



NORDIC MARINE THINK TANK

Report of the Fifth Ordinary General Assembly of the Nordic Marine Think Tank

Monday 2 October 2017 10.00 – 16.00 hours, Axelborg, Copenhagen, Denmark

The meeting was attended by thirteen members of the NMTT: Carl-Christian Schmidt (DK), Dorothy Dankel (NO - by video-link), Esben Sverdrup-Jensen (DK), Hans Lassen (DK), Henrik Sparholt (DK), Jesper Heldbo (DK), Lars Clink (DK), Mogens Schou (Aquamind), Odma Johannesen (DK), Staffan Waldo (SE), Sten Sverdrup-Jensen (DK), Søren Anker Pedersen (DK), Victor Hjort (DK) and three guests: Jeppe Høst (Oxford Research), Helge Paulsen (NMR) and Max Nielsen (CPH University)

Provisional Agenda

- 1) Appointment of chair and rapporteur
- 2) Approval of the agenda, its timely distribution and submitted proxies
- 3) Presentation of the annual report for approval
- 4) Presentation of the certified financial statement for 2016 for approval
- 5) Presentation of the work-plan and budget for 2017, including proposed quota for members and supporting members for approval
- 6) Consideration of submitted proposals
 - Revised Statutes in English language (attached)
 - Proposed changes to Statutes in Danish language (attached)
- 7) Election of the Board
 - State of play (attached)
- 8) Election of the Auditor
- 9) Any other business
 - Reflection paper - “Ønskes”
 - Big data

- 1) Appointment of chair and minute-taker [rapporteur]

The NMTT chair welcomed the participants to the fifth ordinary General Assembly, who elected Helge Paulsen as chair for the meeting and Victor Hjort as minute-taker [rapporteur].

2) Adoption of the Agenda, its timely distribution and received proxies

The Chair confirmed that the agenda for the meeting had been distributed within the prescribed deadline and that three proxies had been received giving voting rights to three of the participating members. He ascertained that the meeting had the necessary quorum.

The agenda and two additional proposals for AOB were adopted.

3) Submission of the annual report for adoption

The NMTT chair presented the annual report, [which is attached to this General Assembly report (in Danish)].

The NMTT Chair informed about the activities held in 2016-2017, including the Conference on Perspectives for Fishmeal and Fish Oil in August 2016. Sten mentioned the contacts held about possible activities in the context of Small Island Developing States and Arctic Fisheries Management. Hans Lassen informed about possible cooperation with the Velux foundations, and Carl-Christian informed about the preparations for the Conference on “Fisheries and Society – Challenges to 2025” planned for the Autumn of 2018 in connection with the Swedish Chairmanship of the Nordic Council of Ministers. Henrik Sparholt informed about the current status of the project “Ecosystem Based Fmsy Values in Fisheries Management”, approved for funding by Danish/EU funds and Nordic Council of Ministry funds.

A short discussion was held on the visibility of the NMTT and how a consistent membership policy could help making the NMTT more known. Several factors contribute to making NMTT known, such as events, publications and projects, although there is no systematic policy to promote the organisation. A lot depends on voluntary work and the participation of enthusiastic members. Exposure through contributions to the media has proven difficult, but is also an avenue to consider.

The chair declared the report as adopted by the meeting.

4) Presentation of the certified financial statement for 2016 for approval

The statement was presented and clarifications were made on the positive balance obtained through project-execution, contributing to the income of a non-profit NGO such as the NMTT.

The assembly adopted the audited accounts for 2016.

5) Presentation of the work-plan and budget for 2017, including proposed quota for members and supporting members for approval

The assembly took note of the project working plan mentioned in the Chair's report and adopted the annual supporting fee at Kr 5000 and personal membership fee at Kr 100.

6) Examination of received proposals

- Revised Statutes in English language
- Proposed changes to Statutes in Danish language

A group composed of Helge, Hans, Carl-Christian, Victor and Odma will present proposals to the board by 1 February 2018.

Some issues were briefly discussed:

On the issue of changes in the statutes, Odma explained her proposal to reconsider the ambition of NMTT to participate in the public debate through the media, due to its limited resources.

Dorothy proposed to have a gender balance quota and the Chair's suggestion "to work for gender, age and national balance" was mentioned as a possibility.

7) Election of the Board

Three out of four members standing for election accepted re-election. The Chair noted that Staffan Waldo, Sweden, accepted to be elected as new member.

The Chair noted consensus on the re-election of three existing members and of one new member.

The composition of the new board is provided in the table below.

NMTT Board - GA 2017 (2 year election periods)		
Name	Country	Year elected
Victor Hjort	DK	2017
Sigrún Smáradóttir	IS	2017
Dorothy Dankel	NO	2017
Staffan Waldo	SE	2017
Carl-Christian Schmidt	DK	2017
Sten Sverdrup-Jensen	DK	2016
Jesper Heldbo	DK	2016
Hans Lassen	DK	2016
Peter Ørebech	NO	2016

Asmundur Gudjonsson	FO	2016
Helle Siegstad	GL	2016

8) Election of the Auditor

Hans Jørgen Larsen was re-elected as auditor.

9) AOB

a) Reflection paper - “Ønskes”

The assembly had a brief discussion focusing on how members of NMTT can or should make regular contributions to the public debate; on members’ “rights and obligations”, and on stating affiliation with NMTT without committing NMTT’s opinion.

Internal discussions in the NMTT could be a way of launching contributions to the public debate. The current session of the General Assembly will host an informal discussion on ITQs, and it was suggested to be more systematic in hosting similar thematic discussions at Board and Assembly meetings.

The issues are already flagged in the discussion on possible changes of the NMTT statutes, and Asmundur’s paper should be taken into consideration in the Statutes review.

The Chair thanked Asmundur for his contribution

b) Big data

Jesper enquired into the status of implementation of Big Data collection, which was discussed at last year’s General Assembly. Not much has happened in practice, although a good deal of work on the concept has been done.

The Chair thanked the participants for good conduct and declared the meeting closed.

/Victor Hjort, 16 October 2017

NMTT Chair's Report on activities 09/2016 to 09/2017

General issues

The past year has been busy for the NMTT Secretariat. As per decision of the 2016 NMTT General Assembly the NMTT language is English. This has meant translating the statutes of the NMTT and in doing so, a number of revisions were suggested to make the statutes clearer and more user friendly.

Symposium: Network of Fishmeal and Oil Stakeholders

On August 29-30 2016 (just prior to the 2016 GA) the NMTT organised a Symposium on the Future of Fishmeal Network of Fishmeal and Oil Stakeholders entitled "*Perspectives for fishmeal and oil in light of management of forage fisheries, alternative uses of meal and oil and the development of new feeds and technologies.*" The symposium was attended by 120 industry and government officials from all Nordic countries and took place at the NordsoCentret in Hirtshals. The symposium was funded by the Nordic Council of Ministers. Victor and CCS in particular were involved in the organisation of the Symposium.

The purpose of the Symposium was to bring stakeholders together for an informed discussion of trends, challenges and opportunities for the fish meal and fish oil value chain. The value chain has changed substantially over past decades due to changing policy environments with respect to fisheries management, regulatory framework, food security, technological developments and changing stakeholder views. Against this background the Nordic Marine Think Tank and the EUfishmeal organisation, with funding support from the Nordic Council of Ministers organised the symposium. To this effect a Steering Group with members from the NMTT and EUfishmeal met on a number of occasions in Copenhagen or through Skype to plan and organise the Symposium. The Symposium was organised around three substantive session and a Round Table.

In the first substantive session on "Biological challenges of Forage Fisheries" moderated by Henrik Mosegaard presentations were given by Hans Lassen, Anna Rindorf, Henrik Sparholt and Esben Sverdrup-Jensen. The purpose of this session was to get a better understanding of the biological nature of forage fisheries, interactions with other ecosystems in which forage fisheries takes place and to understand what better information might provide in terms of Fmsy settings.

The second substantive session entitled "Forage fisheries, Food Security and Other Societal Concerns" was moderated by Dawn Purchase. Presentations were given by Stefania Vannuccini, Camiel Derichs, Chris Nannes and Michael St. John. The Session provided a broader view of the forage fisheries value chain in the context of blue economy and food security. The session also considered the contribution of certification systems and how these deal with the use of fishmeal and fish oil in feed compounds. The use of mesopelagic stocks as a new raw material source was discussed. Knowledge of these stocks is limited and fishing them is expensive. Caution is needed in the way these stocks are exploited.

The third substantive session on "Fishmeal and fish oil Value Chain Perspectives" was moderated by Frank Asche and included presentations by Andrew Jackson, Odd Eliassen, Mari Moren, Tormod Thomsen and Anders Aksnes. The session focussed on the opportunities created

by the very vibrant market situation. Feed producers are investing in finding alternatives to fishmeal and fish oil adding a potential pressure on processors of meal and oil. The uses of fishmeal and fish oil for direct human consumption e.g., in the flavour ingredients business and for pharmaceuticals were also highlighted although it should be kept in mind that the overall quantities going to these uses remain marginal.

The Symposium finished with a roundtable discussion which was moderated by Jóhann Sigurjónsson and included Odd Eliassen, Frank Asche, Anders Aknes and Henrik Sparholt. The key messages and conclusions from the roundtable include:

- There is a need to cooperate with the fishermen with a view to ensuring that information and data are collected to improve stocks assessments.
- It was noted that pelagic stocks are generally more vulnerable than demersal ones and hence particular attention is needed in stock assessments. In this respect good and solid advice is important for the stability and planning horizon of the industry.
- Perceptions about the fishmeal and fish oil value chain are often skewed and the industry need to develop a communication strategy that can address this. Basically, the industry noted that it had not been good at explaining the sector to a wider audience.
- A network, such as this one created by hosting the Symposium, is central to improve communication among stakeholders.
- Participants highlighted the usefulness of having started a process but that the process needed to be followed up.
- In this regard it was suggested that a platform could be developed (e.g., through NMTT based on a blog) which would provide a tool to communicate latest research and general news about the fishmeal and fish oil value chain.
- There is a need to advance the research agenda throughout the value chain i.e. from forage fishing (e.g., gear technologies which reduce the impact on ecosystems) at one end of the value chain to better understand the importance of the fishmeal and fish oil inclusion rates in diets.
- Concerted action in exploration of the great potentials of mesopelagic fish stocks as future raw material for the pelagic industry is needed among all stakeholders, while caution should be exercised in such development.
- It was suggested that the Nordic regions might collaborate more intensely with a view to reduce the overall burden of research costs.

Collaboration between the Nordic Council of Ministers and Commonwealth Secretariat

During the Autumn and Winter 2016/7 a number of NMTT colleagues (Sigrun, Sten and Arne) worked on a so-called “Backbone document” the purpose of which is to highlight issues of the Blue Economy (re. earlier work by the NMTT) as used in the Nordic context which could prove useful to island states members of the Commonwealth Secretariat.

The document notes that the main focus of collaboration between The Nordic Council of Ministers (NCM) and the Commonwealth Secretariat (COMSEC) for the past years has been on Blue Bioeconomy. Blue Bioeconomy may serve as an important platform to identify opportunities for sustainable value increase and possible transfer of knowledge and techniques between different regions. This applies especially to “Small Island States” who are in fact “Big Ocean States”, having large exclusive economic zones and therefore a major interest in ocean bioresources. The Backbone document and its accompanying

policy briefs are put forward to be a foundation for further collaboration and dialogue between the NCM and the COMSEC. This work was funded by the Nordic Council of Ministers.

This Backbone document on the “Growth in the Blue bioeconomy” puts focus on island states and coastal areas, drawing lessons from previous and ongoing Nordic projects and policy documents, such as:

- The TemaNord report “Future Opportunities for Bioeconomy: Focus on the West Nordic Region”, relevant NordRegio case studies and Nordic innovation bioeconomy mapping.
- The ongoing projects including the Arctic bioeconomy II (Progress report “Biorefining and Biotechnology Opportunities in the WestNordic Region”), Development of the Nordic bioeconomy, and The Nordic Region – leading the way in Green Growth: Outcomes of the Nordic prime ministers’ green growth initiative.
- Strategy work and discussions from the Nordic Bioeconomy panel, the West Nordic Bioeconomy panel and BSR (Baltic Sea Region) bioeconomy Council.
- Nordic bioeconomy chairmanship programs such as the NordBio (Iceland), Growth in Blue Bio-economy (Faroe Islands /Denmark), the Nordic Road Map for Blue Bioeconomy (Finland), the Ocean Environment and the Blue Bioeconomy (Norway).
- Policy documents such as the Nordic Bioeconomy Initiative and Nidaros Declaration.
- The joint Nordic initiative on Agenda 2030 and the 17 UN Sustainable Development Goals.

In addition to a number of case studies of sustainable practices reviewed, the Backbone document also presents a number of “Policy Briefs” on Nordic Blue Growth processes and solutions, that are considered relevant to Commonwealth island states. The Policy Briefs are also intended for use in other contexts e.g., to FAO and Nordic development fund, where they should strengthen the international profile of the Nordic Council of Ministers (The Nordic solutions). The policy briefs are focused on the following subjects.

- Nordic blueprint for developing blue bioeconomy.
- Long term sustainability of resources and climate change.
- Long and short term social aspects.
- Focus on the blue bioeconomy.
- Implementing the Blue bioeconomy.
- Investing in the Blue bioeconomy.

NMTT participation at the Arctic Frontiers Conference, Tromsø, Norway, 22-25

January 2017

Sten represented the NMTT at this conference. The Conference was well represented by Nordic countries and at high levels of government. For the NMTT it was an opportunity to further a series of articles in preparation by Sten and Peter Oerebaek and Poul Degnbol on issues relevant to the Arctic and to explore if NMTT should take up management of Polar Sea fish resources as a future theme. An article by Sten, Peter on the subject is in the mold.

Approach to the Velux foundation

During winter 2016/17 the NMTT was approached by the Velux Foundation for possible participation in a bid for funding on marine issues. The Velux Foundation organised two symposiums to further interest in the foundations work on 18 January and 10 March. Hans Lassen participated on behalf of the NMTT in the 18 January meeting. The Velux Foundation is interested in finding relevant research groups to be for funding for a maximum period of 12 months and for a maximum of 2 million DKR. The NMTT suggested a couple of research areas but in the end it came to naught for administrative reasons. The NMTT will pursue a dialogue with the Velux Foundation to better future possibilities for collaboration on projects of mutual interest.

Project Ecosystem Based FMSY Values in Fisheries Management (ECOSYSTEM-Fmsy)

The objective of the project is to come up with FMSY values, which are based on ecosystem functioning, for each of ICES data rich fish stocks. These FMSY values can be applied directly by ICES in its routine fisheries advice. The aim is to bridge the gap between the science available and management. The current FMSY values used by ICES are based on traditional single species consideration that ignores ecosystem functioning in terms of carrying capacity, density dependent population dynamics and species interactions. This generally means that ICES current FMSY values are severely biased in the new reality, where stocks are rebuilding. Ecosystem and multispecies modelling indicate that the bias in FMSY estimates could be as much as a factor of two. Not bridging the gap between the science on ecosystem functioning available and management has the unfortunate consequence MSY is not reached, because the current FMSY values used are biased downwards. Meta-analysis and ecosystem/multispecies modelling in several ICES eco-regions, indicate that the foregone yield will be in the order of 40% less yield than by applying ecosystem based FMSY values.

The project has attracted funding from the NMC and the EU through the Danish Government Agrifish Agency.

Henrik Sparholt is the lead coordinator of this project which involves a number of world renowned researchers (including Ray Hilborn, Jan Horbowy, Petur Steingrund, Jeremy Collie, Bjarte Bogstad, Daniel Howell, Villy Christensen, and Gunnar Stefansson). The NMTT (Odma, Lars and Victor) acts as administrative support for the project.

Conference *Fisheries and society – challenges to 2025* to take place second quarter 2018

The NMTT was asked to start preparations for a conference on ITQ to take place in 2018 (possibly end second quarter). Funding for this endeavour is from NMC. Under the title: *Fisheries and society – challenges to 2025* the overall objective of the conference is to bring together higher level civil servants from Nordic fisheries administrations, parliamentarians dealing with fisheries matters, fisheries organisations and invited speakers for an informed discussion on the challenges to fisheries management to 2025 and beyond, with a focus on the relations between fisheries management and society at large. The detailed aims of the conference are to heighten the understanding of the use of individual transferable quota management systems, discuss the lessons learned from those Nordic countries that have an experience in their implementation and use, and to better understand their effects, and acceptability, on fishing communities, fishing fleets, revenues and the returns to society. The important economic contribution fisheries potentially can generate to societies is an important consideration for fisheries policy

makers one the one hand, while ensuring that the fisheries management and its outcomes are legitimate on the other.

The Conference is the final step of a major project on the use of ITQs in the Nordics. Reports produced under the project include : a) Max Nielsen (Struktur Udvikling og Regulering i Nordiske Fiskerier frem til 2025), Jeppe Høst (a. Fra skole til skipper: En undersøgelse af rekruttering og generationsskifte i nordisk fiskeri, samt b. værdikæder i kystfiskeriet) og Edgar Henriksen (Fiskeripolitikens påvirkning på sysselsætning og bosætning i fiskeriavhengige regioner i NO, IS og FO. Desuden de tilknyttede projekter: a. ”Fisken og Folket”, b. fremtidige strukturer indenfor fiskeriet i Norge, Island og Færøerne). A common theme of these individual reports is their focus on potential future structural adjustments in the Nordic fisheries sector. This should be seen in the light of a wish that the fisheries sector contributes to the overall national economy. The three authors will each have 20 minutes to present the key results followed by questions from the floor.

Victor Hjort and CCS are the NMTT participants in the steering group setting up the conference.