



REPORT MIAC 2021

Meeting: **MIAC – Annual Coordination Meeting ICES-ACs**

Parties: **BSAC, SWWAC, LDAC, NWWAC, PelAC, NSAC members and ICES**

Date: **14th January 2021**

Location: **Webex**

Chair: **Kenn Skau Fischer**

Rapporteur: **Katrina Ryan**

1. Welcome and introduction

The Chair, Kenn Skau Fischer – Executive Committee Chair of the North Sea Advisory Council (NSAC) – welcomed everyone to the meeting. He noted it was the first time in the history of MIAC that the event had been held online. He thanked all colleagues in ICES and from the Advisory Councils for their attendance, and said that a full list of participants at the meeting would be circulated.

The Chair introduced and thanked Tamara Talevska, Executive Secretary of the NSAC.

No apologies had been provided, and all Advisory Councils (ACs) were represented and present at the meeting.

Following the formal exit of the UK from the EU on January 1st 2020, there was no UK representation amongst members present at the meeting, but there was broad attendance from EU 27 Member States.

2. Action Points from the previous meeting

1. Information on changes and updates to scientific advice

- ACs Secretaries and members to contact ICES Secretariat to register in the ICES Observer Forum:
http://community.ices.dk/Advice/advice_activities/default.aspx; **Further information and reminders to be circulated after MIACO21.**

2. On the use of scientific survey data in stock assessments

- ICES ACOM to provide a summary paragraph on the requirements for independent scientific survey data which was to be included in stock assessments and advice. **Pending update.**

2.c. ICES guidelines for rebuilding plans workshop

- ACs to ensure active participation in special workshops WKREBUILD and WKREM in Feb and April 2020, with the aim to contribute actively to development of science-policy interface in order to find an agreement with managers and stakeholders to develop a MAMP. **Pending update.**

2.d ICES Work in RFMOs: NAFO RA 3M Shrimp and VMEs in NEAFC RA

- NAFO: LDAC asked ICES to run again the assessment of the 3M Shrimp in late August/early September so the advice could be frontloaded and arrive in time to inform the NAFO CPCs and its annual meeting (3rd week of September). **Update at MIAC21.**
- NEAFC: ICES to continue work with DG MARE and NEAFC in developing scientific advice on review of effectiveness and impacts of fishing activities in VMEs to provide management options linked to the EU deep sea access regime regulation. **Tabled for MIAC21, written response.**

3.a Improving science and discard data for deep-water stocks

- LDAC, NWWAC, NSAC (and potentially SWWAC) to organise a Task Force to look into the needs and gaps of commercial data on (by)catch and discards. Explore avenues of collaboration with ICES WGDEEP to try to integrate commercial data into the advisory process in time for next biannual advice on fishing opportunities for 2021/2022. **Pending update.**

4.a. Working with commercially collected data and stakeholder information

- ACs to read outputs of ICES WKSCINDI report and identify areas for collaboration.
- LDAC to upload reports of joint ICES-ACs meetings on stock data deficiencies; and make a review with ICES on data needs relying on industry, MS and scientists for commercially relevant stocks. **Pending update.**

4.b ICES Working Group on Economics

- ACs to be regularly informed and to liaise with Simon Jennings and ICES ACOM to provide advice on the ToR and work contents from this WG in order to avoid duplication and overlapping of tasks with other organisations dealing with social and economic data of the fleets such as STECF. **Tabled at MIAC21, written response.**

4.c. Stakeholders' engagement in ICES Advisory Processes



- ACs to follow up outcomes and decisions of ACOM to be held in March 2020 in order to develop an engagement strategy and identify the resources. The question of authorship of industry on Expert Group reports shall form part of this discussion. **Addressed at MIACO21.**

6. Organization and Chairperson for MIAC 2021

- Following the work of the BSAC, PELAC and LDAC in previous years, it is up for the NSAC, NWWAC, and SWWAC to discuss between themselves and decide who will take over the coordination work for organising next year's MIAC meeting. The decision will be reported to ICES Secretariat and the other ACs asap. **Completed.**

Following the update on the actions, Kenn Skau Fischer noted an Advisory Council Chair for the MIAC meeting in 2022 was sought. This would be determined before the close of the day's meeting.

3. AC-specific issues

3.1 Updates on activities of the ICES WG on Offshore Wind development and fisheries (NWWAC)

Emiel Brouckaert, Executive Committee Chair for the NWWAC, introduced himself to the meeting. He extended his thanks to the NSAC for organising the discussion, and noted that four representatives of the NWWAC were present. He introduced Mo Mathies, NWWAC Executive Secretary, to cover the subject of offshore wind development and fisheries.

Mathies explained that the NWWAC sought an update from ICES on work underway on the subject, as well as ideas for how the ACs can most effectively contribute their stakeholder expertise – potentially with a specific task-force or Focus Group.

Mark Dickey-Collas handed the floor to Eugene Nixon, an ACOM Vice-Chair working primarily on environmental and ecosystem requests coming into ICES. Nixon explained there is a new ICES WG on offshore wind, formed in 2020, with Terms of Reference (ToRs) covering a three-year period. The first meeting of the group took place in April of 2020. There are 37 members in the group, and all participated in the first meeting. Two-thirds of participants are from North America – providing a 'great opportunity' to compare science and policy development from both sides of the Atlantic. The ToRs for the group include a review and report on fishing – both commercial and recreational – and its interactions with offshore wind developments. They also include the assessment of the impact of offshore wind development on fisheries resources, using observational information and model-based approaches. Nixon detailed that the group would also cover habitat alteration – including benthic



habitat impact, water movement, sediment suspension and water column changes and that they will report at the end of their three year term. The next meeting of the WG is scheduled for the week commencing the 15th March, 2021, and will be held online. The current focus of the group is a comparison of existing work on the subject of offshore wind between the EU and the US, both in terms of science and management. A review of this will be produced.

Nixon said that, in terms of AC engagement, he would make the three Chairs of the WG aware of the interest and ensure that the ACs are informed of any workshops organised by the WG. He concluded that cooperation and input from the ACs is welcomed.

Mo Mathies thanked Nixon on behalf of the NWWAC.

3.2 Impacts of seismic activities and underwater noise (NWWAC, PelAC)

Mo Mathies spoke on behalf of the NWWAC and the PelAC on the subject of underwater noise and seismic activities. Both ACs were keen to ascertain if there was work planned in the pipeline on this subject matter within ICES.

Mark Dickey-Collas responded, saying that ICES are working with a number of working groups and organisations to study the impacts of underwater noise, including the ICES Marine Mammal Ecology WG (WGMME), the European Marine Board's WG on noise, and the OSPAR Intersessional Correspondence Group (ICG) on noise. These organisations are working together to bring forward research and understanding around the issue, mostly through the mechanism of the Marine Strategy Framework Directive (MSFD) called TG Noise.

Dickey-Collas remarked that ambitious timelines have been set up for the MSFD, particularly for noise - where there has been significant growth in terms of work. He stated that the current status of the implementation of the MSFD is that assessments of Articles 8 and 9 have been completed, which focus on the determination of Good Environmental Status (GES) and monitoring programmes to support this.

In 2021, TG Noise intend to enter into a phase of assessments and evaluation. In 2022 and 2023, the MSFD will move to the programmes of measures, in which actions are proposed by EU member countries.

The tasks the group are bringing together are implementation of the Good Environmental Status decision (including baseline threshold values and methodologies), reporting guidance and products, and development of measures on impulsive noise and continuous noise.

The work programme for TG Noise on the subject of underwater noise across the next two years involves the definition of threshold values for underwater noise and

developing an assessment framework, which will flow through to monitoring guidance and subsequent discussion of the effectiveness of the measures.

Mo Mathies requested a link to the work described. This was provided in the chat function of the meeting (and is supplied in the Annex of this document). She sought clarification on whether the thresholds described pertained to commercial fish stocks, or marine mammals. Dickey-Collas re-asserted that they ‘cover everything’.

Sean O’Donoghue (PelAC) thanked Dickey-Collas for the information. He highlighted that a ‘major’ aspect of the Green Deal is offshore wind energy development, asking whether there was a direct link between the Green Deal and the initiatives listed by Dickey-Collas in his intervention. He added that there was significant impact assessment work underway on offshore wind energy projects, but that in his experience noise impacts have been ‘poorly accounted for’ within these.

Mark Dickey-Collas responded that the Green Deal is a European policy, but that there is no direct linkage with the Common Fisheries Policy (CFP) and the MSFD. However, these policies are linked through the 2030 Biodiversity Strategy. He explained that ICES had been asked to consider how they will provide advice to DG Environment through the Biodiversity Strategy, adding that there ‘is no major work on impact of noise on fish – it’s on sensitive species and habitats overall’.

3.3 Update on activities of the WG on bycatch of protected species (NWWAC)

Mo Mathies request general updates on the work of the ICES WG on bycatch and on protected species.

Mark Dickey-Collas introduced Henn Ojaveer, and ACOM Vice-Chair responsible for environmental and ecosystem matters, including bycatch of sensitive species. Ojaveer commented that the main issues in the sphere of bycatch of Protected Endangered and Threatened Species (PETS) are: data quality and data quantity. He noted this had been referenced in several ICES advisory products, adding that the data issue relates not only to monitoring data and bycatch incidents, but also to fishing effort data and abundance estimates. All work in ICES in terms of the bycatch of protected species will be carried out in the frame of the [ICES bycatch roadmap](#), which is available online. The main objective of the WG’s work at this time is to assess the risk of incidental bycatch around fishing activities, and include these assessments in fisheries overviews in 2022. WG BYC and WG MME will continue efforts to improve data in this area, in order to improve the quality of ICES advice on bycatch. Ojaveer noted that ICES is now ‘moving to new regional database system’ and that bycatch experts are working to ensure that PETS bycatch data recorded under national Data Collection Framework programmes are stored ‘in a meaningful way’. Experts under WGBYC will continue updating information using annual strandings data, in order to update mortality estimates and assessments.



In terms of how the Advisory Councils can contribute in this area, Henn Ojaveer re-emphasised that there are ‘problems in all three main data-types: monitoring effort, fishing effort and abundance surveys’. He said ICES acknowledges that cooperation between industry and scientists will help in this regard. The ACs can help to communicate this need for data through their membership. He added that current abundance surveys on cetacean populations are carried out at decadal intervals, and that more frequent data is needed – saying that ACs can help by highlighting this need to Member States, their members and the Commission. Finally, he added that ‘the conservation and management objectives for PETS in EU legislation differ’ and that agreeing on quantitative goals is important: something else the ACs could communicate to Member States, members and the Commission.

Mark Dickey-Collas intervened to note that ‘in the run-up to 2021-2022’ ICES will likely receive requests for bycatch advice from DG ENV, DG MARE, NEAFC and OSPAR. He added that this was a ‘big subject’ and shared his appreciation for it featuring on the MIAC agenda. He said it was a significant challenge, as there is only a ‘small community’ of experts to rely on. ACs could contribute by ‘making it clear to national administrations that more research and more experts in this area are needed’.

The Chair, Kenn Skau Fischer, said that ‘from a fisheries point of view’ this was an important area and issue to deal with, noting that many fishers have concerns about data gathering on PETS bycatch – out of fear for their own fisheries, and ‘their colleagues’ fisheries’.

Gerard Van Balsfoort (PelAC) asked whether the ‘new third country – the UK’ had requested advice from ICES on bycatch of cetaceans. Mark Dickey-Collas responded that ICES had recently signed a Memorandum of Understanding (MoU) with the UK to continue providing advice ‘into the fisheries realm and the marine environment realm’. No specific request regarding bycatch had been received.

3.4 Stickleback (BSAC)

Esben Sverdrup-Jensen, Executive Committee Chair of the BSAC, spoke to this agenda item: he explained that the stickleback is a small fish that lives in the Baltic, that is seemingly abundant. This had led to a desire to explore the possibility of instigating a sustainable fishery of the stock. The BSAC sought to ascertain ICES’ position in terms of availability to assess the stock and provide information that may help develop the fishery.

Mark Dickey-Collas had been in touch with the stock assessment group and the integrated ecosystem assessment group for the Baltic on this subject. These colleagues had reported that a number of them had been engaged in a BSAC workshop on the subject in September 2020. He noted he had seen several scientific papers come out on the subject of stickleback. ICES felt the time was right to run a workshop to try and bring the various threads of research in this area together. Dickey-Collas explained that both the stock assessment WG and the integrated ecosystem



assessment WG felt there was sufficient information to start to 'put together and ICES story on this'. As no special request had been received, this would be tackled through the 'science arm'.

Jörn Schmidt, Chair of the ICES Science Committee, confirmed Dickey-Collas' remarks, saying it was possible a workshop would take place to synthesise the science around stickleback stocks in 2021.

Sverdrup-Jensen thanked ICES for taking on the request, and Mark Dickey-Collas returned the thanks – noting that the presence of the subject on the MIAC agenda had provided the necessary impetus to 'address the gap' of knowledge around stickleback.

3.5 Western Baltic Spring Spawning Herring (BSAC)

Esben Sverdrup-Jensen again spoke on behalf of the BSAC. Western Baltic spring spawning herring (WBSSH) is a returning issue for the MIAC agenda. Zero catch advice has been issued for the stock – affecting fishermen in the Baltic, but also affecting related fisheries in the Skagerrak and Kattegat. He said that a rebuilding plan had been under discussion for a number of years. He noted that ICES had initiated a process on this – WKREBUILD – and requested a status update on the work, adding 'we would like guidelines on developing rebuilding plans for stocks where there is zero catch advice [and] we are keen to play a part in developing this work'.

Mark Dickey-Collas invited Colm Lordan to respond, an ACOM Vice-Chair mainly dealing with fisheries advice. Lordan confirmed that WBSSH is subject to zero catch advice, given in accordance with the current ICES advice framework. He explained that 2020 advice showed that, even with zero catches, spawning stock biomass for the stock is not expected to exceed Blim before 2023.

The WKREBUILD workshop had been held in March 2020, making a 'good start on ideas that could be integrated into advice in future'. The workshop had identified three crucial elements to any plan: i) the level of risk that is acceptable to fishery managers, ii) the targets – what is the plan rebuilding to? iii) the timeframe: what is acceptable for rebuilding different stocks? A number of timeframes had been considered, including the option of '2xT0', or two-times zero catch, and it was thought that further exploration of possible timeframes would be valuable. As a result, ToRs for WKREBUILD-2 are in draft. Lordan said this second workshop would test a number of rebuilding plans, including one for WBSSH, and seek to propose criteria for 'acceptable rebuilding plans'. This is provisionally planned for Autumn 2021.

Lordan explained that WKREBUILD had also proposed a workshop on reference points, noting this was of relevance for WBSSH and also high on the ACOM agenda. He listed a range of ICES activities in this area, including two previous workshops – WKRPCHANGE and WKGMMSE3 – and several ACOM sub-groups and a working group on productivity issues. He said that 'all these groups are reporting at the moment



and developing thinking around reference points'. A workshop on reference points would likely follow in 2022.

Esben Sverdrup-Jensen thanked Lordan for the information.

Michael Anderson (NSAC) queried the '2xT0' recovery time period referenced, asking if a recovery period of 'two generations' had also been considered. Lordan responded that previous recovery plans in the US and Canada had used the concept of 'generation time'. He explained that what were seen as more advanced and mature plans moved away from this to the '2xT0' concept. The main conclusion of the WKREBUILD group had been that these things need to be defined and agreed at the outset, then it is possible to monitor progress towards the rebuilding plan. Lordan concluded that both approaches – zero catch time and generation time – were still on the table for discussion.

3.6 NAFO / ICES joint Pandalus WG (LDAC)

Alex Rodriguez, LDAC Executive Secretary, addressed the group. He said that this agenda item was a follow-up on previous years' discussions, and he sought to underline the value of having ICES' assessment for the pandalus shrimp 'front-loaded and submitted in time for annual deliberations for NAFO'. The LDAC wants to compliment ICES for listening to this request in previous years – noting the joint WG was 'working well' and that the LDAC hoped to be able to move to a quota regime for the shrimp in the near future.

Rodriguez detailed that the shrimp in 3M is very important to LDAC members, and they would like to see the fishery re-open after a 13-year moratorium. He noted that this 13-year pause on fishing the stock means the situation and knowledge of the stock have changed: the shrimp have moved location, and the LDAC is concerned that there is a need for more scientific monitoring of the fishery to track these changes, including through catch data.

Rodriguez concluded with an additional plea to ICES to ensure advice on the stock is available in early September.

Colm Lordan responded. He noted that ICES has no formal role in providing advice on 3M shrimp, as this sits with NAFO. He commented that ICES and NAFO working together is 'working well' and that ICES would endeavour to make sure timings of meetings and assessments fit into the needs of both ICES and NAFO. He noted that there was 'a lot of work underway' on ecosystem modelling for the Flemish Cap and the inter-relationships between redfish, cod and shrimp. There has been 'strong progress' on this within the ICES community, including on multi-species MSE and ecosystem considerations. He added that 'there is a recommendation coming from the expert group for a benchmark in 2022' for a number of stocks, including NAFO 3M. He said it was possible that a 'number of pandalus benchmarks' would take place in 2022.



Alex Rodridguez thanked Lordan for the ‘valuable information’, and noted the potential benchmark in 2022 – saying that LDAC members would likely be interested in providing input into the model. He added that the LDAC are closely following the NAFO work on multi-species management, and that it was ‘challenging’ to shift from an ecosystem model to management advice – characterising the work as ‘interesting and groundbreaking’.

Kenn Skau Fischer drew a close to agenda item 3 – highlighting to those present that written explanations for others questions posed prior to the meeting were available.

4. General Items

4.1 Ecosystem considerations (BSAC)

Nils Höglund spoken on behalf of the BSAC, as Chair of the BSAC’s Ecosystem Working Group. He asked for information on ICES’ knowledge capabilities with regards to local sub-populations about pelagic stocks in the Baltic - in area 29 in the north, and area 30 in the south. In that area, he explained that there is a ‘fairly large archipelago’ where a fishery has been ‘signalling for a while’ that the herring they catch are smaller, and there are less of them. He asked whether ICES can identify and ‘special needs or care for such sub-populations’.

The second part of Höglund’s query focused on connections between open-sea fisheries and the wellbeing of coastal stocks – he noted that coastal stocks were of increasing importance to fishermen in the Baltic, due to the state of the cod stock, and asked what information was available on open sea and coastal interactions.

Mark Dickey-Collas thanked Höglund for his questions and noted that he would be addressing ecosystem services and impacts, and quality assurance related to this, during the afternoon’s MIACO session. He said that ICES has generally been an adviser in terms of international catches, and that many coastal issues are covered by national fisheries policies. He noted that the BSAC engages with HELCOM, and said that this may be more appropriate for these issues due to their access to coastal fisheries and ecology ‘information flow’ for the Baltic. He noted that HELCOM and ICES are ‘talking together but not working together’, although ICES has a ‘lots of scientists who are incredibly interested in the ecosystem approach’.

With regards to the herring sub-population, Dickey-Collas highlighted a 2018 [workshop](#) on mixing of herring – which examined three international herring stocks. This workshop also pointed to challenges with local stocks. He added that herring stocks all over the North-East Atlantic have local populations, explaining that trying to work out what is a local stock and what is a wider stock is a challenge.

Nils Höglund thanked Dickey-Collas for his response, and re-framed his query: underscoring that ‘the same herring’ fished in the international fishery is being fished by coastal vessels in internal waters when they come to spawn.

Mark Dickey-Collas responded that the question then pertained more to management of the fleet than overall stock status – as catch statistics would remain the same. He said it was a ‘complex question’ and that ICES has ‘expertise in mixed fisheries and selectivity that can address these issues’ but no ‘advice requester’ has asked ICES to do so.

Colm Lordan agreed that this is a common issue: smaller, local fisheries for stocks that are part of larger, international fisheries. He said that ‘tools and genetic techniques are developing rapidly’, but that ‘right now, data isn’t in place to fully inform management decisions’.

Ghislain Chouinard, ICES, drew a parallel with the Baltic salmon: where stocks from a variety of rivers are exploited in the open sea and the Baltic sea, presenting a real challenge for sustainable exploitation. He added that WGBAST is looking at this issue in terms of providing advice.

Nils Höglund asked whether if there were a request regarding the herring fishery discussed, whether ICES would be able to respond with a solution. Mark Dickey-Collas supplied a relevant [research paper](#) via the chat function, but cautioned that the ‘idea that we can break management down into smaller and smaller units is dangerous and misleading’

Kenn Skau Fischer noted that the paper may supply insights and food for thought for further discussions on the topic in future MIAC meetings.

Mark Dickey-Collas revisited his remarks on HELCOM and data flow: noting that his initial understanding of Nils Höglund’s question was different. He said that ‘data flow with HELCOM is less of an issue when it comes to herring’ and that there is a ‘large amount of genetic analysis’ underway at the moment, to deliver ICES with more information on populations in the Baltic.

5. Action Points

3.1 – Updates on the activities of the ICES Working Group on Offshore Wind Development and Fisheries (WGOWDF): A new WG, formed on the subject in 2020, has ToR covering three-year period and will prepare a report after three years. <https://www.ices.dk/community/groups/Pages/WGOWDF.aspx>. Chairs of the WG will be made aware of the AC interest and the observer forum will be used to inform of any workshops developed on the subject. ACs are encouraged to attend.

3.2 – Research developments on the interactions between fisheries and underwater noise & seismic activities: ICES is part of the European process centred around the Marine Strategy Framework Directive and OSPAR and HELCOM efforts, collating data on continuous and impulsive noise, and exploring impacts and mitigation measures. A number of WGs and deliverables are due to report in 2021 on this, including the setting of thresholds for both impulsive and continuous noise in Spring 2021. NSAC to circulate the link¹ to this work, provided by ICES, to all MIAC attendees.

3.3 – Update on the activities of the ICES Working Group on Bycatch of Protected Species (WGBYC): All work in this area to be carried out under the framework of the ICES Roadmap on Bycatch². The biggest issues in this area are monitoring data, fishing effort data, and abundance data of sensitive species. ACs could contribute on these main aspects by addressing this with national authorities and the Commission. ACs to consider actions to support quantitative data improvement and communication to relevant authorities on the subject of bycatch – including making it clear to national authorities that ‘more research and more experts in this area are needed’ to improve the evidence base.

3.4 – Report from BSAC meeting on Stickleback: There is a proposal to hold a Workshop to explore the ecological consequences and commercial opportunities offered by the outbreak of stickleback. This may take place in 2022 and will be open to AC participants. It will focus on the synthesis of available science. BSAC will follow progress in this regard and contribute as much as possible.

3.5 – Western Baltic Spring Spawning Herring: Based on 2020 advice, WBSSH not expected to rebuild above blim before 2023. Following a successful WKREBUILD workshop in 2020, ICES is developing ToRs for WKREBUILD2, which still requires approval. This meeting may take place in Autumn 2021. This work inter-links into a number of initiatives looking at reference points and productivity issues. A workshop on reference points is provisionally planned for 2022. BSAC to monitor developments in this regard and contribute as / when possible.

3.6 – Update on NAFO/ICES joint Pandalus WG: scientific advice on 3M Shrimp for 2021 and management implications for NAFO RA: ICES to continue to ensure timing of meetings and assessments fits into needs of both ICES and NAFO. ICES noted a strong progress on ecosystem modelling for the Flemish Cap and the inter-relationships between redfish, cod and shrimp, including on multi-species MSE. It was noted that a ‘number of pandalus benchmarks’ may take place in 2022. LDAC noted this and LDAC members would be interested in supplying data into the model(s) being developed.

¹ https://circabc.europa.eu/sd/a/f67c5de2-cd66-4165-bc60-212d99da77ed/Minutes_TG%20Noise_16th%20Annual%20Meeting%206th%20October%202020.pdf
10:34

² https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2020/2020/Roadmap_ICES_Bycatch_Advice.pdf10



4.1 – Ecosystem considerations: ICES doesn't have sufficient data flow, so BSAC should liaise with HELCOM on ecosystem considerations on coastal fisheries data. BSAC to consider the research shared by ICES within the meeting (<https://academic.oup.com/icesjms/article/74/6/1708/2629217?login=true>) as 'food for thought' for additional consideration of the issue in future MIAC discussions.

5. AOB action – Those contacted by ICES communication team with requests for quotes to reply as soon as possible, if they are comfortable sharing a comment for public use.

6. Next meeting action – NWWAC to chair the next MIAC meeting in 2022.

6. MIAC 2022

The next MIAC meeting will be held as an in-person session in Copenhagen. Mo Mathies volunteered that NWWAC will Chair this meeting.

7. Any Other Business

Mark Dickey-Collas highlighted a request from the ICES communications team for quotes from various members of MIAC and MIACO, noting that they would appreciate prompt replies.

8. Actions from the meeting

Action	Responsible party
<p>3.1 – Updates on the activities of the ICES Working Group on Offshore Wind Development and Fisheries (WGOWDF): A new WG, formed on the subject in 2020, has ToR covering three-year period and will prepare a report after three years. https://www.ices.dk/community/groups/Pages/WGOWDF.aspx. Chairs of the WG will be made aware of the AC interest and the observer forum will be used to inform of any workshops developed on the subject. ACs are encouraged to attend.</p>	ICES and ACs
<p>3.2 – Research developments on the interactions between fisheries and underwater noise & seismic activities: ICES is part of the European process centred around the Marine Strategy Framework Directive and OSPAR and HELCOM efforts, collating data on continuous and impulsive noise, and exploring impacts and mitigation measures. A number of WGs and deliverables are due to report in 2021 on this, including the setting of thresholds for both impulsive and continuous</p>	NSAC Secretariat

<p>noise in Spring 2021. NSAC to circulate the link³ to this work, provided by ICES, to all MIAC attendees.</p>	
<p>3.3 – Update on the activities of the ICES Working Group on Bycatch of Protected Species (WGBYC): All work in this area to be carried out under the framework of the ICES Roadmap on Bycatch⁴. The biggest issues in this area are monitoring data, fishing effort data, and abundance data of sensitive species. ACs could contribute on these main aspects by addressing this with national authorities and the Commission. ACs to consider actions to support quantitative data improvement and communication to relevant authorities on the subject of bycatch – including making it clear to national authorities that ‘more research and more experts in this area are needed’ to improve the evidence base.</p>	ACs
<p>3.4 – Report from BSAC meeting on Stickleback: There is a proposal to hold a Workshop to explore the ecological consequences and commercial opportunities offered by the outbreak of stickleback. This may take place in 2022 and will be open to AC participants. It will focus on the synthesis of available science. BSAC will follow progress in this regard and contribute as much as possible.</p>	BSAC Secretariat
<p>3.5 – Western Baltic Spring Spawning Herring: Based on 2020 advice, WBSSH not expected to rebuild above blim before 2023. Following a successful WKREBUILD workshop in 2020, ICES is developing ToRs for WKREBUILD2, which still requires approval. This meeting may take place in Autumn 2021. This work inter-links into a number of initiatives looking at reference points and productivity issues. A workshop on reference points is provisionally planned for 2022. BSAC to monitor developments in this regard and contribute as / when possible.</p>	ICES and BSAC
<p>3.6 – Update on NAFO/ICES joint Pandalus WG: scientific advice on 3M Shrimp for 2021 and management implications for NAFO RA: ICES to continue to ensure timing of meetings and assessments fits into needs of both ICES and NAFO. ICES noted a strong progress on ecosystem modelling for the Flemish Cap and the inter-relationships between redfish, cod and shrimp, including on multi-species MSE. It was noted that a ‘number of pandalus benchmarks’ may take place in 2022. LDAC noted this and LDAC members would be interested in supplying data into the model(s) being developed.</p>	ICES and LDAC
<p>4.1 – Ecosystem considerations: ICES doesn’t have sufficient data flow, so BSAC should liaise with HELCOM on ecosystem considerations on coastal fisheries data. BSAC to consider the research shared by ICES within the meeting (https://academic.oup.com/icesjms/article/74/6/1708/2629217?login=true) as ‘food for thought’ for additional consideration of the issue in future MIAC discussions.</p>	BSAC Secretariat

³ https://circabc.europa.eu/sd/a/f67c5de2-cd66-4165-bc60-212d99da77ed/Minutes_TG%20Noise_16th%20Annual%20Meeting%206th%20October%202020.pdf 10:34

⁴ https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2020/2020/Roadmap_ICES_Bycatch_Advice.pdf10

AOB action – Those contacted by ICES communication team with requests for quotes to reply as soon as possible, if they are comfortable sharing a comment for public use.	ACs
Next meeting action – NWWAC to chair the next MIAC meeting in 2022.	NWWAC Secretariat

9. Meeting participants

First Name	Surname	Organisation
Kenn	Fischer	Chair, NSAC
Tamara	Talevska	NSAC
Chloé	Pocheau	SWWAC
Fiona	Birch	PelAC
Stavroula	Kremmydiotou	NWWAC
Alexandre	Rodriguez	LDAC
Noor	Visser	NSAC
Kenn	Fischer	NSAC
Claus	Ubl	Dt. Fischerei-Verband
Mart	Undrest	BSAC
Helle	Jorgensen	ICES
Ewa	Milewska	BSAC
Matilde	Vallerani	NWWAC
Mo	Mathies	NWWAC
Emiel	Brouckaert	NWWAC
Stavroula	Kremmydiotou	NWWAC
Juan Manuel	Liria Franch	LDAC
Sean	O'Donoghue	PelAC
Christine	Absil	MAC
Emiel	Brouckaert	NWWAC
Esben	Sverdrup-Jensen	BSAC
Iñigo	Martinez	ICES
Henn	Ojaveer	ICES
Ruth	Fernandez	ICES
Katrina	Borrow	Mindfully Wired Communications
Sally	Clink	BSAC
Michael	Andersen	Danish Fishermen PO
David	Miller	ICES
Colm	Lordan	ICES
Nils	Höglund	CCB
Ghislain	Chouinard	ICES

Anne	Cooper	ICES
Gerard	van Balsfoort	PelAC
Gonçalo	Carvalho	PelAC
Colm	Lordan	ICES
Ivan	Lopez	LDAC
Béatrice	Gorez	LDAC
Gualberto	Rita	SWWAC
Jorge	Humberto	SWWAC
Peter	Breckling	NSAC
Mart	Undrest	BSAC
Christine	Absil	MAC
Ghislain	Chouinard	ICES
Henn	Ojaveer	ICES
Lotte	Worsoe Clausen	ICES
Helle	Gjeding Jørgensen	ICES
Iñigo	Martinez	ICES

10. Annex 1 – Links provided via the Chat function

- Marine Strategy Framework Directive Common Implementation Strategy, 16th Meeting of the Technical Group on Underwater Noise (TG NOISE): https://circabc.europa.eu/sd/a/f67c5de2-cd66-4165-bc60-212d99da77ed/Minutes_TG%20Noise_16th%20Annual%20Meeting%206th%20October%202020.pdf – provided by Mark Dickey-Collas
- HELCOM Expert Network on Underwater Noise: <https://helcom.fi/helcom-at-work/groups/pressure/en-noise/> – provided by Nils Höglund
- Roadmap for ICES bycatch advice on protected, endangered, and threatened species: https://www.ices.dk/sites/pub/Publication%20Reports/Advice/2020/2020/Roadmap_ICES_Bycatch_Advice.pdf – provided by Mark Dickey-Collas
- LDAC Advice for NAFO 42nd Annual Meeting: https://ldac.eu/images/EN_LDAC_Advice_on_NAFO_AM_2020_15September_2020.pdf – provided by Alexandre Rodriguez
- Report of the workshop on mixing of western and central Baltic herring stocks: http://www.ices.dk/sites/pub/Publication%20Reports/Expert%20Group%20Report/acom/2018/WKMixHer/WKMixHer_Report2018.pdf – provided by Mark Dickey-Collas



- Lessons learned from practical approaches to reconcile mismatches between biological population structure and stock units of marine fish:
<https://academic.oup.com/icesjms/article/74/6/1708/2629217?login=true> –
provided by Mark Dickey-Collas