**NAMMCO SCIENTIFIC COMMITTEE**

**25th MEETING**

**Polarlys Bergen-Tromsø, Norway**

**13-16 November 2018**

**Draft Agenda**

Paper numbers in[ ].

1. **CHAIRMAN’S WELCOME AND OPENING REMARKS** [SC/25/02]
   1. **Presentation of the new Scientific Secretary**
   2. **NAMMCO new staffing**
2. **ADOPTION OF AGENDA** [SC/25/01ab]
3. **APPOINTMENT OF RAPPORTEURS**
4. **REVIEW OF AVAILABLE DOCUMENTS AND REPORTS** [SC/25/03]
   1. **National Progress Reports** [SC/25/NPR-F, -G, -I, -N, -C, -J, -R]
      1. **Update from observer country – Canada**
      2. **Update from Makivik**
      3. **Update from Nunavut**
      4. **Update from observer country – Japan**
      5. **Update from observer country – Russia**
   2. **Working Group Reports**

**By-catch WG** [SC/25/13]

**Abundance Estimate WG** [SC/25/12]

**Walrus WG** [SC/25/14]

* 1. **Other reports and documents**

**List of active Council requests [SC/25/04]**

**North Atlantic killer whales: a status review** [SC/25/18]

**Abundance and Trends tables** [SC/25/05ab]

**NAMMCO guidelines for authors** [SC/25/19]

**Global Review of Monodontids – final version** [SC/25/FI/12]

**Cetacean abundance and distribution in the NA workshop – final version [**SC/25/FI/18**]**

**Others**

1. **WORK PROCEDURES IN THE SC**
   1. **Presentation SC 25: Paul Wassmann “Whales are ecosystem engineers: fact or fake?”**
   2. **Swot analysis** [SC/25/15]
   3. **Updates from Council: NAMMCO/26** [SC/25/FI/04, SC/25/04]
      1. **General Comments**
      2. **New requests**

***R-1.6.6 (NEW, 2018):***  *The Council of NAMMCO request the Scientific Committee to conduct a review of the management procedures used by the Committee for generating management advice (RMP, AWMP, Bayesian assessment, Hitter Fitter, etc). The Committee should advise on which procedure is the most suitable for each species (or category of species) with the data that is currently available, while also meeting the management principles of NAMMCO. The Committee should further advise where additional data could allow for more suitable management procedure(s) to be implemented.*

* + 1. **Endorsed SC work plan** [SC/25/24]
    2. **Super-tag project**
  1. **Population Estimates**
     1. **Review of NAMMCO abundance tables** [SC/25/05a,b]
        1. Abundance Estimates
        2. Trends and status of stocks
     2. **Guidelines for reporting abundance estimates and other results in WG and SC reports**
  2. **Catches**
     1. **Struck and Lost**
     2. **Catch database**
  3. **Furthering cooperation in the SC**
     1. **Presentation by SC members**
     2. **Super tag project**
     3. **Genetics collaboration on harbour porpoise**
     4. **AOB**
  4. **Development of Management Advice**
     1. **Review of development of management advice in NAMMCO** [SC/25/06, SC/25/20, SC/25/21]
     2. **Review and status of active requests**

***R-1.6.4 (ongoing):*** *Council requested the SC and the Committee on Hunting Methods to provide advice on the best methods for collection of the desired statistics on losses, as the SC has recommended that catch statistics include correction for struck but lost animals for different seasons, areas, and catch operations.*

***R-1.6.5 (Standing):*** *Struck and loss rates should be subtracted from future advice on sustainable removals in Greenland, with the advice being given as total allowable landings.*

***R-1.6.6 (NEW, 2018):***  *The Council of NAMMCO request the Scientific Committee to conduct a review of the management procedures used by the Committee for generating management advice (RMP, AWMP, Bayesian assessment, Hitter Fitter, etc). The Committee should advise on which procedure is the most suitable for each species (or category of species) with the data that is currently available, while also meeting the management principles of NAMMCO. The Committee should further advise where additional data could allow for more suitable management procedure(s) to be implemented.*

* 1. **NAMMCO Scientific Publications**
     1. **Guidelines for authors** [SC/25/19]
     2. **Publication process**
  2. **Classification and criteria for assessing conservation status in NAMMCO (e.g. website)** [SC/25/17]
  3. **Confidentiality of documents for SC and WGs**

1. **COOPERATION WITH OTHER ORGANISATIONS** 
   1. **IWC** [SC/25/07-08]
   2. **ASCOBANS** [SC/25/06]
   3. **ICES** [SC/25/09]
      1. **Update from Tore**
      2. **RoPs for the ICES/NAFO/NAMMCO joint WGHarp** [SC/25/26]
   4. **JCNB** [SC/25/11]
   5. **Arctic Council and subsidiary bodies** [SC/25/10]
   6. **Other**
2. **ENVIRONMENTAL / ECOSYSTEM ISSUES**
   1. **Marine mammals-fisheries interactions** (R-1.1.5)
      1. **Consumption of resources by marine mammals**
      2. **By-catch** [SC/25/13]
         1. **Update**
         2. **NAMMCO By-Catch WGs 2018**
         3. **Others**
      3. **Review and status of active requests**

***R-1.1.5 (standing):*** *The Council encourages scientific work that leads to a better understanding of interactions between marine mammals and commercially exploited marine resources and requested**the Scientific Committee to periodically review and update available knowledge in this field.*

* 1. **Multispecies approaches to management/Ecosystem Modelling** (R-1.1.8, 1.2.1, 1.2.2, 1.4.7)
     1. **MAREFRAME**
     2. **Other updates**
     3. **Review and status of active requests**

***R-1.1.8 (ongoing):*** *In addressing the standing requests on ecosystem modelling and marine mammal fisheries interaction, the SC is requested to extend the focus to include all areas under NAMMCO jurisdiction. In the light of the distributional shifts seen under T-NASS 2007, the SC should investigate dynamic changes in spatial distribution due to ecosystem changes and functional responses.*

***R-1.2.1 (ongoing):*** *consider whether multispecies models for management purposes can be established for the North Atlantic ecosystems and whether such models could include the marine mammal compartment. If such models and the required data are not available, then identify the knowledge lacking for such an enterprise to be beneficial to proper scientific management and suggest scientific projects which would be required for obtaining this knowledge.*

***R-1.2.2 (standing):*** *In relation to the importance of the further development of multispecies approaches to the management of marine resources, the Scientific Committee was requested to monitor stock levels and trends in stocks of all marine mammals in the North Atlantic.*

***R-1.4.7 (ongoing):*** *The Scientific Committee is requested to review the results of the MAREFRAME ecosystem management project when these become available. In particular, the results should be reviewed with respect to the ongoing and standing requests on marine mammal interactions (R-1.1.0) and multispecies approaches to management (R-1.2.0).*

* + 1. **Future work**
  1. **Other environmental issues** (R-1.5.1, 1.5.3, R-1.5.4)
     1. **Updates**
     2. **Review and status of active requests**

***R-1.5.1 (pending):*** *To describe the possible pathways of radioactive material from blowouts and leakage in existing nuclear power plants, leakage from dumped material and possible accidents in planned recycling plants in the northern part of Scotland into the food web of the North Atlantic and hence into the top predators like marine mammals. This request was sent to ICES by NAC.*

***R-1.5.3 (ongoing):*** *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-1.5.4 (2017, ongoing):*** *Committed to furthering its ecosystem approach to the management of marine mammals, and recognising the range of anthropogenic pressures facing North Atlantic marine mammals associated with the climate and environmental changes taking place, the Council requests the SC to 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.*

* + 1. **Future work**

1. **SEALS AND WALRUS STOCKS - STATUS AND ADVICE TO THE COUNCIL** 
   1. **Harp Seal** 
      1. **Update [**SC/25/13**]**
      2. **ICES/NAFO/NAMMCO WGHARP 2019**
      3. **Review and status of active requests** (R-2.1.4, 2.1.10)

***R-2.1.4 (standing):*** *update the stock status of North Atlantic harp and hooded seals as new information becomes available.*

***R-2.1.10 (standing):*** *provide advice on Total Allowable Catches for the management of harp seals and the establishment of a quota system for the common stocks between Norway and the Russian Federation*

* + 1. **Future Work**
  1. **Hooded seal** 
     1. **Update**
     2. **ICES/NAFO/NAMMCO WGHarp 2019**
     3. **Review and status of active requests** (R-2.1.4, 2.1.9)

***R-2.1.4 (standing):*** *update the stock status of North Atlantic harp and hooded seals as new information becomes available.*

***R-2.1.9 (ongoing):*** *investigate possible reasons for the apparent decline of Greenland Sea stock of hooded seals; and assess the status of the stock*

* + 1. **Future work**
  1. **Ringed seal**
     1. **Update [**SC/25/13**]**
        1. Update on the Ringed seal ecotypes project
        2. Others
     2. **Ringed Seal WG (2020/2021)**
     3. **Review and status of active requests** (R-2.3.1, 2.3.2)

***R-2.3.1 (standing):*** *To advise on stock identity of ringed seals for management purposes and to assess abundance in each stock area, long-term effects on stocks by present removals in each stock area, effects of recent environmental changes (i.e. disturbance, pollution) and changes in the food supply, and interactions with other marine living resources.*

***R-2.3.2 (standing):*** *To advise on what scientific studies need to be completed to evaluate the effects of changed levels of removals of ringed seals in West and East Greenland.*

* + 1. **Future work**
  1. **Grey seal** 
     1. **Update [**SC/25/13**]**
     2. **Coastal Seals WG (2019)**
     3. **Review and status of active requests** (R-2.4.2)

***R-2.4.2 (ongoing):*** *To provide a new assessment of grey seal stocks throughout the North Atlantic. -- It is noted that there has been a decline in the numbers of grey seals around Iceland, possibly due to harvesting at rates that are not sustainable. The SC had previously provided advice in response to a request to review and assess abundance and stock levels of grey seals in the North Atlantic, with an emphasis on their role in the marine ecosystem in general, and their significance as a source of nematodal infestations in fish in particular (NAMMCO 1995). Given the apparent stock decline in Iceland, an apparent increase in Southwest Norway and in the United Kingdom, and the fact that this species interacts with fisheries in three NAMMCO member countries, it is recommended that the SC provide a new assessment of grey seal stocks throughout the North Atlantic.*

* + 1. **Future work**
  1. **Harbour seal**
     1. **Update [**SC/25/13**]**
     2. **Coastal Seals WG (2019)**
     3. **Review and status of active requests** (R-2.5.2)

***R-2.5.2:*** *To conduct a formal assessment of the status of harbour seals around Iceland and Norway as soon as feasible*

* + 1. **Future work**
  1. **Bearded seal**
     1. **Update [**SC/25/13**]**
     2. **Bearded Seal WG (2020/2021)**
     3. **Review and status of active requests (**none**)**
     4. **Future work**
  2. **Walrus** 
     1. **Updates**
     2. **Walrus Working Group October 2018 [**SC/25/14**]**
     3. **Review and status of active requests** (R-2.6.3, R-2.6.7, R-1.6.4, R-1.6.5)

***R-2.6.3 (ongoing):*** *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.*

***R-2.6.7 (2017, pending):*** *To provide assessments of, and advice on sustainable removals from, all stocks of walrus in Greenland covering the period from 2019 to 2023, with the advice for Qaanaaq starting in 2021.*

***R-1.6.4******(ongoing):*** *The SC has recommended that catch statistics include correction for struck but lost animals for different seasons, areas, and catch operations. Council requested the SC and the Committee on Hunting Methods to provide advice on the best methods for collection of the desired statistics on losses.*

***R-1.6.5 (2017, standing):*** *Struck and loss rates should be subtracted from future advice on sustainable removals in Greenland, with the advice being given as total allowable landings.*

* + 1. **Future Work**

1. **CETACEANS STOCKS - STATUS AND ADVICE TO THE COUNCIL**

**9.0 AEWG 2018**

* 1. **Fin whale** 
     1. **AEWG 2018 [**SC/25/12**]**
     2. **Update**
     3. **Review and status of active requests** (1.7.12)

***R-1.7.12 (ongoing):*** *Greenland requests the SC to give information on sustainable yield based on new abundance estimates expected from TNASS2015 for all large baleen whales in West Greenland waters*

* + 1. **Future work**
  1. **Humpback whale**
     1. **AEWG 2018**
     2. **Update**
     3. **Review and status of active requests** (R-3.2.4, 1.7.12)

***R-1.7.12 (ongoing):*** *Greenland requests the SC to give information on sustainable yield based on new abundance estimates expected from TNASS2015 for all large baleen whales in West Greenland waters*

***R-3.2.4-amended (ongoing):*** *conduct a formal assessment following the completion of the T-NASS…In addition the Scientific Committee is requested to investigate the relationship between the humpback whales summering in West Greenland and other areas and incorporate this knowledge into their estimate of sustainable yields of West Greenland humpback whales.* ***Amendment (NAMMCO/25):*** *adds the following text: “The SC is further asked to provide advice on future catch levels of humpback whales in West Greenland at different probability levels for a non-declining population evaluated over a 5 year period, similar to the procedure for the advice generated for beluga, narwhal and walrus. The advice should include the latest abundance estimate.”*

* + 1. **Future work**
  1. **Common minke whale**
     1. **AEWG 2018 [**SC/25/11-12**]**
     2. **Update**
     3. **Review and status of active requests** (R-3.3.4, 1.7.11, 1.7.12)

***R-1.7.12 (ongoing):*** *Greenland requests the SC to give information on sustainable yield based on new abundance estimates expected from TNASS2015 for all large baleen whales in West Greenland waters*

* + 1. **Future work**
  1. **Beluga**
     1. **Global Review of Monodontids** **[**SC/25/FI/12**]**
     2. **Update**
     3. **NAMMCO-JCNB JWG & Workshop March 2019**
     4. **Review and status of active requests** (R-3.4.9, 3.4.11, R-3.4.14)

***R-3.4.9 (ongoing):*** *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; narwhal added at NAMMCO 23*

***R-3.4.11 (standing):*** *To update the assessment of both narwhal and beluga*

***R-3.4.14 (ongoing):*** *To examine the data existing on beluga in East Greenland (sightings, strandings, by-catch and catch) and examine how this material can be used in an assessment process and advice on how this data can be improved.*

* + 1. **Future work**
  1. **Narwhal** 
     1. **Global Review of Monodontids [**SC/25/FI/11-12**]**
     2. **Update**
     3. **NAMMCO-JCNB JWG & Workshop March 2019**
     4. **Review and status of active requests** (R-3.4.9, 3.4.11)

***R-3.4.9 (ongoing):*** *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; narwhal added at NAMMCO 23*

***R-3.4.11 (standing):*** *update the assessment of both narwhal and beluga*

* + 1. **Future work**
  1. **Sei whale**
     1. **AEWG 2018 [**SC/25/12**]**
     2. **Update**
     3. **Review and status of active requests (R-3.5.3 amended, 1.7.12)**

***R-1.7.12 (ongoing):*** *Greenland requests the SC to give information on sustainable yield based on new abundance estimates expected from TNASS2015 for all large baleen whales in West Greenland waters*

***R-3.5.3 amended (ongoing):*** *assess the status of sei whales in West Greenland waters and the Central North Atlantic and provide minimum estimates of sustainable yield*

* + 1. **Future work**
  1. **Bottlenose whale** 
     1. **AEWG 2018 [**SC/25/12**]**
     2. **Update**
     3. **Review and status of active requests (none)**
     4. **Future work**
  2. **Killer whale**
     1. **Status Review by Jourdain et al [**SC/25/18**]**
     2. **AEWG 2018 [**SC/25/12**]**
     3. **Update**
     4. **Review and status of active requests (R-3.7.2)**

***R-3.7.2 (ongoing):*** *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.*

* + 1. **Future work**
  1. **Pilot whale**
     1. **AEWG 2018 [**SC/25/12**]**
     2. **Trends [**SC/25/22**]**
     3. **Update**
     4. **Pilot Whale WG (2020)**
     5. **Review and status of active requests (R-1.7.11, 3.8.6)**

***R-1.7.11 (ongoing):*** *To develop estimates of abundance and trends as soon as possible*

***R-3.8.6 (ongoing):*** *To complete a full assessment of pilot whales in the North Atlantic and provide advice on the sustainability of catches...with particular emphasis on the Faroese area and East and West Greenland. [Part answered: In the short term...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]*

* + 1. **Future work**
  1. **Dolphins**
     1. **AEWG 2018 [**SC/25/12**]**
     2. **Update [**SC/25/13**]**
     3. **Review and status of active requests (R-3.9.6)**

***R-3.9.6 (ongoing):*** *assessments of dolphin species*

* + 1. **Future work**
  1. **Harbour porpoise**
     1. **AEWG 2018 [**SC/25/12**]**
     2. **Update [**SC/25/13**]**
     3. **HP Workshop December 2018**
     4. **HPWG 2019**
     5. **Review and status of active requests (R-3.10.1)**

***R-3.10.1 (ongoing):*** *To perform a comprehensive assessment of the species throughout its range, which might include distribution and abundance, stock identity, biological parameters, ecological interaction, pollutants, removals and sustainability of removals.*

* + 1. **Future work**
  1. **Sperm whale**
     1. **AEWG 2018 [**SC/25/12**]**
     2. **Update**
     3. **Review and status of active requests (none)**
     4. **Future work**
  2. **Bowhead whale** 
     1. **Update**
     2. **Review and status of active requests (none)**
     3. **Future work**
  3. **Blue Whales**
     1. **AEWG 2018 [**SC/25/12**]**
     2. **Update**
     3. **Review and status of active requests (R-1.7.11)**

***R-1.7.12 (ongoing):*** *Greenland requests the SC to give information on sustainable yield based on new abundance estimates expected from TNASS2015 for all large baleen whales in West Greenland waters*

* + 1. **Future work**

1. **SURVEYS** 
   1. **Update “Cetacean abundance and distribution in the North Atlantic” workshop** **[**SC/25/FI/18**]**
   2. **NAMMCO/IWC cooperation reg. AE WGs**
   3. **Abundance Estimates WG 2018 [**SC/25/12**]**
      1. **Status of analyses**
      2. **Joint analyses**
   4. **Review and status of active requests and recommendations (R-1.7.11)**

***R-1.7.11 (ongoing):*** *To develop estimates of abundance and trends as soon as possible*

* 1. **Plans for next NASS**
     1. **Focus**
     2. **Timing and time-line**
     3. **Tentative budget**

1. **NAMMCO SCIENTIFIC PUBLICATIONS**
   1. **Age** **estimation of MM with a focus on Monodontids [**SC/25/FI/13]
   2. **NASS II [**SC/25/23**]**
2. **FUTURE WORK PLANS**
   1. **Scientific Committee 2019 Meeting**
      1. **Timing and place**
      2. **Presentations**
   2. **Working groups/Symposia/Other meetings [**SC/25/24**]**
      1. **2019**
      2. **2020**
      3. **Long-term planning**
3. **EXPENSES 2018 and BUDGET 2019-20 [**SC/25/25**]**
   1. **SC Expenses 2018**
   2. **SC Budget 2019-20**
4. **ANY OTHER BUSINESS**

**14.1. Election of Officers**

1. **MEETING CLOSURE** 
   1. **Acceptance of report**
   2. **Closing remarks**