of the Scientific Committee were endorsed.

Surveys for estimating abundance and trends are an essential component of the assessment of the conservation status of all marine mammals. The Management Committee recognizes that the planning, conduct and interpretation of surveys is a very contentious issue between hunters, managers and scientists in Greenland. Such surveys must be planned using the best available expertise, including input from hunters, so that all will have confidence in their results. The Committee therefore recommends that future surveys for beluga 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 insured.

### **7.7 Narwhal - West Greenland**

#### *7.7.1 Proposals for conservation and management*

This year 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.

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 recognizing 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.

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 and will lead to further depletion of the stock.

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.

#### *7.7.3 Recommendations for scientific research*

The recommendations for research contained in Annex 1, Section 5.7 of the Report of the Scientific Committee were endorsed.

The recommendation with regard to surveys in item 7.6.3 above, applies also to narwhal.

### **7.13 North Atlantic Sightings Surveys**

The Management Committee noted that the proposed extended area TNASS in 2007 could provide new information on stocks and species for which requests for advice are still outstanding. (See also discussion at the end of item 11.)

## **8. REPORT OF THE WORKING GROUP ON BY-CATCH**

The Working Group held a meeting on 13 March 2006, and the Report from the meeting is included in Section 2.2.

### **Progress in monitoring marine mammal by-catches by NAMMCO Member Countries**

The Working Group reviewed the progress of member countries in establishing systems to effectively monitor by-catch. There have been no changes in the past year in the by-catch monitoring systems in the Faroes, Greenland and Iceland. In 2005 in Norway two new by-catch monitoring programmes were introduced. (see below).

### **Evaluation of procedures developed and implemented by NAMMCO Member Countries**

In 2005 Norway introduced two new programmes to monitor by-catch: an independent observer (IO) programme for large vessels, and “reference fleet” (RF) programmes for large and small vessels. These are described in detail in Section 2.2, Part 4.2.1. It is anticipated that extrapolation of by-catch estimates to entire fisheries will be feasible sometime in 2007. The

Working Group welcomed the progress by Norway in monitoring by-catch in coastal and offshore fisheries and will await the results of the evaluation next year.

In 2004 the Scientific Committee recommended that full uncertainty should be incorporated into the by-catch estimates from the Icelandic logbook programme and the experimental gillnet survey, and these estimates were presented this year (Section 2.2, Part 4.2.2). The Working Group welcomed Iceland's progress in fulfilling this technical recommendation by the Scientific Committee. It was noted that the level of precision for the most commonly caught species, the harbour porpoise, may be acceptable even with the present low rate of reporting in the logbook program. However the potential for negative bias in estimates from this programme still needs to be addressed, and the Working Group referred to the recommendations of the Scientific Committee (NAMMCO 2005) for doing so.

### **Evaluation of the potential risk of marine mammal by-catch in the fishery within the NAMMCO area**

In 2004 the Management Committee recommended that member countries should prepare working documents outlining the existing knowledge about marine mammal by-catch in their jurisdiction, for the consideration of the Working Group. In 2005, documents from Iceland and the Faroe Islands were reviewed. This year, documentation was received from Greenland (partial) and Norway.

#### *Greenland*

Fisheries in Greenland and their potential for by-catch are described in Section 2.2, Part 5.1. The Working Group considered this work to be incomplete as it did not provide descriptions and spatial distributions of all fisheries in sufficient detail and provided no information on the potential for overlap with marine mammals. Nevertheless this was considered a first step in assessing the potential for by-catch in Greenland. In this regard the Working Group noted that there was potential for marine mammal by-catch in near-shore gillnet and trap fisheries for several species, but at present there is no way to assess the magnitude of by-catch that is occurring.

#### *Norway*

Fisheries in Norway and their potential for by-catch are described in Section 2.2, Part 5.1. In addition, the distributions of several species of toothed and baleen whales are well known for the summer months but poorly described for the remainder of the year. These distributions show considerable overlap with those of fisheries. However, these provide a static picture of fishery and marine mammal distribution, which in the real world are very dynamic both in space and time. Much more detailed data would be required to identify potential "hot spots" for marine mammal by-catch. The Working Group welcomed this contribution from Norway, noting that it added greatly to their understanding of Norwegian fisheries. The Working Group agreed with the conclusion that the coastal gillnet fishery probably has the highest risk of marine mammal by-catch and should be a priority for monitoring.



These reviews were originally requested in 2004 (NAMMCO 2004) for the purpose of developing recommendations and priorities for by-catch monitoring in member countries. While the reviews had proven quite useful in identifying fisheries that were most at risk for marine mammal by-catch, it was considered that further progress in this area would require much finer spatial and temporal resolution of both fishery and marine mammal distributions than was available for most areas. Therefore, the Working Group **recommended** that efforts be concentrated on developing effective monitoring programmes, especially for fisheries identified as being most at risk for marine mammal by-catch.

### **Reporting of by-catch to NAMMCO**

The Working Group reviewed the by-catch information in the National Progress Reports applicable for 2004. This year all countries included the required section on by-catch in their progress reports, however the format was not followed in all cases. It is apparent that, without effective by-catch monitoring programmes in place, countries cannot report by-catch in a way that can be quantified. In no case would total by-catch be estimated from the data reported.

### **Proposal for a workshop on by-catch monitoring**

The Terms of Reference for this working group indicate that its major focus is to improve the systems for collecting data on by-catch in NAMMCO member countries. Noting that, at present, no NAMMCO member country has an effective monitoring programme for marine mammal by-catch, the Working Group considered that there is potentially much to gain from learning from the experiences of other jurisdictions where monitoring programmes are more developed. The Working Group therefore proposed that NAMMCO host a workshop with the theme “Monitoring Marine Mammal By-catch”. The details of the proposed workshop are given in Section 2.2, Part 7.1.

### **Recommendations**

In 2005 the Working Group provided a number of recommendations to improve the monitoring of by-catch in NAMMCO member countries (NAMMCO 2005). At that time the Management Committee noted that the Working Group was not able to complete its assessment of the potential for marine mammal by-catch in NAMMCO member countries, and therefore agreed to postpone a full consideration of the recommendations put forward by the Working Group until the next annual meeting. The Working Group therefore reiterated the recommendations first put forward last year, with some additions and modifications (Section 2.2, Part 8).

The Management Committee commended the Working Group for their valuable and efficient work.

With regard to the recommendation by the Working Group to hold a workshop on by-catch monitoring, the Management Committee agreed that external expertise should be available to the Working Group if required. However, the Committee considered that it would be simpler and perhaps

more efficient to invite external experts to participate directly in the Working Group, rather than holding a separate workshop. The Management Committee therefore directed the Secretariat to assist the Working Group in obtaining the expertise necessary to move forward at their next meeting.

The Management Committee supported the following recommendations put forward by the Working Group, and urged member countries to implement them in a timely manner:

1. The recommendations of the Scientific Committee made in 2005 to improve the estimation of by-catch from the Icelandic monitoring system (NAMMCO 2005) are supported.
2. The use of self reporting through fishery logbooks to estimate by-catch should be considered the minimum level of monitoring for NAMMCO member countries. To be effective, such a reporting system must report the presence or absence of by-catch for every gear set. It is also crucial that fishermen be kept informed about the programme.
3. Supplemental monitoring, probably through observer programmes, will be necessary for high risk fisheries and in cases of high conservation concern where more precise and reliable estimates are required.
4. Target levels of precision for by-catch estimation should be established. While these may be species or stock specific it was considered likely that such a level would likely be at least as precise as that established by the EU, *i.e.*  $cv \leq 0.3$ .
5. Norway should continue to develop its observer programme for offshore fisheries and the targeted collection of data from the coastal fishery, and provide estimates of by-catch with associated precision as soon as feasible.
6. Norway is in the process of revising their logbook system and introducing electronic logbooks. The effective recording of marine mammal by-catch should be a part of this process.
7. For Greenland, catch of marine mammals resulting from some coastal fisheries with mixed species catches should be specified with regard to catching method.
8. Greenland should complete the evaluation of the potential for marine mammal by-catch in fisheries presented in incomplete form to the Working Group this year.

## **9. IMPLEMENTATION OF THE JOINT NAMMCO CONTROL SCHEME**

### **9.1 NAMMCO International Observation Scheme 2005**

The Chair referred to the report of the NAMMCO International Observation Scheme under the Joint Control Scheme for the hunting of the marine mammals, prepared by the Secretariat (NAMMCO/15/MC/7). Charlotte Winsnes, Administrative Coordinator, presented the report to the Management Committee. For the 2005 season, the planned and approved observation activities were sealing in Iceland and Norway. However, due to low skin prices in Iceland in 2005 and the anticipation that there would be

only minor hunting taking place in Iceland, the decision was made to focus on sealing in Norway alone.

One observer stayed on one sealing vessel going to the west ice and stayed onboard from 10 March to 2 May. The actual hunting period was from 24 March to 27 April in areas XIVa and IIa (ICES-division). No infringements were observed.

Prior to the observation period the observer participated in the course held for the Norwegian national inspectors. He had received and was briefed on the national laws and regulations pertaining to hunting of marine mammals in Norway, and was also provided with the Provisions of the Joint NAMMCO Control Scheme for the Hunting of Marine Mammals.

The observer found that he could carry out his observations in accordance with the provisions of the Scheme. It was noted that NAMMCO has a well functioning system with onboard observations.

## **9.2 NAMMCO International Observation Scheme 2006**

The Management Committee noted that the approved scope and range of the observation scheme for 2006 would be whaling in Greenland and Norway

## **9.3 Other matters**

Norway gave an update on the "Blue box" system in Norway which will be fully operational from 2006 and noted that implementation of the blue box may require some adjustments to the NAMMCO Control Scheme. The Management Sub-Committee on Inspection and Observation will carry out this revision.

## **10. USER KNOWLEDGE IN MANAGEMENT DECISION-MAKING**

Charlotte Winsnes presented the published proceedings from the NAMMCO Conference on User Knowledge and Scientific Knowledge in Management Decision-Making held in Iceland in January 2003. The publication was well received, and the Management Committee complimented the Secretariat for a job well done.

The Working Group on User Knowledge in Management was re-established under the chairmanship of Egil Ole Øen, Norway with the following new terms of reference:

1. To define in which areas of management and research a collaborating forum between users, managers and scientist would be beneficial;
2. To make recommendations as to how such a collaborative forum may be established.

Member countries were requested to appoint members to the WG.

Aqqaluk Lyngé of the Inuit Circumpolar Conference (ICC) gave an intervention emphasising the importance of scientific knowledge as the basis of all discussion and decision-making, but also the importance of securing meaningful representation of user knowledge. It would be beneficial to get a better understanding of the work done in Alaska and Arctic Canada on these issues and for Greenland a possible solution would be to supply the KNAPK with a full-time biologist fluent in Greenlandic and Danish/English.

## **11. REPORT OF THE *AD HOC* WORKING GROUP ON ENHANCING ECOSYSTEM-BASED MANAGEMENT**

Johann Sigurjónsson (Chairman of the *Ad hoc* Working Group) presented the report. He summarised the main discussions and recommendations which are listed in the report (NAMMCO/15/MC/8, Section 2.3). Considerable discussion and comment followed.

The Faroes expressed appreciation for the report and noted that it would form a useful document for reference. The Faroes referred to the preamble to the NAMMCO Agreement which recognises the need to enhance research on the role of marine mammals in the ecosystem, including multi-species approaches to management, reminding members that NAMMCO has been committed to ecosystem-based approaches to management (EBM) from its inception. Also, in previous requests to the Scientific Committee, reference had often been made to considering the possible effects on feeding ecology and environment.

Lars Walløe, Chairman of the Scientific Committee stated that it was important to work on the ecosystem approach in management and reminded the Committee that Norway has been working on ecosystem modelling for several years, but experience has shown that ecosystems can be very complex. With reference to management plans – capelin in the Barents Sea – is a good example of a multi-species ecosystem approach to fisheries management, where supply of food for cod is considered in setting fisheries quotas. It is hoped that progress will be made on the important marine mammal ecosystem modelling work and whale feeding information currently being obtained in Iceland and Norway in the very near future. Models are necessary to an ecosystem approach. While EBM topic is important, it may also be incautious to make any concrete recommendations at this stage.

Greenland reported that an “Ecogreen” professor (based at the Greenland Institute of Natural Resources, Nuuk) has been employed to develop an ecosystem-based approach in Greenland. Greenland has no current EBM for marine mammals but this is not the case for other ecosystem components. Fishery policy approved in 2004 included EBM policies. It was noted that in Greenlandic waters 56 thousand tonnes of halibut are consumed by cetaceans annually: an amount more than double that consumed by the indigenous human population. Greenland stated that it

looked forward to working with NAMMCO and WG participants on development of EBM.

Iceland stated that it sets great importance on EBM approaches and in understanding the ecosystem, and referred to the presentation of new results on the Icelandic Research Programme made by Gísli Víkingsson on the first day of the Annual Meeting.

The Faroes drew attention to other bodies that are currently working towards EBM and are currently reviewing and updating their mandates to incorporate this theme. It is important for NAMMCO to engage such other organisations in EBM, to coordinate efforts with them and to ensure that marine mammals are not forgotten in marine EBM. Particular reference was made here to NAFO, and also to the UN Law of the Sea which would be holding a meeting in June 2006 to consider EBM.

Lars Walløe, Scientific Committee Chairman, cautioned that the details of feeding models and interactions may take a long time to develop. Jóhann Sigurjónsson, Chairman of the *Ad hoc* Working Group, drew attention to the fact that it was important for NAMMCO to progress: NAMMCO had already made the first steps and that EBM is already on the agenda. We might be realistic and even pessimistic at times, but we must be committed to EBM and take a pragmatic, incremental approach as our knowledge and experiences increase. He recalled that in Iceland there had long been recognition that there may be ecological impacts of management decisions, and that historically Iceland had experimented with the sacrifice of one species to maximise another.

The General Secretary reminded the Committee that the *Ad hoc* Working Group report emphasised the importance of clear management objectives in EBM; these may change over time and in priority, and according to the ecosystem-species balance and the environment as well as the socio-economic situation prevailing.

With respect to the recommendations, Greenland considered that a framework checklist of items needed – so-called “shopping list” - is an important and useful idea. Greenland would like to explore how fishermen could be involved in the EBM approach. The Faroes noted that such a checklist should be defined, also impacts and effects down the line; user knowledge is already being taken into consideration to some extent. Attention was drawn particularly to the following points under Objective 2 in the recommendations:

“Marine Mammals will be an important component of approaches in the NAMMCO area and therefore NAMMCO can play a significant role by:

- 1) ensuring that the appropriate data on marine mammals are available as input;
- 2) continuing to improve our understanding of all marine mammals that occur in these areas;

- 3) promoting an awareness of ecosystem-based management with managers and the general public;
- 4) coordinating inputs among regional approaches to ensure consistency in the way in which marine mammal data are incorporated.”

The Chair of the Management Committee proposed that a start should be made on the checklist while the work on ecosystem models progresses, and also that the *Ad hoc* Working Group should continue. At the same time he stated that it was important that adequate funding should be found nationally for the modelling work required. All members were in favour of this proposal, and Greenland requested that items listed on p.22 of the report Annex 1 should also be considered in the checklist development.

In conclusion on this matter, Geneviève Desportes (Faroes, coordinator of TNASS), enquired if the TNASS planning group should take ecosystem approaches into consideration, and, with reference to points 1 and 2, the importance of getting information on all marine mammals. While recognising that survey design was largely determined by target species, it was agreed that some additional effort could be made in collecting ancillary data and in allowing improvement of data collection for non-target species. Attempts to collaborate with fishery and oceanographic surveys, as well as global projects, such as within IPY (International Polar Year) could enhance cooperative research.

Recommendations:

The Management Committee recommended that the *Ad hoc* Working Group should continue and meet inter-sessionally, and contact other bodies dealing with marine resource and fisheries management in order to consider EBM approaches in marine mammal management and develop a checklist as recommended in the report. The Working Group should report back at the next Annual Meeting.

## **12. ELECTION OF OFFICERS – CHAIR AND VICE-CHAIR OF COUNCIL**

Halvard P. Johansen (Norway) was re-elected as Chair, and Ásta Einarsdóttir (Iceland) was re-elected as vice-Chair.

## **13. ANY OTHER BUSINESS**

There was no other business.

## **14. ADOPTION OF REPORT**

The draft report containing all important points was presented to Council, but formal adoption of the Management Committee report was by correspondence.

## AGENDA

1. Chairman's opening remarks
2. Adoption of agenda
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4. National Progress Report
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  - 5.9 Beluga - West Greenland
  - 5.10 Narwhal - West Greenland
  - 5.11 Fin whales - East Greenland - Iceland stock area
  - 5.12 Incorporation of users' knowledge in the deliberations of the Scientific Committee
6. Status of past requests to the Scientific Committee
7. New proposals for conservation and management, requests for advice from the Scientific Committee and recommendations for scientific research.
  - 7.1 Economic aspects of marine mammal - fisheries interactions
    - 7.1.1 Proposals for conservation and management
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  - 7.7 Narwhal - West and East Greenland
    - 7.7.1 Proposals for conservation and management
    - 7.7.2 New requests for advice
    - 7.7.3 Recommendations for scientific research

- 7.8 Fin whales
  - 7.8.1 Proposals for conservation and management
  - 7.8.2 New requests for advice
  - 7.8.3 Recommendations for scientific research
- 7.9 Minke whales
  - 7.9.1 Proposals for conservation and management
  - 7.9.2 New requests for advice
  - 7.9.3 Recommendations for scientific research
- 7.10 White-beaked, white-sided and bottlenose dolphins
  - 7.10.1 Proposals for conservation and management
  - 7.10.2 New requests for advice
  - 7.10.3 Recommendations for scientific research
- 7.11 Humpback whales
  - 7.11.1 Proposals for conservation and management
  - 7.11.2 New requests for advice
  - 7.11.3 Recommendations for scientific research
- 7.12 Killer whales
  - 7.12.1 Proposals for conservation and management
  - 7.12.2 New requests for advice
  - 7.12.3 Recommendations for scientific research
- 7.13 North Atlantic Sightings Surveys
  - 7.13.1 Proposals for conservation and management
  - 7.13.2 New requests for advice
  - 7.13.3 Recommendations for scientific research
- 7.14 Others
- 8. Report of the Working Group on By-catch
- 9. Implementation of the Joint NAMMCO Control Scheme
  - 9.1 NAMMCO International Observation Scheme 2005
  - 9.2 NAMMCO International Observation Scheme 2006
  - 9.3 Other matters
- 10. User Knowledge in Management Decision-Making
- 11. Report of the *ad hoc* Working Group on Enhancing Ecosystem-Based Management
- 12. Election of officers – chair and vice-chair of management committee
- 14. Any other business
- 15. Adoption of report



**LIST OF DOCUMENTS**

NAMMCO/15/MC/1	List of Documents
NAMMCO/15/MC/2	Agenda
NAMMCO/15/MC/3	Status of past proposals for conservation and management
NAMMCO/15/MC/4	Summary of active requests by NAMMCO Council to the Scientific Committee, and responses by the Scientific Committee
NAMMCO/15/MC/5	Report of the Management WG on By-Catch
NAMMCO/15/MC/7	Report of the implementation of the Observation Scheme in 2005
NAMMCO/15/MC/8	Report of the Ad Hoc WG on Enhancing Ecosystem-Based Management
NAMMCO/15/MC/NPR-F	Faroe Islands – Progress Report on Marine Mammals in 2004
NAMMCO/15/MC/NPR-G	Greenland – Progress Report on Marine Mammals in 2004
NAMMCO/15/MC/NPR-I	Iceland – Progress Report on Marine Mammals in 2004
NAMMCO/15/MC/NPR-N	Norway – Progress Report on Marine Mammals in 2004
NAMMCO/15/5	Report of the SC

