

**MANAGEMENT COMMITTEE WORKING GROUP ON
BY-CATCH**

Telephonemeeting 13 February 2007

Present at the meeting were: Droplaug Ólafsdóttir (Chair, Iceland), Arne Bjørge (Norway), Synnøve Liabø (Norway), Bjarni Mikkelsen (Faroe Islands), Genevieve Desportes (Faroe Islands), Fernando Ugarte (Greenland), Leif Arne Nygård (Greenland) and Daniel Pike and Christina Lockyer from the NAMMCO Secretariat.

1. ADOPTION OF AGENDA

The draft agenda (Appendix 1) was adopted. The List of Documents is provided in Appendix 2.

2. APPOINTMENT OF RAPPORTEUR

Daniel Pike, Scientific Secretary of NAMMCO, was appointed as Rapporteur.

**3. INFORMATION REGARDING ONGOING MONITORING AND
MANAGEMENT OF MARINE MAMMAL BY-CATCHES OUTSIDE
THE NAMMCO AREA**

3.1 European Union

Bjørge reported on progress in implementing Council Regulation 812/2004 pertaining to the incidental catch of cetaceans in fisheries in European Union waters, which entered into force in July 2004. The regulation includes measures restricting Baltic Sea drift net fisheries, providing for mandatory use of acoustic deterrent devices (pingers) in some fisheries, and the use of onboard observers on vessels of over 15 m in length. Further details were provided in the 2005 report of this Working Group (NAMMCO 2006). An evaluation workshop is scheduled for 2007 but no documentation is available at this time. The implementation and impact of the regulation will also be evaluated by the IWC Scientific Committee at their 2007 meeting. Bjørge agreed to continue to monitor progress in this area.

**4. REVIEW PROGRESS IN MONITORING AND MANAGEMENT OF
MARINE MAMMAL BY-CATCHES WITHIN THE NAMMCO AREA**

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

Norway

Bjørge presented BC/6 which reported on progress in monitoring by-catch in selected Norwegian fisheries. Last year Norway reported on a pilot study conducted in 2004 and 2005 which revealed the possibility of high by-catches of marine mammals (in particular grey and harbour seals and harbour porpoises) in three coastal gillnet fisheries. These fisheries targeted cod *Gadus morhua*, anglerfish *Lophius piscatorius* and lump sucker *Cyclopterus lumpus*. Based on this pilot study, a programme to

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monitor by-catches of marine mammals was developed for fisheries for cod and anglerfish (which had the highest fishing effort of the three) starting in October 2005. Two commercial fishing vessels (less than 15m total length) in each of nine coastal fishery statistics areas were selected and contracted to observe and report detailed statistic on effort, catch and by-catches.

In cod fisheries (fisheries targeting cod using bottom-set gillnets of 80-120mm half mesh) about 920 thousand kg of cod were landed from the observed operations from October 2005 to September 2006. In the fisheries targeting anglerfish with large meshed gillnets (180mm half mesh) about 120 thousand kg anglerfish were landed from the observed trips from October 2005 to September 2006. In these fisheries totals of 20 harbour seals (including 3 taken in traps by the same vessels), 9 grey seals, 8 harp seals and 101 harbour porpoises were observed by-caught.

A workshop is scheduled for March 2007 to evaluate results of the first 12 months of by-catch monitoring. The aim is to establish methods for extrapolating from observed by-catches to estimates of total by-catches in entire fisheries.

In addition to the two observed fisheries and the lumpsucker fishery, a number of marine mammals are assumed to be taken in recreational gillnet fisheries. The by-catch rates and the efforts of the recreational gillnet fisheries are presently unknown.

Most of the Norwegian commercial fish catches are landed by vessels larger than 15m total length operating demersal trawl and purse seine in offshore areas in the Barents, North and Norwegian seas. Monitoring programmes for these fisheries were presented to the Working Group last year, and these programmes substantiated the assumption that these fisheries have relatively low levels of marine mammal by-catches.

The Working Group thanked Bjørge for this information and commended Norway for making progress in monitoring marine mammal by-catch. The Working Group **recommended** that Norway provide the report of the March evaluation meeting to the NAMMCO Scientific Committee at their next meeting, and provide estimates of by-catch from these fisheries to NAMMCO as soon as they become available.

Faroës

Mikkelsen noted that there had been no changes in the by-catch reporting system in the Faroe Islands since last year. Fishery logbooks are mandatory for all vessels larger than 110 BRT, however the reporting of by-catch in these logbooks is encouraged but not required. The logbooks are not formatted for recording by-catch, and such records must be entered as supplementary comments. There is no logbook system in place for smaller boats. It is tentatively planned to conduct a questionnaire survey of fishermen to gather basic information about the magnitude of marine mammal by-catch in various fisheries later this year.

In discussion the Working Group noted that the logbook and associated questionnaire survey used in Iceland had been extensively reviewed by the Scientific Committee in 2004 and that this should be considered in planning the Faroese study. The Working

Group considered the conduct of such a study to be a useful first step in monitoring by-catch in the Faroes and **recommended** that it be conducted and reported to the Working Group at their next meeting.

Greenland

Ugarte reported that it is now mandatory for small fishing vessels to keep a logbook which includes a section for reporting by-catch of marine mammals (logbooks were previously required only on large vessels). In most cases by-catch of small whales and seals in coastal fisheries is thought to be included in the catch statistics but there is no way to separate out by-catch from directed catch. By-catch of large whales is probably always reported because the fisherman must seek permission from the Department of Hunting before the whale can be killed and utilized, and the fisherman can receive compensation for damaged gear.

Iceland

Ólafsdóttir reported that the by-catch monitoring programme in Iceland is unchanged from last year. The reporting of marine mammal by-catch in fishery logbooks is mandatory on all vessels. However reporting in most fisheries is very poor. An effort to introduce a procedure for reporting marine mammal by-catch through the log book system was initiated for the gillnet fishing fleet in 2002, and the results from this programme were evaluated by the Scientific Committee and this Working Group in 2004 (NAMMCO 2005a, b). The recommendations for improvement of the reporting system made then were accepted by Iceland (NAMMCO 2005c, p. 25), but there has been no progress in implementing them. Ólafsdóttir also noted that the methodology used in the Icelandic coastal aerial survey portion of the TNASS would be modified to obtain better estimates of harbour porpoises.

The Working Group **reiterated** its recommendations for improving the by-catch monitoring programme in Iceland (NAMMCO 2005a, p. 190) and encouraged Iceland to implement these recommendations in a timely fashion.

4.2 Evaluation of procedures developed and implemented by NAMMCO Member Countries

The Working Group noted that the Norwegian by-catch monitoring system was not yet sufficiently developed to warrant a formal evaluation by the Scientific Committee. The Working Group looked forward to receiving initial estimates of by-catch from the programme next year. The Icelandic system was reviewed in 2004 and has not been improved since (see 4.1). Neither Greenland nor the Faroes have functional by-catch monitoring systems.

5. EVALUATION OF THE POTENTIAL RISK OF MARINE MAMMAL BY-CATCH IN THE FISHERY WITHIN THE NAMMCO AREA

5.1 Spatial and temporal overlap in the fishing activity and distribution of marine mammals within the NAMMCO area

In 2004 the Management Committee recommended that member countries should prepare working documents outlining the existing knowledge about marine mammal

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by-catch in their jurisdiction, for the consideration of the Working Group on By-catch. These documents would be evaluated by the Working Group and used to develop recommendations and priorities for by-catch monitoring in member countries. To date documents from Iceland, the Faroes and Norway have been evaluated, but full documentation has not yet been received from Greenland, and last year the Working Group recommended that Greenland provide a working document at the next meeting.

Ugarte explained that the material had not yet been prepared because of competing priorities, but that they would be dedicating some time to this task in the near future. Once again the Working Group **recommended** the completion of this documentation for the next meeting.

Bjørge reported that Norway would attempt to use spatial modelling to improve estimates of by-catch for grey and harbour seals. The models would incorporate spatial data on fishing effort, known distribution of seals and possibly other variables. The Working Group **recommended** that this work be reported to NAMMCO when it is completed.

5.2 Other indirect or direct evidence of marine mammal by-catch within the NAMMCO area

It appears that there are no functioning stranding networks in NAMMCO member countries, thus there is no systematic reporting of stranded animals that may show evidence of having been entangled in fishing gear.

6. REPORTING OF BY-CATCH TO NAMMCO

6.1 Reporting in 2005.

Pike reviewed the by-catch information in the National Progress Reports applicable for 2005. All countries included the required section on by-catch in their progress reports, however the format was not followed in all cases. The Faroe Islands provided information on their collection programme and reported by-catch of one harbour porpoise. Greenland reported a by-catch of 5 humpback whales but no details as to the methodology of by-catch data collection, coverage, or monitoring effort are given. Norway provided information on the development of their monitoring programme that is summarized under item 4.1. Iceland provided detailed reporting of recorded by-catch, totalling 275 marine mammals. However total by-catch cannot be estimated from these data as reported.

7. OTHER ITEMS

7.1 Proposal for a Scientific Committee evaluation of by-catch monitoring programmes

Last year the Working Group proposed to hold a workshop with the theme “Monitoring Marine Mammal By-catch”, with the general objective of providing advice on the establishment of effective by-catch monitoring programmes in NAMMCO member countries (NAMMCO 2006). This proposal was rejected by the Management Committee. The Council then suggested that it might be more

appropriate if such advice were provided by the Scientific Committee, and agreed that the Management Committee would consider this in 2007.

If the Management Committee decides that it does require scientific advice in this area over and above that which can be provided by this Working Group, it will have to formulate a request for advice to the Scientific Committee. It will then be up to the Scientific Committee to respond to this request, probably (but not certainly) through the formation of a Working Group which would include external expertise. Pike proposed that the Working Group on By-catch could contribute to this process by specifying what scientific advice is required to make progress in this area.

The Working Group agreed with this proposal and **recommended** that the following request for advice should be made to the Scientific Committee:

By-catch of marine mammals occurs to an unknown extent in fisheries in NAMMCO member countries and may constitute a large proportion of human removals for some species in some areas. At present no NAMMCO member country has a by-catch monitoring programme that can deliver quantitative estimates of by-catch, with associated uncertainty. Work is under way in Norway and Iceland to develop monitoring systems for some fisheries. Therefore there is potentially much to gain from learning from the experiences of other jurisdictions where monitoring programmes are more developed and obtaining scientific advice on the design of a monitoring programme that will satisfy the needs of management. It is recognized that monitoring systems must be tailored to the specific fisheries and the conditions prevalent in different jurisdictions.

The Scientific Committee is therefore requested to:

1. *Review by-catch monitoring systems used in other jurisdictions and various types of fisheries, and provide advice on the most effective systems in terms of delivering accurate and precise estimates of by-catch at reasonable cost;*
2. *Review information on fisheries and by-catch in NAMMCO member countries to determine which fisheries are likely to catch the greatest number of marine mammals and/or negatively affect the conservation status of marine mammal stocks;*
3. *Provide recommendations specific to country and fishery for monitoring by-catch in NAMMCO member countries;*
4. *On an ongoing basis, review the by-catch monitoring programmes in place in member countries and provide advice on how they can be improved.*

8. RECOMMENDATIONS

- i. Norway should provide the report of the by-catch estimation methodology meeting to be held in March 2007 to the NAMMCO Scientific Committee at their next meeting, and provide estimates of by-catch from these fisheries to NAMMCO as soon as they become available (see 4.1).
- ii. The Faroes should conduct a pilot questionnaire study as a first step in monitoring

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- by-catch in the area, and provide a report on this to the Working Group at their next meeting (see 4.1).
- iii. The Working Group reiterated its recommendations for improving the by-catch monitoring programme in Iceland (NAMMCO 2005a, p. 190) and encouraged Iceland to implement these recommendations in a timely fashion (see 4.1).
 - iv. The Working Group reiterated its recommendation of last year that Greenland should complete a working document outlining the existing knowledge about marine mammal by-catch in their jurisdiction. These documents were first requested in 2004 (see 5.1).
 - v. Norway should report on its efforts to use spatial modelling to improve estimates of by-catch for grey and harbour seals, as soon as the work is completed (see 5.1).
 - vi. The Working Group recommended that the request for advice detailed under 7.1 should be made to the Scientific Committee.

9. FURTHER MEETINGS?

Given that there was some uncertainty as to the future status of the Working Group, it was agreed to consider this after the Council meeting. In general it was agreed that face-to-face meetings were more effective and preferable to telephone meetings.

10. ADOPTION OF REPORT.

The Report was adopted by correspondence on 20 February 2007. The Chair thanked all members for their contributions to the meeting, noting particularly that this is the last By-catch Working Group meeting for Daniel Pike as he is leaving NAMMCO. Pike has served as rapporteur for the WG for 8 years and been a key person in organizing and arranging practical matters as well as actively influencing the discussion and development of the Working Group. The Chair thanked him for his contribution to the Working Group and stated that his influence will certainly be missed in the future work relating to by-catch by NAMMCO.

REFERENCES

- [NAMMCO] North Atlantic Marine Mammal Commission. 2005a. Report of the Management Committee Working Group On By-catch. In: *NAMMCO Annual Report 2004*, NAMMCO, Tromsø, pp. 187-197.
- [NAMMCO] North Atlantic Marine Mammal Commission. 2005b. Report of the Scientific Committee. In: *NAMMCO Annual Report 2004*, NAMMCO, Tromsø, pp. 207-278.
- [NAMMCO] North Atlantic Marine Mammal Commission. 2005c. Report of the Council. In: *NAMMCO Annual Report 2004*, NAMMCO, Tromsø, pp. 13-126.
- [NAMMCO] North Atlantic Marine Mammal Commission. 2006. Report of the Management Committee Working Group On By-catch. In: *NAMMCO Annual Report 2005*, NAMMCO, Tromsø, pp. 125-134.

APPENDIX 1 – AGENDA

1. Adoption of agenda
2. Appointment of rapporteur
3. Information regarding ongoing monitoring and management of marine mammal by-catches outside the NAMMCO area
 - 3.1 European Union
4. Review progress in monitoring and management of marine mammal by-catches within the NAMMCO area
 - 4.1 Progress in monitoring marine mammal by-catches by NAMMCO member countries evaluation of procedures developed and implemented by NAMMCO member countries
5. Evaluation of the potential risk of marine mammal by-catch in the fishery within the NAMMCO area
 - 5.1 Spatial and temporal overlap in the fishing activity and distribution of marine mammals within the NAMMCO area
 - 5.2 Other indirect or direct evidence of marine mammal by-catch within the NAMMCO area
6. Reporting of by-catch to NAMMCO
 - 6.1 Reporting in 2005.
7. Other items
 - 7.1 Proposal for a scientific committee evaluation of by-catch monitoring programmes
8. Recommendations
9. Further meetings?
10. Adoption of report.

APPENDIX 3 - LIST OF DOCUMENTS

NAMMCO/16/MC/BC/1	List of participants
NAMMCO/16/MC/BC/2	Draft agenda.
NAMMCO/16/MC/BC/3	List of documents
NAMMCO/16/MC/BC/4	National Progress Reports: By-catch reporting for 2004.
NAMMCO/16/MC/BC/6	Bjørge, A.. Information on observed by-catches of marine mammals in some selected Norwegian fisheries in 2006.
NAMMCO/16/MC/BC/7	Pike, D.G. Proposal for a Scientific Committee evaluation of by-catch monitoring programmes.

Other document

DFO. 2006. Science and Implementation Considerations of Mitigation Techniques to Reduce Small Cetacean By-catch in Fisheries. DFO Can. Sci. Advis. Sec. Proceed. Ser. 2006/020.

