



JOINT MEETING OF THE MANAGEMENT COMMITTEES

6 March 2018, Tromsø, Norway

DRAFT Report

1. CHAIR'S OPENING REMARKS

The Chair of the Joint Meeting of the Management Committees, Nette Levermann (GL), welcomed the delegates, observers, and invited participants to the meeting. Levermann also introduced herself, and gave a brief summary of her involvement at the Ministry of Fisheries and Hunting Agriculture in Greenland.

2. ADOPTION OF AGENDA

The agenda was adopted without revisions.

Levermann drew the attention of the participants (Appendix X) to the documents for this meeting, in particular documents NAMMCO/26/MC/05 "Proposals for Conservation and Management," NAMMCO/26/MC/06 "Summary of Requests by NAMMCO Council to the Scientific Committee," and NAMMCO/26/08 "Report of the 24th Scientific Committee."

Prewitt informed the MCJ that document NAMMCO/26/MC/05 "Proposals for Conservation and Management" has a new format which replaces the table used in previous years, and the aim of the new format is to make it easier to track the progress of both new and old Proposals for Conservation and Management and Recommendations for Research.

3. ECOSYSTEM APPROACH (R-1.5.3, 1.5.4, 3.4.9)

Review of requests by Council for advice from the Scientific Committee

R-1.5.3 (ongoing): monitor the development of the Mary River Project and assess qualitatively or if possible quantitatively the likely impact and consequences on marine mammals in the area

R-1.5.4 (ongoing): advise on the best process to investigate the effects of non-hunting related anthropogenic stressors on marine mammal populations, including the cumulative impacts of global warming, by-catch, pollution and disturbance.

R-3.4.9 - 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.

The requests were discussed separately under the updates from the Scientific Committee (SC).

Update from SC

Tore Haug (NO), the Chair of the SC, updated the MCJ on the SC's discussions regarding Ecosystem issues.

Regarding **R-1.5.4**, the SC noted that this request will not have one answer that will entirely cover this request, and **recommended** that upcoming/future working groups consider request R-1.5.4, for example by adding non-hunting impacts to their agendas.

The SC also recommended that the Ministry of Hunting and Fisheries in Greenland should be considered when new projects are proposed.

Comments and Discussion by the MCJ

Greenland asked for clarification on the impact of the work of the various WGs if the non-hunting impacts are added to the WGs agendas in order to answer R-1.5.4. Haug informed the MCJ that adding this to the WG agendas will either require that some other items are not discussed, or the meetings may need to be prolonged.

The MCJ **endorsed** the recommendation to add non-hunting impacts to their future agendas.

3.1. Disturbance

R-1.5.3 The Council requests the SC to monitor the development of the Mary River Project and assess qualitatively or if possible quantitatively the likely impact and consequences on marine mammals in the area.

R-3.4.9 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.

Update from SC

Haug informed the MCJ that the NAMMCO-JCNB JWG discussed the Mary River project at their meeting in 2017 and stated, “The JWG expressed concern regarding development of mining activities and associated ship traffic on the Eclipse Sound narwhal stock. No similar example of such a high level of shipping and development has occurred in a high-density narwhal habitat so there is little precedent to inform an assessment of the impacts.”

The JWG provided a list of specific concerns for the Mary River Project, and shipping and icebreaking in Baffin Bay overall.

The SC noted that the JWG makes recommendations based on the information that is available on the current plans for the Mary River project at the time of their meetings, however there is often uncertainty around what the plans actually entail, and these plans appear to change often. This makes it difficult to give relevant management advice.

The SC reiterated its previous recommendation that all information on the Mary River project be presented to the JWG. It was suggested that someone from the Fisheries Protection Division in Canada should attend the next NAMMCO-JCNB JWG in 2019.

Additionally, the JWG also noted that increased shipping (in addition to Mary River Project) is of concern – narwhals are very skittish and easily disturbed, and “cumulative effects should be considered when new shipping and icebreaking activities are proposed for narwhal and beluga habitat areas.”

Comments and Discussion by the MCJ

Canada recognised the interest in NAMMCO to obtain information on how projects such as these are approved in Canada and provided an update on the Mary River project.

In Canada, there is a co-management impact review process between Canada and the Government of Nunavut -- the Nunavut Impact Review board (NIRB) -- which reviews proposals for projects and

provides recommendations on the possible impacts. New projects can be proposed or changed through the review process.

The Mary River project is an iron ore mine located on North Baffin Island, near Pond Inlet. The ore is shipped through Milne Inlet, through Davis Strait from Canada to Greenland. Baffinland, the company operating the mine, is currently authorised to ship 4.2 mill tons of ore per year. In 2017, 4.XX mill tons were shipped. This is an increase from 2016, where 3.2 mill tons were shipped, and 2015, when 1.3 mill tons were shipped.

Baffinland is currently proposing expanding their activities at the Mary River mine, including increases in shipping capacity, establishing a railway between mine site and the Milne port, establishing stock piles of ore, and increased shipping during open water season. (is this correct? Seth please fix any errors in this section!)

Canada noted that Baffinland has suspended their vessel monitoring program due to safety concerns.

The MCJ discussed that the shipping is the activity of main concern regarding the Mary River project. Greenland noted that they have a strong interest in obtaining information on all projects that could impact species in their area, including not only the whales, but also seals.

The MCJ **endorsed** the recommendation of the SC that all information on the Mary River project be presented to the JWG, and for someone from the Fisheries Protection Division in Canada to attend the next NAMMCO-JCNB JWG in 2019. Canada informed the MCJ that they will work with the NAMMCO Secretariat (Canada should also include DFO scientists or whoever is dealing with the JCNB in Canada here) to provide the most relevant information for the JWG and ensure the information is available for the next meeting (scheduled for 2019).

The MCJ **endorsed** the recommendation that cumulative effects should be considered when new shipping and icebreaking activities are proposed for narwhal and beluga habitat areas.

3.2. Climate Change

Update from the SC

Haug noted that climate change is discussed in the SC each year, and is also dealt with in many of the working groups, including WGHAP, NAMMCO-JCNB JWG, etc. He also gave a presentation to the MCJ on the impacts of climate change on future harvests in the North Atlantic.

Future harvest – road map slides - insert bullet points here

Comments and Discussion by the MCJ

Japan commented on the information on the northward movement of boreal cetacean species and asked whether Pacific minke whales or humpback whales have been observed in the Atlantic Arctic. Haug informed the MCJ that the Americans are observing more boreal whales in the Bering Sea north of the Bering Strait, however this is a shelf area, while the area north of Svalbard is off the shelf and may prevent these species from moving even further north of Svalbard.

3.3. Marine Mammal – Fisheries Interactions (R-1.1.5, 1.1.8, 1.2.1, 1.2.2, 1.4.7)

Review of requests by Council for advice from the Scientific Committee

R-1.1.5 (1997; standing): review and update available knowledge on interactions between marine mammals and commercially exploited marine resources

R-1.1.8 (2008): *investigate dynamic changes in spatial distribution of cetaceans due to ecosystem changes and functional responses*

R-1.2.1 (1992) “multispecies models for management purposes...suggest required data and knowledge to make such models”

R-1.2.2 (1995): monitor stock levels and trends in stocks of all marine mammals in the North Atlantic.

R-1.4.7 in the “Economic aspects of marine mammal-fisheries interactions” section

- Review results of MareFrame ecosystem modelling project

The MCJ noted that R-1.1.5, 1.1.8, and 1.2.2 are many years old, and appear to be issues that have become part of the working procedures of the SC. The MCJ discussed whether these requests should be removed from the request list, and possibly added to the overall Terms of Reference for the SC. It was decided to leave these requests as “standing” on the request list.

The MCJ further noted that R-1.2.1 and R-1.4.7 will be answered, in part, by the SC in the near future when the SC reviews the results of the MareFrame project (discussed below), however it was noted that the “Economic aspects of marine mammal-fisheries interactions” may not be within the competence of the SC. The MCJ suggested that the SC should comment on whether considering the “economic aspects” should remain in their purview.

Update from SC

With regards to R-1.2.1 and R-1.4.7, the MareFrame project was scheduled to be completed in late 2017. The SC noted that the results of the MareFrame project will likely be useful to NAMMCO as models that will serve as building blocks for further development of multi-species modelling in the NAMMCO area.

The SC **recommended** that a small group be organised to review the report of the MareFrame project and prepare a document for the next SC meeting.

Comments and Discussion by the MCJ

The MCJ **endorsed** the recommendation of the SC for a small group to review results of MareFrame and present a review to the next SC meeting.

3.3.1. By-catch

Levermann noted that there are no requests from Council, but there are many recommendations to member countries from the SC’s By-Catch WG, which held meetings in 2016 and 2017.

Update from SC

Haug reported on the work of the SC’s BYCWG country by country.

Norway

Several important issues were identified with the approaches to by-catch estimation that was presented at the BYCWG, both with the data acquisition through the coastal reference fleet and the analyses. These issues prevented the BYCWG from endorsing the proposed by-catch estimates.

The group recommended methodological improvements to be implemented both in the data collection and the analysis before the by-catch estimates could be endorsed.

In addition, the BYCWG noted that if the same vessels are used in the coastal reference fleet (CRF) year after year, they will be correlation in the data samples which will lead to errors in the by-catch estimate and the WG recommended to modify the design of the selection process.

Norway has plans to update the by-catch estimates in 2018.

Comments from Norway

Norway commended the SC and the BYCWG on dealing with the issues.

Iceland

There were several issues with the analysis of the by-catch estimates presented to the BYCWG which prevented the group from accepting the estimates. The group provided several recommendations for revising the analysis of by-catch estimates as well as improving the data collection.

Iceland has submitted an updated working paper addressing most of the technical comments of the BYCWG, and these will be discussed via videoconference in March 2018.

Comments from Iceland

Iceland thanked Haug and the BYCWG for their work and welcomed the input. They informed the MCJ that they are working on making a new scheme for observation of gillnet fishing. Regarding the Greenland halibut gillnet fishery, Iceland informed the MCJ that these nets are set deep and therefore it seems unrealistic that there would be by-catch, but Iceland will consult with the MRI on this issue.

Iceland further updated the MCJ that they have now increased the observer coverage of the gillnet fleet, introduced more random sampling. **There is a need to distinguish between the targeted observations of the Directorate, Business Analysis Institute, targeting vessels that have diverged from expected catches (Iceland can you help with this text? Or delete)**

Faroe Islands

The SC recommended that a responsible precautionary approach be taken and that a proper assessment of the by-catch risk in the various fisheries be undertaken, beginning with those fisheries of higher concern such as the Very High Vertical Opening (VHVO) and pelagic pair trawling. The WG also provided recommendations for by-catch monitoring and observation.

Comments from the Faroe Islands

Faroe Islands informed the MCJ that they do not have gillnet fisheries in shallow waters and therefore by-catch is not an issue with respect to this gear type. The Faroe Islands have observed increases in pelagic fish stocks around the Faroe Islands, and expect these fisheries to continue increasing. These fisheries areas overlap with marine mammal species, and therefore there is a potential for by-catch, however the process of looking into by-catch in these fisheries has not begun. The Faroe Islands further informed the MCJ that fisheries are now managed by a quota system which will require more frequent observers and therefore the possibility for more by-catch observation.

The Faroe Islands commented that the BYCWG was focusing on the pelagic fisheries for the Faroe Islands, and not for the other countries. The Secretariat recalled the general Terms of Reference for the By-Catch Working Group, which were to

1. Identify all fisheries with potential by-catch of marine mammals
2. Review and evaluate current by-catch estimates for marine mammals in NAMMCO countries.
3. If necessary, provide advice on improved data collection and estimation methods to obtain best estimates of total by-catch over time.

Therefore as stated in task 1, the WG looks at the overlap between marine mammal distribution and fisheries to evaluate the potential risk of by-catch in all fisheries in all countries, based on known by-catch risks in similar fisheries (e.g. information from the ICES Working Group on By-Catch). Gillnet fisheries represent for example a high by-catch risk to, particularly, smaller cetaceans and coastal seals.

Estimate of by-catch were provided by Norway and Iceland and were therefore reviewed by the working group, as the first step. In the absence of by-catch estimates for the Faroe Islands and Greenland, the Working Group started to assess the by-catch risk associated to the different fisheries, based on the fisheries information provided to the group. In the Faroe Islands, as noted above, the gillnet fisheries take place in deeper water and do not seem to represent a risk to marine mammals. The risk associated to pelagic fisheries, with anecdotal reporting of by-catch in the Faroese and high risk to some cetacean species known from other places, needs to be evaluated. Therefore the Working Group recommended the Faroes to provide specific information necessary to provide a reliable risk assessment.

Greenland

The WG reviewed the information provided on the present sources of by-catch reporting and discussed their relative reliability. It provided several recommendations for improvement and identified areas where already existing information should be analysed.

Comments from Greenland

Greenland informed the MCJ that many of these recommendations have already been taken into consideration in the processes within Greenland, and previous reports from 2013 are being made available for review. Greenland also commented that gathering this information requires communication with multiple departments and will take some time to review.

Comments and Discussion by the MCJ

The MCJ endorsed all of the recommendations from the BYCWG (except the one on validation of by-catch reporting? This needs clarification when we adopt the report) which can be found in Appendix X (doc 05, the proposal table that I will update).

3.3.2. Fish farms

Update from the SC

The SC's BYCWG discussed removals of seals from around fish farms and recommended that both Norway and Iceland obtain reliable and complete reporting of all removals.

Updates from member countries

The Faroe Islands informed the MCJ that the numbers of grey seals that are shot at fish farms in the Faroe Islands are being monitored. These numbers have not been validated yet, but the preliminary numbers indicate a downward trend.

Comments from the MCJ

The MCJ **endorsed** the recommendation that Norway and Iceland obtain reliable and complete reporting of all removals.

3.3.3 Consumption of resources by marine mammals

Update from the SC

Haug presented a summary of the project "Exploring marine mammal consumption relative to fisheries removal in the Nordic and the Barents Seas." The project reviews and summarises the currently available information on diet, abundances, and residence times of marine mammals in the Nordic and the Barents Seas, and follow recently recommended approaches to estimate plausible ranges of total consumption, and also compares marine mammal consumption to removal by fisheries (retrieved from ICES databases). Preliminary results suggest that marine mammal consume around 15 million tons \pm 50% of prey per year, predominantly targeting low and mid trophic level species (zooplankton and small pelagic fish). Fisheries remove around 4.3 million tons per year, targeting mid and top trophic levels (small pelagic fish and larger demersal and pelagic fish).

The SC welcomed this joint initiative and noted that there is a lot of NAMMCO participation in this project. Important areas for NAMMCO are covered by this project, and the SC looks forward to seeing the published results.

Comments from the MCJ

The MCJ thanked Haug for this interesting presentation which provided valuable information for the discussions on ecosystem approach to management. This project highlights the importance of marine mammals as a large component in the ecosystem and the role of these species in the ecosystem, and the importance to the hunts in the North Atlantic. The MCJ looks forward to the publication.

Greenland further commented that questions on this issue were raised many years ago, and it is now good to have numbers on which to base the discussions with the Fisheries Division. Greenland also noted that it could be interesting to look into these results with respect to specific areas, and whether there are areas where they could have more questions and request more elaboration on the results.

Haug also noted that the MareFrame project which was discussed under Item X incorporated information that this project provided. However, the MareFrame project included only the Icelandic area, and there is interest in doing similar work in the Barents Sea. Such an exercise could also build upon other types of modelling work.

4. PROCEDURES FOR DECISION MAKING ON CONSERVATION AND MANAGEMENT MEASURES

4.1. Struck and Lost (R-1.6.4)

R-1.6.4: the SC and the Hunting Committee... provide advice on the best methods for collection of the desired statistics on losses.

Prewitt reported that the SC agreed to direct the WGs to indicate when more reliable struck and lost (S&L) were a priority for improving the assessment and would make the most significant difference in terms of quota allocation, so the collection of S&L data could be prioritised for these hunts. The WG could then give recommendations on how to better obtain S&L data for the targeted hunts.

An update from the Committee on Hunting Methods will be given to Council.

Comments from the MCJ

There were no comments from the MCJ.

4.2. Catch Validation

Prewitt noted that a previous recommendation for Greenland to investigate the differences between the two reporting schemes (Pinarneq and Skærmeldingschema) was discussed at SC/23, where Greenland provided an explanation.

Levermann noted that the SC also previously recommended that catches be validated on a yearly basis.

Updates from member countries

Greenland updated the MCJ that a quality review of the catch data that is provided by the hunters is performed yearly.

5. USER KNOWLEDGE IN MANAGEMENT DECISION-MAKING

There was no discussion on this item.

6. ANY OTHER BUSINESS

No other business was raised, and Levermann thanked Haug for his presentations, the member countries for their input, and closed the meeting.