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Minutes from the Meeting of the
ICES Science Committee (SCICOM)

23 and 28 September 2018



ICES
CIEM

International Council for
the Exploration of the Sea

Conseil International pour
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International Council for the Exploration of the Sea Conseil International pour l'Exploration de la Mer

H. C. Andersens Boulevard 44–46
DK-1553 Copenhagen V
Denmark
Telephone (+45) 33 38 67 00
Telefax (+45) 33 93 42 15
www.ices.dk
info@ices.dk

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1 Opening

The SCICOM Chair welcomed the participants and thanked the Secretariat and all contributors of meeting documents.

A special welcome was extended to

- Sarah Bailey, as incoming HAPISG Chair;
- Francis O'Beirn, as new member for Ireland;
- Floor ten Hoopen, representing Sweden at this meeting, with Anna Jöborn joining on Friday. Floor and Anna will lead the theme session group;
- Clara Ulrich who will stand in for Brian MacKenzie on Friday and in the theme session group;
- Olivier Thebaud as French alternate member joining in place of Pierre Petitgas, he will also represent Pierre on the theme session group;
- Tom Noji for US in place of Kevin Friedland;
- Ivars Putnis as alternate member for Latvia;
- Corinne Pomerleau, Canadian alternate, who would join the Sunday SCICOM meeting.

Apologies had been received from Mike Rust (ASG Chair), Laura Uusitalo (Finland), Kevin Friedland (USA) and Pierre Petitgas (France).

SCICOM was informed that the PICES Chairman, Chul Park, and the PICES Science Board Chairman, Hiroaki Saito, would join the SCICOM meeting on Friday.

A tour de table was conducted.

The ICES President welcomed SCICOM members to Hamburg, Germany. A reception would be held the same evening for all ICES committee members and ICES staff at the Hamburg and Germania Ruder Club.

This meeting would be Henn Ojaveer's last meeting as HAPISG Chair and Daniel Duplisea's last year as Chair of ICES Training Group. Also this would be Eskild Kirkegaard's last meeting in SCICOM as ACOM Chair and Mark Dickey-Collas' last SCICOM meeting as a member of the Secretariat. As from 1 October Mark will become the ACOM Chair.

2 Introduction of agenda and timetable

SCICOM Chair noted that the Sunday agenda would mostly focus on getting everything in place for ASC, setting up the awards and 2019 theme and network session selection processes and getting updates on work of Strategic Initiatives, Steering Groups and Operational Groups. The Friday SCICOM meeting will focus much more on our science planning and strategy, to help us finalise and publish the science plan and link it to the strategic plan. Also ICES is covering the topics of relevance to PICES on Friday and will hear a little more about their work.

SCICOM was informed that the ACOM meeting during the ASC would discuss the proposal to bring all EGs under the Steering Group structure (SG). Later the same day, SCICOM was informed that ACOM had agreed to the proposal and that the next step would be to develop a proposal for the (re)allocation of expert groups and naming for the SGNEW(S) for final approval via forum or the November 2018 ACOM meeting.

Action: Call for new chair and members of Training Group – SCICOM members were encouraged to consider the open position as Training Group Chair in ICES, replacing Daniel Duplisea, who would be stepping down by the end of the year –and also to consider becoming a member of the Training Group. The task of Training Group Chair is fully supported by the ICES Secretariat, so what is needed from a chair is intellectual leadership and a steer on the types of courses ICES should be offering.

3 Follow-up on decisions taken at the meetings of SCICOM (February–March 2018 meeting and on SCICOM Forum)

The SCICOM Chair, with reference to the summary of actions on the SCICOM Forum and Resolutions Forum in Doc 4 and 5, drew attention to actions taken to address decisions at the SCICOM March meeting and via the SCICOM Resolutions Forum. All had been addressed.

The main outstanding item is the science highlights template which is available in draft, but has not yet been set up online.

SCICOM Chair asked for feedback from SCICOM members on the ICES Resolutions Forum and SCICOM Forum. The products going up are generally all of a high standard, but do people have the time to review these posts? SCICOM members recalled that the resolutions meetings in the past were difficult. The current system allows more time to read the resolutions and from a Steering Group perspective it allows Chairs to be more operational. A compromise might be to establish up to four approval packages per year.

Action: SCICOM should continue to review the utility of the ICES Resolutions Forum and SCICOM Forum

4 General arrangements for Annual Science Conference 2018

4.1 Preview of Open Sessions at ASC 2018 and agreeing leads for feedback to SCICOM (SG/SI leads)

SCICOM was informed of the contents of the ASC 2018 Open Sessions. SCICOM would receive a brief summary of the outcome of these sessions during the Friday meeting.

- 'Do you know more about climate change issues than the wider European public?' (John Pinnegar and Myron Peck, SICCME Co-Chairs)
- 'Methodological advances to evaluate ecosystem impacts of human activities' (Silvana Birchenough, Chair of EPDSG and Henn Ojaveer, Chair of HAPISG)
- 'Data's Den: Show us your best tools to process and present data' (Jens Rasmussen, DIG Chair)
- 'How do we best incorporate social and economic analyses in management advice?' (Alan Haynie, Eva-Lotta Sundblad, Jörn Schmidt, SIHD Co-Chairs)
- 'Public-private partnerships for the exploration of the sea' (Olivier Thebaud)

4.2 ASC Award Selection Committee Process and Planning (Best Paper, Poster, Early Career Scientist Awards)

In March 2018 SCICOM appointed this year's Award Selection Group: Rafael González-Quirós (Chair), Jan Jaap Poos, Antonina dos Santos, Steven Degraer, Silvana

Birchenough, Antanas Kontautas, and the following new members volunteered to join the group: Corinne Pomerleau, Canada; Fátima Borges, Portugal; Mette Skern-Mauritzen, Norway; Myron Peck, Germany; Nils Olav Handegard, Norway; Olivier Thebaud, France; and Thomas Noji, USA.

The group was tasked to select the winners of the 2018 ASC Merit Awards, which will be presented at the Closing Ceremony. The Secretariat has prepared hard-copy scoring lists for the judges and conveners and a new set of criteria to support the process. The Award Selection Group would meet later the same day to discuss the process.

This year the programme of the last day has been changed to avoid the rush to prepare materials for awardees before the ASC closing ceremony. SCICOM agreed to schedule a plenary talk right before the awards ceremony. The Awards Committee scheduled two meetings during ASC, on Wednesday and Thursday.

Action: Ensure in future years that the theme session conveners get guidance as soon as their session is approved, and well in advance of ASC to indicate that they are expected to play a role in scoring.

4.3 Chaperoning keynote speakers

SCICOM representatives were appointed as hosts and contact persons to liaise with the keynote speakers and to introduce them prior to the presentations:

- Jan Jaap Poos was appointed as host for Ingrid van Putten;
- Peter Wright was appointed for Murray Roberts;
- The local speakers will not have a formal chaperone but Jörn Schmidt will introduce them to the plenary.

4.4 Preview of Theme Session proposals for ASC 2019 and call for suggestions for plenary speakers

In March 2018 SCICOM appointed the Theme and Network Session Group for Gothenburg 2019; 2019 ASC Group members present, or replaced were Jörn Schmidt, Peter Wright, Brian MacKenzie (replaced by Clara Ulrich), Silvana Birchenough, Hedinn Valdimarsson, Pierre Petitgas (replaced by Olivier Thebaud), Henn Ojaveer, Wojciech Wawrzynski, Mark Dickey-Collas, and Nathalie Steins (representing ACOM). The group was guided by Floor ten Hoopen, with support from SCICOM Chair and the Secretariat.

Floor ten Hoopen, Swedish representative for SCICOM, gave a presentation introducing the conference venue, and a number of side-events proposed by Sweden (SVEA (2019), Universities, Maritime Cluster, Pan-Baltic Scope, BONUS programme, UN Ocean Decade / IOC, and HELCOM). Floor also provided an overview of theme and network session proposals and proposed meetings of the Theme and Network Session Group.

SCICOM Members were reminded to complete the ranking tool by Sunday noon. The voting outcomes would be compiled by the Secretariat and handed to the group.

Based on the guidance document, the Theme and Network Session Group was asked to identify 18 theme sessions and 4 network sessions from the proposals, with a good balance of topics. SCICOM Chair emphasised the importance of including all subject areas, especially diadromous fish. The ranked list proposal would be tabled on Friday for SCICOM review and approval. SCICOM Chair thanked Floor for taking on the responsibility to lead this group at a short notice.

Actions:

Theme and Network Session Group should report back on any gaps in coverage of science topics that follow from the 2018 call for the 2019 ASC.

In future years the submission deadline for theme and network sessions should be amended to at least one month before ASC so SCICOM can review coverage of science topics and solicit additional sessions to fill major gaps.

Brian MacKenzie, Myron Peck, Hedinn Valdimarsson, and SCICOM Chair to prepare short paper for March SCICOM meeting describing process and to finalise after feedback.

5 Science Implementation

5.1 Draft Resolutions

The Secretariat (with reference to Doc 13) informed SCICOM members of the process and deadlines for finalization of the draft resolutions. The package of draft resolutions (available via SharePoint site) will be approved via WebEx meeting on 15 October with attendance of both SCICOM and ACOM members. SCICOM members would be notified a week before the WebEx meeting to review the draft resolutions and submit their comments to the Secretariat before the actual meeting.

5.2 Evaluation of multi-annual groups

SCICOM was informed of the multi-annual group evaluations, which had been reviewed by SG Chairs and would be dealt with alongside the draft resolutions.

SCICOM Chair asked for comments about the self-evaluation process. Do we feel this process is adequate and are there alternatives? Overall there was agreement that self-evaluations provide a good opportunity to reflect on the past three years and it is a good introduction for the planning of the next three-year term if this was supported by the group.

Actions:

WGCHAIRS meeting in January to highlight the self-evaluations and what is a good report and evaluation.

Better guidance on the expectations of the self-evaluation is required, even though the questions asked are fine. Consider providing boxes to make clear the expected level of content on the form. Chairs need to be informed that self-evaluations are required in the first year and we will also consider adding more details of the requirements to the Guidelines for ICES groups).

6 Reporting of Steering Groups

Full reports from the Steering Groups are available in the [SCICOM Progress Report 2018](#).

6.1 Integrated Ecosystem Assessments SG

Mette Skern-Mauritzen, Chair of IEASG, with reference to Doc 16 reported from IEASG.

ICES has been asked to be engaged in the 2nd UN World Ocean Assessment and two experts have been recruited from the IEASG, Manuel Hidalgo and Mette Skern-Mauritzen. HAPISG Chair, Henn Ojaveer, was selected to the UN WOA2 Group of Experts, and ICES HoSS, Wojciech Wawrzynski, was nominated to the UN WOA2 Pool of Experts.

Going forward there will be more work to do to develop the ecosystem overviews, such as including socio-economic indicators. Several IEA groups focus more and more on cumulative impacts, and with this development it becomes more important to have workshops cutting across Steering Groups.

The IEA EGs are an important part of providing a network and ideas for research proposals. SCICOM Chair was pleased to see these links to emerging funding calls and international processes.

The SCICOM Chair commented that he would like to get a better idea of how many participants we are attracting to IEA groups from outside the traditional ICES laboratories. It would be interesting to look into this systematically

Expert groups (in HAPISG) have stated they wish to provide input to fisheries and ecosystem overviews, but need guidance on how to contribute.

Olivier Thebaud asked whether there had been opportunities to connect the work of IEASG with IPBES review. IEASG Chair responded that there might be an option to build up connections.

Actions:

IEASG Chair and Olivier Thebaud (France, Alternate) to follow up on role of IEA and ecosystem overviews in global processes like IPBES.

IEASG Chair to provide guidance to HAPISG EG Chairs on how to contribute to fisheries and ecosystem overviews and to invite them to attend the planned workshop to define the third generation of ICES Ecosystem Overviews which will be announced in November 2018 (and take place in February or March 2019).

6.2 Human Activities, Pressures and Impacts SG

Henn Ojaveer, Chair of HAPISG, with reference to Doc 17, reported from HAPISG.

SCICOM was informed that a new group will be established: A Workshop on Spatial and Temporal Distribution of Pressures (WKSTDP) chaired by Vanessa Stelzenmüller, Germany, and Roland Cormier, Canada.

WKIHSD (workshop of historical data, relates to WGHIST) will be postponed to next year due to lack of nominations.

SCICOM was updated on recent developments after the Working Group on Risks of Maritime Activities in the Baltic Sea (WGMABS) was dissolved. HAPISG Chair has tried to identify members for a shipping group with broader scope and has partly succeeded. HAPISG is now getting a small group together with participation from Australia. A draft resolution will be tabled for the SCICOM March meeting. SCICOM Chair emphasised that, strategically, shipping is an important area to develop and suggested to include vessel tracking as part of the proposal given links to skills in WGSFD.

The **ICES-PICES-CIESM Viewpoint: *Evaluating and mitigating introduction of non-native species via vessel fouling*** led by Bella Galil (Israel) and Cynthia McKenzie (Canada) is currently with the authors for revision. It will hopefully re-submitted mid-October and will also be converted to a manuscript. When looking for new topics for viewpoints HAPISG Chair suggested to go one step down (from EG chairs to members), as the chairs are often too busy.

There seems to be wide interest and willingness to start coordinated work on cumulative impacts of human activities. A workshop has been suggested for next year and there is interest from IEASG.

SCICOM Chair thanked for the report and was pleased to see that the incoming HAPISG Chair was able to attend the ASC SCICOM meeting.

6.3 Ecosystem Processes and Dynamics SG

Silvana Birchenough, Chair of EPDSG, with reference to Doc 18, reported from EPDSG.

Two workshops were highlighted:

Working Group entitled “Towards an EUROpean OBServatory of the invasive calanoid copepod *Pseudodiaptomus marinUS*” (WGEUROBUS) has developed from a workshop into a full WG proposal.

SCICOM noted with disappointment that the Working Group on Small Pelagic Fishes, their Ecosystems and Climate Impact (WGSPEC) is disbanding, since this is a subject area that ICES needs to cover, and also important to ACOM.

Action: SCICOM should try to catalyse a new small pelagics group in cooperation with PICES.

6.4 Ecosystem Observation SG

Sven Kupschus, Chair of EOSG, with reference to Doc 19, reported from EOSG with focus on the most pressing issues:

EOSG organisation. EOSG is getting ever larger, formally there are now 46 EGs reporting to EOSG and more in the pipeline. Workshops have been a great success to get groups to work together but not without consequences. Communication within the SG (between individual groups) is improving, but at the more general SG level remains very difficult to manage.

Ecosystem and fisheries science. How do we develop new ecological data products and an integrated ecosystem observing system? And how do we strengthen the links to the assessment EGs?

Regionalised versus methodological. IEA and advisory groups are regionalised, whereas EOSG is methodologically focused. There are reasons for this but is it beneficial? There is scope for regionalising the EGs. Developing a new approach, there are lots of aspects to consider.

SCICOM Chair thanked the EOSG Chair for the Steering Group report and suggested that the structural challenges in EOSG should be addressed in the context of the forthcoming changes to the Steering Group structure, and that the SCICOM March meeting would be a good time for SCICOM to address this issue in more detail.

Action: SCICOM requested a paper from EOSG to be tabled at the SCICOM March meeting addressing the pressures on EOSG and proposing a set of options and their consequences. The paper should be seen in the context of the decision by ACOM to establish new Steering Groups.

6.5 Aquaculture SG

Wojciech Wawrzynski, Head of Science Support, with reference to Doc 20, reported from ASG on behalf of Mike Rust, Chair of ASG.

With two groups starting, one group renewing and one group forming, this year has been active for the ASG. In addition, there are three possible workshops; and sessions at ASC 2018, and proposed for ASC 2019, dealing with aquaculture.

There has been recent interest by PICES in developing an aquaculture focused study group. The ASG chair will continue dialogue with PICES.

Francis O'Beirn strongly endorsed this relatively new Steering Group in ICES and pointed out that many of these groups are not new, they have existed under different names and have now been re-established under ASG. However, the people who were involved in these old groups have not been approached, and these are people who would be fully committed to these groups.

Action: Francis O'Beirn and Tom Noji agreed to review the distribution lists for EGs under Aquaculture Steering group for other potential contributors to existing and emerging aquaculture expert groups and to share with Mike Rust.

At the national level SCICOM members were requested to identify experts who could contribute to these new groups.

SCICOM Chair thanked Mike Rust for all his good work building up this steering group.

6.6 EG relationships with Steering Groups

Postponed for agenda item under WGCHAIRS.

7 SCICOM Operational Groups and interactions between Operational Groups and ICES Secretariat

7.1 ICES Training Group

Chair of Training Group, Daniel Duplisea and Conference and Training Coordinator, Anna Davies, with reference to Doc 21, reported from Training Group.

Training Group would meet during the ASC and work on the action items from the last SCICOM meeting during this meeting.

ICES training and ICES projects. Through participation in H2020 projects, ICES training is contributing to training opportunities, in cooperation with other project contributing partners. A question was raised in relation to financial aspects of ICES being involved as a partner in EU projects. If the training does not work out as expected, how would this affect ICES financially? In response Head of Science Support explained that this is a very unlikely scenario. ICES is funded to run the courses, and thus it would mainly be the administrative time that would be lost in the unlikely event that a course

would be cancelled. If projects are supported by ICES it is because they add value in relation to the ICES Science Plan. The courses are open to ICES community.

Dissemination of ICES Training Programme. If these courses could engender a bigger profile for ICES, it might help drive interest in other ICES courses. This might be something for Training Group to consider.

Alan Haynie proposed having ultra-short, two-hour training courses during ASC as something new offered by Training Group.

New Chair of ICES Training Group and Training Group Membership

Daniel Duplisea's three-year term on the Training Group will finish at the end of 2018. Jan-Jaap Poos (Netherlands) was nominated to fill the role which was unanimously supported by the Training Group and approved by SCICOM. Eskild Kirkegaard will be replaced by Mark Dickey-Collas as new ACOM Chair and will take over Eskild's place on the Training Group to ensure the strong link with ACOM. Daniel Duplisea will remain as a regular member of the Training Group.

Action: Proposals for training course topics – also for project-funded courses – should be sent to the ICES Training Group (via [Anna Davies](#)).

7.2 ICES Science Impact and Publication Group

SCICOM Chair with reference to Doc 22, informed SCICOM of the recent developments of SIPG.

The SCICOM Chair is filling the Chair role for now, but would welcome a Chair. The membership of SIPG was presented

SIPG Membership

- The SIPG now has five external members and two members from the ICES Secretariat (ICES editor and Technical Editor). Tara Donaghy, Department of Fisheries and Oceans (DFO), Canada
- Jan Jaap Poos, Wageningen University (WUR), Netherlands
- Antonina dos Santos Instituto Português do Mar e da Atmosfera (PMA), Portugal
- Frederic Serchuk, former National Marine Fisheries Service (NMFS), US
- Morgane Le Gall, Bibliothèque La Pérouse (IFREMER), France
- Celine Byrne, ICES Editor
- Søren Lund, ICES Technical Editor

Antonina dos Santos informed SCICOM that work on the ICES leaflets for plankton was discontinued last year due to the unavailability of the former co-editor Claudia Castellani. Last March, Lidia Yebra was appointed by WGZE as co-editor to substitute Claudia Castellani. The work resumed soon after and there are now five leaflets in preparation under the new edition.

7.3 ICES Data and Information Group (DIG)

DIG Chair Jens Rasmussen and Neil Holdsworth, Head of Data and Information, reported with reference to Docs 23a and 23b.

In March 2018 a paper¹ was submitted to SCICOM identifying future challenges and opportunities, generally related to data but also encompassing science. The DIG plenary meeting in May 2018 further elaborated on this document and developed a SWOT analysis (Strengths, Weaknesses, Opportunities and Challenges. A SharePoint based registry has been established to monitor these and assign appropriate actions within the ICES community to respond to the specific challenges and opportunities. In the March 2019 meeting, the DIG chair will provide a more detailed overview.

Within DIG, data management and governance principles have been elaborated and are actively promoted within the ICES system. A clear outcome of this, are the Governance groups established under EOSG for the coordinated development of SmartDots² and DATRAS.

The WKINVITED Hackathon held back to back with the DIG meeting attracted 16 participants (remote and local) and 5 projects. DIG discussed if a follow up event should be proposed, but at the same time, an opportunity has arisen for ICES to partner in the 2019 EMODNET/Copernicus hackathon (OpenSeaLab 2019). This is a well-resourced event on a much larger scale, and it was recommended that ICES should try a broader event with a scope for wider integration of data to learn which format suits best. Neil Holdsworth has progressed discussions with EMODnet, and ICES will be an equal partner in the event in (most likely) May 2019, alongside EMODnet and Copernicus.

ICES Linked Data is becoming a reality with data connected to internally and externally referenced terms. At the outset, this may seem like a modest change, but it has the potential to enable ways of integrating and analysing data that would previously have required huge efforts. A DIG subgroup is developing 2-3 potential case studies that will help demonstrate the versatility and potential use of these capabilities.

One key aspect of enabling linked open data, apart from the work on vocabularies, is the ability to establish persistent identifiers or signposts for data – otherwise, you cannot link together the terms and the data. ICES has already worked towards a service architecture enabling digital object identifiers (DOI's) for outputs (reports, data, advice) and DIG has recommended that new or revised data submission formats incorporate the ability for national data submitters to include persistent identifiers in data delivered into ICES.

Data Guidelines process review. There is a recognised need within ICES expert groups and DIG to expand the scope and utility of these guidelines to capture a more dynamic process of guidance and documentation thereof. A sub- group of DIG members is developing a proposal, which will be ready for the SCICOM March meeting. While this work is ongoing, there will be no attempt to revise or update existing guidelines.

¹ Doc 08 Future data challenges and opportunities in ICES, SCICOM March 2018

² <http://ices.dk/marine-data/tools/Pages/smartdots.aspx>

Requests to SCICOM from DIG

- Promote good data management practices in the community
- Make and highlight linkages to your expert groups
- Recognise domain specific challenges that fit in with the future challenges and opportunities, and let us know

SCICOM Chair thanked DIG Chair for the very clear work that is coming out of DIG.

A discussion followed on how to promote good data practices in expert groups. It was concluded that WGCHAIRS was a forum where this could be encouraged.

Action: An agenda item will be added to the WGCHAIRS January agenda on the role of DIG in supporting expert groups with planning data work. This could include a worked example of good practice (e.g. WGSFD).

8 ICES initiatives and cooperation

Mark Dickey-Collas thanked SCICOM for their engagement during his time as the ICES Ecosystem Approach Coordinator and was looking forward to attending SCICOM meetings in his new role as ACOM Chair. Mark highlighted the key priorities/wish list for SCICOM to provide to ACOM in the coming years: science and expertise in mixed fisheries; work on management strategy evaluation; reconciling conservation and sustainability objectives in terms of resource management, and help on how to communicate advice.

SCICOM Chair thanked Mark Dickey-Collas for the great support he has given to SCICOM. A good background knowledge of the work of SCICOM is a very good starting point for even closer cooperation with ACOM in the future.

Action: ACOM priorities were identified as mixed fisheries, management strategy evaluation (MSE), reconciling fisheries and conservation objectives and communicating advice. SCICOM Chair to ensure they are covered in latest iteration of science plan.

8.1 Council Steering Group on the Marine Strategy Framework Directive (CSGMSFD)

Mark Dickey-Collas, Ecosystem Approach Coordinator, with reference to Doc 24, reported on CSGMSFD.

The Council Steering group on the Ecosystem Approach and the MSFD worked in 2017 and 2018 to develop a request on trade-off analysis from one member country. The request would explore the trade-off between the objectives for fishery production, biodiversity conservation and renewable energy production in the southern North Sea. Unfortunately the request failed to gain political support during the last stage of national preparation.

The steering group has also raised the issue that ICES is not investing enough in training and development of people for the ecosystem approach. The steering group is now in conversation with Bureau to initiate a process to highlight and address this expertise shortage. The Training Group will also be approached.

8.2 Cooperation with Regional Sea Conventions

Mark Dickey-Collas, Ecosystem Approach Coordinator, with reference to Doc 25, reported on the Regional Sea Conventions (RSCs).

This information document describes how ICES interacts with the four regional sea conventions with which ICES engages. SCICOM Chair thanked Mark for the document and was pleased to see that there is a lot of interaction on both the advisory and the science side of ICES. Moreover, the ecosystem overviews will feed into the next quality report to OSPAR.

8.3 Global initiative on improving and sharing stock assessment methods and development of fisheries science in ICES

Mark Dickey-Collas, Ecosystem Approach Coordinator, with reference to Doc 26, informed SCICOM that due to work load issues there has been no progress in preparation of GAME in the last 12 months. The proposed new steering group on fish stock assessment and fisheries management (name to be decided with approval of ACOM) will hopefully reinvigorate GAME further and also acquaint SCICOM with the science needs of this field.

8.4 Ecosystem and Fisheries Overviews

Mark Dickey-Collas, Ecosystem Approach Coordinator, with reference to Doc 27, reported on ecosystem and fisheries overviews.

Thanks were extended SCICOM and in particular to the two SICCOME Co-Chairs, Myron Peck and John Pinnegar, for their contribution to the ecosystem overviews which will lead to climate change issues being incorporated into all ecoregions in 2018. Thanks were also extended to IEASG and Mette Skern-Mauritzen for their contributions to the overviews and for leading the process to introduce the third generation of ecosystem overviews.

SCICOM Chair thanked for the good work and was pleased to see these products developing. He noted that it was also excellent to see that there is a push from EGs to have their products included.

9 Review of vision document for Strategic Initiative on the Human Dimension

SIHD Co-Chair Alan Haynie, with reference to Doc 28, reported from SIHD and explained that this document, "the roadmap" is aiming to identify what the science community needs and will be a living document.

He reported that the SIHD Forum has been set up and feedback is sought from SIHD members and other members of the ICES community on the roadmap.

Possible future groups

- **WK(G)INTER (Workshop - or Working Group - on Best Practices in Interdisciplinary Science)**; would help to coordinate the lessons learned from different regional IEA experiences, concepts/theory and practise to share advances in interdisciplinary research and integrated analyses.
- **WK(G)BESIO (Working Group on Balancing Economic, Social, and Institutional Objectives in Integrated Assessments)**: a potential group on

mapping out regional and national policy objectives and goals for further refinement in stakeholder consultation, subsequently serving as a basis for assessments in the IEA groups.

SCICOM chair thanked for the presentation and was pleased to see the momentum from the group. SCICOM discussion was centred around the following key strategic issues:

What is the best way for SIHD to communicate and operate in the ICES structure?

One suggestion was to have workshops on a defined topic with real, tangible outputs, where you bring in a group of social scientists to work together with natural scientists. This could be a series of focused workshops, also including the IEA people and groups. Workshops can be the start of a longer term working relationship.

DIG Chair commented that everything that ICES does rests on a classification of data, e.g. on physics, biology, or environmental parameters, but we currently don't have data material with socio-economic information woven in. Maybe some of the existing data needs to be tagged with socio-economic aspects.

How do we best have long-term effective communication with decision makers?

Credible science creates demand for it so building institutional credibility should come first, then trying to tailor messages to specific audiences.

SCICOM members were encouraged to attend the SIHD Open Session on 26 September from 16:00 to 17:00.

10 Communications with EG Chairs

10.1 Communications with EG Chairs

10.2 WGCHAIRS 2018

SCICOM Chair summarised the actions implemented since the last WGCHAIRS meeting:

- Accessible information on all EG: Excel sheet prepared and distributed with links providing full names and contact details for all EG. Seeking web options in longer-term.
- Keyword search of resolutions: To be implemented as part of the planned development of resolutions database
- Authorship of EG reports: New approach being finalised by Secretariat and SIPG after Bureau review
- Member induction: Presentation prepared to help Chairs induct new members
- Guidelines for ICES Groups: All feedback assimilated and new edition to be published shortly after Council 18-19 October
- Online introductory session for new EG Chairs: We will set up later this year, building on presentation for EG Chairs and new "Guidelines"

SCICOM was informed that the next WGCHAIRS meeting is scheduled for Monday 21 January 2019 14:00 – Friday 25 January 2019 13:00 and the format will primarily focus on ACOM linked EGs on Monday and Tuesday, SCICOM linked EG Thursday and Friday, and all Chairs on Wednesday. The draft agenda has been posted on the

WGCHAIRS forum, and will also be discussed during ASC Chairs lunch and introduction this week. The proposed topics include the guidelines for ICES groups, strategic plan and science plan, viewpoints, fisheries and ecosystem overviews, mentoring, authoring expert group reports, steering group structure

10.3 Update of Guidelines for ICES groups

SCICOM Chair informed the meeting that a new version of the Guidelines for ICES Groups would be published after Council meeting on 17–18 October. The main reason to hold the update until after Council is to provide guidance on how to handle conflicts of interest (CoI) and to include the new Code of Conduct.

Action: New agenda item to be added to WGCHAIRS draft agenda requesting feedback from new/incoming EG Chairs on whether they felt any information was missing from the guidelines they received.

10.4 Chairs forum

SCICOM was informed that WGCHAIRS requested a [WGCHAIRS SharePoint Forum](#) similar to the fora established for SCICOM, ACOM and ICES resolutions approval. This is now established and the forum can be used to advertise or request feedback from expert group chairs on issues of broad relevance.

11 Science highlights and science promotion

11.1 Update from Communications on efforts to increase the profile of ICES science and review of recent content

Terhi Minkkinen, Communications Officer, reported from Communications.

Selected science news stories from 2018 were presented. Communications would like to receive science highlights from the community. SCICOM was informed that a [draft template for submitting science highlights online](#) has been produced and will be implemented shortly. The importance of cc'ing/informing SG chairs when EG Chairs contact communications about science highlights was emphasised. It was suggested that via the online system it should be possible to inform the relevant recipients.

The effects of climate change on the world's oceans (ECCWO) 2018. SCICOM was informed that ICES Communications was involved in the ECCWO 2018 as part of the overall communications team consisting of ICES, NOAA, PICES, DFO, FAO & IOC-UNESCO. ICES was in charge of Twitter account, NOAA in charge of media, and PICES in charge of website & outreach material.

COMPASS activities (Opening science panel, Pitch pit and message box workshop) were very popular; The organizing committee had hired cartoonist, Bas Kohler, to illustrate and summarise the sessions and activities.

11.2 ICES bibliography: review of literature database and interface

SCICOM Chair on behalf of Celine Byrne, with reference to Doc 30, updated SCICOM on the developments with the ICES bibliography. ICES Editor, Celine Byrne, has carried forward the project to make the bibliography more complete. The aim is to get a catalogue of peer reviewed publications catalysed by work in the ICES Expert Groups, using ICES data or facilitated by the different ICES initiatives.

SCICOM Chair requested members to:

1. Review list of publications (Doc 30, Annex A) and to use knowledge of work conducted and published in the expert groups to identify any publications not yet included in the bibliography (for 2016, 2017 and 2018).
2. Comment on the appropriateness of the bibliographic tool prepared for the ICES website and recommend any improvements to increase use and accessibility. It is here: <http://ices.dk/publications/Pages/ICES-peer-review-database.aspx>
3. Note the request to expert groups to acknowledge ICES in published outputs that are catalysed by expert group activities and draw attention to the recommended acknowledgement in the “Guidelines for ICES groups”.

11.3 Authorship of ICES Expert Group reports

SCICOM Chair, on behalf of Celine Byrne, ICES Editor and with reference to Doc 31, presented an update on the authorship of ICES EG reports. This was driven by the WGCHAIRS meeting and a paper was presented to Bureau with six different options for the authorship of ICES EG reports. Chairs and Bureau supported the intermediate Option 4:

‘Chairs identified as editors and all attendees as authors on cover of report, but not leading on citation, all EG reports allocated to a new ICES series with ISSN’ (plus DOI as with all options) (Not for interim reports)

e.g. ICES (2018) Report of the working group on spatial fisheries data. ICES Scientific Reports 1: 1-250. DOI: 10.17895/ices.pub.3523, ISSN: 1368-2630

The next steps will involve implementation of a new report template to include editor and author names on the title page. Once this is received it will be tested and refined with users in the Secretariat, with the intention of adopting the template for 2019 reports.

Provision of an ISSN number for a new report series requires that a proposal is sent to ISSN. This proposal is currently being developed. The series may be titled ‘ICES Scientific Reports’. Every report will also have a DOI and information on how to cite the report will be published with the report.

A question was raised regarding the risks connected with subsequent publication of material out of an expert group report. When there is overlap some journals may not accept. In response, SCICOM Chair explained that a questionnaire was sent to all EG Chairs and there had only been one case where the chair had had an issue; other chairs had not seen this as an issue owing to rewriting and reformatting of material.

Action: Nils Olav Handegard (Norway) commented that the proposed citation proposal does not fit with how most journals would do this and was asked to contact Celine Byrne to review plans for citing of EG reports and share this review with SIPG.

DAY II: Friday, 28 September

12 Welcome and introduction of agenda and timetable (SCICOM Chair)

SCICOM Chair extended a warm welcome to the second meeting of SCICOM. A special welcome was extended to our PICES guests who will inform us about PICES science priorities. New participants were also welcomed to the meeting (Fritz W. Köster, ICES First Vice-President; Alain Vezina, Canadian delegate; Anna Jöborn, Swedish Agency for Marine and Water Management (representing the ASC 2019 in Sweden), John Pinnegar, SICCME Co-Chair; Clara Ulrich, replacing Brian MacKenzie; Eskild Kirkegaard, ACOM Chair; and Lotte Worsøe Clausen, Head of Advisory Support).

Anne Christine Brusendorff, General Secretary gave a warm welcome to all participants and was pleased to see a full meeting room with very good representation across the organisation.

A tour de table introduction of all participants was conducted.

Tribute to Georgs Kornilovs

SCICOM Chair paid tribute to Georgs Kornilovs. During the ASC we received the sad news that Georgs Kornilovs had passed away prior to the ASC. Georgs Kornilovs was the Latvian SCICOM member from 2009 to 2016. He took on many roles and was one of the leads of the Annual Science Conference held in Riga in 2016.

13 Self-introduction by PICES guests and brief update on PICES news

PICES Chairman, Chul Park, thanked ICES for the invitation to attend this meeting. PICES Science Board Chairman, Hiroaki Saito, also thanked ICES for the invitation and this opportunity to discuss ICES and PICES cooperation.

He introduced PICES, reporting that it is an intergovernmental science organisation established in 1992 with 6 member countries (Canada, Japan, People's Republic of China, Republic of Korea, the Russian Federation, and the United States of America).

The PICES vision statement was introduced: "To engage scientists in trans-disciplinary multi-national collaborations to further our collective understanding of the North Pacific's natural systems and enhance ecological and social resilience of our coasts and oceans." The organisation does not provide advice on stock assessments, and most discussions are on science, but PICES may carry out projects to deliver specific advice to governments or agencies on request.

PICES science is characterised by the collaboration between climate/physical oceanographers and biological/fishery scientists. PICES is also strong in basin scale science. A new committee on Human Dimensions has been established in PICES and there are plans to establish an aquaculture group.

The **FUTURE** science program was introduced: **F**orecasting and **U**nderstanding **T**rends, **U**ncertainty and **R**esponses of the **N**orth **P**acific **E**cosystem. The goals are:

- To understand how marine ecosystems in the North Pacific respond to climate change and human activities,

- To forecast ecosystem status based on current knowledge of how the natural world functions,
- To communicate new insights to PICES scientists, their governments, stakeholders, and the public.

At this ASC 2018 there are two theme sessions co-sponsored by PICES:

- Tipping points, complex nature, and implications for marine socio-ecological systems management
- Sustainability thresholds and ecosystem functioning: the selection, calculation, and use of reference points in fisheries management

And at the forthcoming PICES 2018 Annual Meeting ICES will co-sponsor the following sessions:

- Synthesizing projected climate change impacts in the North Pacific (ICES convenor: Myron Peck)
- Ocean acidification and deoxygenation and their impact on ocean ecosystems: Synthesis and next steps (ICES convenor: Silvana Birchenough)

There is also a good history of joint symposia between ICES and PICES: including the early career scientist conference. The two most recent co-sponsored symposia were mentioned:

- 4th ICES/PICES/IOC/FAO Symposium on Climate Change and Impacts on the World's Oceans (ECCWO, 4–8 June 2018, Washington D.C., USA)
- ICES/PICES Symposium on "Drivers of dynamics of small pelagic neritic fish resources" (6–11 March 2017, Victoria BC, Canada)

Last year in Busan, Korea, PICES and ICES co-organised the third PICES/ICES Early Career Scientist Conference "*Climate, oceans and society: Challenges and opportunities*" and this was also a very successful event. The next joint ECS conference will most likely take place in the ICES area.

ICES and PICES have a successful history of joint EGs with ICES and currently collaboration is planned on the following activities:

- Study Group on Marine Microplastic
- Co-sponsorship to ICES International Shellfish Symposium
- MSEAS-II
- Zooplankton Production Symposium
- Extension of WG-CAO (Central Arctic Ocean)
- Early Career Scientists Conference

Biodiversity of Areas Beyond National Jurisdiction (BBNJ) is a growing issue in the ocean sciences and there is scope for collaboration between ICES and PICES to establish regional scientific hubs and collaboration via joint ICES/PICES expert groups. These would be useful for the new BBNJ agreement under UNCLOS.

PICES has had only had two aquaculture WGs in its history (dissolved) and is planning establishment of a new Study Group on the Impacts of Mariculture to Coastal Ecosystems (SG-IMCE). Aquaculture is a wide disciplinary science, so PICES needs to increase its activities in this area and recruit more scientists.

SCICOM Chair thanked Hiroaki for an excellent high-level overview of PICES work and noted that the draft ICES science plan resonates beautifully with the PICES top priorities. There are many areas where we could strengthen our collaborations. In terms of SDG and BBNJ ICES can look more specifically at these areas under item 15. PICES has a strong focus on biological oceanography, and this has become a smaller part of the ICES programme. ICES would also be interested to strengthen our collaboration and science activity in this area. ICES is very keen to interact and collaborate with the PICES community on climate issues, changes in the Arctic, small pelagic fishes, the human dimension and aquaculture.

Comments:

Action: SICCOME Co-Chairs to take the lead to set up a joint PICES/ICES workshop and suggest actions to get biogeochemical projection modellers from Europe and the US collaborating.

Biodiversity of Areas Beyond National Jurisdiction (BBNJ) and Marine Areas Beyond National Jurisdiction (ABNJ)

Rafael González-Quirós commented that there is a need to coordinate better the efforts of ICES member state representatives within IOC. Canadian delegate, Alain Vezina, added to Rafa's comment that it would be important to synchronize with IOC in terms of what will happen in relation to BBNJ.

Head of Science Support Wojciech Wawrzynski commented that the BBNJ process is nationally driven with IOC support and that intergovernmental organisations like ICES and PICES have a clear regional scale advantage to contribute. Only few regional seas programmes have a mandate and some bodies have narrow sectoral activities, so there is a need for a coordinated scientific input to the UN process.

The challenge with ocean governance at the Marine Areas Beyond National Jurisdiction (ABNJ) level is that governance frameworks have been deployed on a sector by sector basis and there is a lot of overlap. An ecosystem based application in ABNJs is missing, and there lies the strength of intergovernmental, regional organisations.

Actions:

- Through our national contact point in IOC, Rafael González-Quirós, in cooperation with the ICES Secretariat, engage in discussions with IOC on the potential collaboration between ICES and PICES on ABNJ and BBNJ, including the suggestion to establish a joint study group on ABNJ and the health of ecosystems including biodiversity. After 2020 when ABNJ is in place as a legal instrument there might also be a role in helping the states to implement their rights and obligations under the new legal regime. As a first step, before entering discussions with IOC, Rafael González-Quirós was asked to prepare a document for SCICOM review via the Forum.
- A document/summary describing existing ICES work on ABNJ and BBNJ will be prepared to inform the work of the Study Group with help from Mark Tasker.

14 Strategic Initiatives: update on activity and review of plans

14.1 ICES/PICES Strategic Initiative on Climate Change and Marine Ecosystems (SICCME)

SICCME Co-Chair, Myron Peck, with reference to Doc 32, presented the SICCME report. SICCME activities are contributing to both the ICES and PICES Science Plans. This strategic initiative is co-chaired by Jackie King (Canada, PICES), Shin-ichi Ito (Japan, PICES), Myron Peck (DE, ICES) and John Pinnegar (UK, ICES). Some examples of recent activities were presented.

SICCME has been involved in the production of two chapters of FAO Fisheries and Aquaculture Technical Paper on “Climate change implications for fisheries and aquaculture. Overview of current knowledge and responses” published in June.

SICCME also has co- and lead-authors of the next climate assessment report: Two SICCME members were selected to participate: Anne Hollowed as a lead author on Chapter 3 Polar Regions (50 pages), and Manuel Barange as a Review Editor for Chapter 5 Changing ocean, marine ecosystems, and dependent communities (65 pages). For the IPCC 6th Assessment Report (2021) two SICCME co-chairs have been selected to participate. Shin-ichi Ito was selected for “oceans and coastal”, and John Pinnegar for “small islands”.

The “Fourth International Symposium on the Effects of climate change on the world’s oceans” was held in June 2018, in Washington D.C. (USA) with the support of IOC, PICES and ICES, and was a huge success with 669 registrations from 51 Countries. The conference had 14 plenary speakers, 350 oral presentations and 158 poster presentations. There are discussions for the fifth meeting which could potentially take place in Norway in 2021.

Another important event that took place back to back with ECCWO was ICES-PICES Workshop on Political, Economic, Social, Technological, Legal and Environmental scenarios used in climate projection modelling, which was co-organised with the Strategic Initiative on the Human Dimension (SIHD). The workshop compiled and compared future scenarios currently used by different research groups projecting the socio-ecological consequences of climate change on fisheries and aquaculture.

SICCME work is closely linked to two ICES WGs:

Working Group on Integrative Physical-biological and Ecosystem Modelling (WGIPEM). Capacity building for spatially-explicit biophysical modeling activities. Myron Peck provided a presented information on the coordination of regional modeling activities by SICCME.

Working Group on Seasonal-to-Decadal Prediction of Marine Ecosystems (WGS2D). The group is chaired by Mark Payne (DK). Capacity building for ocean predictions on timescales from seasons to decades in order to support marine resource management

SCICOM Chair thanked for the report and was pleased to see the scale of involvement of ICES and PICES scientists in this strategic initiative. He was also pleased to see that the ICES-PICES Workshop on Political, Economic, Social, Technological, Legal and Environmental scenarios used in climate projection modelling (WKPESTLE) was able to catalyse join up between natural and social scientists.

Action: Ellen Kenchington (Canada) to provide SICCME with names of Canadians who can contribute downscaled models to the work of SICCME, particularly in the Arctic.

14.2 Strategic Initiative on the Human Dimension (SIHD)

Alan Haynie, SIHD Co-Chair, with reference to Doc 33, presented the SIHD report. Some recent key events were presented:

- Two new working groups, Working Group on SOCIAL indicators (WGSOCIAL) and Working Group on Economics (WGECON) formed and met in June.
- The joint SIHD/SICCME workshop: ICES-PICES WKPESTLE met in June 2018.
- The SIHD Roadmap planning for the close future and longer term was presented on the first day of SCICOM. Feedback is sought via the new SIHD Forum.
- Workshop on Balancing Economic, Social, and Institutional Objectives in Integrated Assessments (WKBESIO) met in November 2017. The key message from this workshop was that there is a clear mandate to include social and economic objectives in management trade-offs. There are discussions on how to manage this in the longer term and whether to have regional workshops.

The Sunday discussion in SCICOM was centred on how to improve communication across the wide range of groups that have human dimension elements in ICES and to consider how the Strategic Initiative should evolve over time.

The SIHD open session held during ASC was well attended. One issue raised was the need for a framework to support social scientists that are not part of the national marine science organisations.

SCICOM Chair thanked SIHD for the presentation and was delighted to see the initiative broadening and attracting a wider range of expertise via WGSOCIAL and WGECON.

Action: SCICOM Chair encouraged SIHD Chairs to seek guidance/insight from Myron Peck on how to use workshops with focused goals to produce high-impact, tangible outputs. Clara Ulrich as STECF representative would be invited to give her view on what tractable topics might be addressed.

15 Science Cooperation (A)

15.1 PICES cooperation and benefits to member countries and the network

Anne Christine Brusendorff, General Secretary, with reference to Doc 34 and the presentation given by Hiroaki Saito, PICES Science Board Chairman, gave a general overview of the joint ICES/PICES activities with collaboration in a wide array of joint workshops, symposia and strategic initiatives.

She commented that it is thanks to this sustained cooperation our two organisations have built a trustful relationship, and this means that both organisations can draw on a wider pool of scientists in our joint activities. This is also important when discussing

politically sensitive issues, for instance in the Arctic, where ICES has a joint working group dealing with the central Arctic Ocean. Another area of joint interest is the Biodiversity Beyond National Jurisdiction (BBNJ), and ICES has now taken an action from this meeting to enter into discussions with IOC and to establish a joint working group together with PICES dealing with some specific topics that ICES can take back to the negotiation rounds in the UN for a possible legal regime for BBNJ.

Hiroaki Saito, PICES Science Board Chairman, responded that PICES does not have an official strategy for BBNJ at this stage, but is hoping to have a joint activity with ICES to contribute to this very important instrument. Sustainable Development Goals and related activities

Wojciech Wawrzynski, Head of Science Support, with reference to Doc 35, presented a brief overview of activities related to cooperation with PICES.

In December 2017 the UN General Assembly the UN Decade of Ocean Science (The IOC-UNESCO '**International Decade of Ocean Science for Sustainable Development, towards the Ocean We Need for the Future We Want**', 2021-2030). ICES Secretariat is in contact with IOC-UNESCO with regards to compilation of the work plan for the 'Decade'.

World Ocean Assessment 2 (*Regular Process for Global Reporting and Assessment of the State of the Marine Environment Including Socioeconomic Aspects*). ICES was represented by Manuel Hidalgo, Spanish Institute of Oceanography, at the 2nd round of regional workshops in summer 2018.

The Atlantic Ocean Research Alliance in May 2018 celebrated the 5th anniversary of the Galway Statement. In 2017 the AORA was officially extended to the South Atlantic: the *Belem All-Atlantic research and innovation cooperation statement* was signed by the European Union, Brazil and South Africa, and the **All-Atlantic Research Alliance** was established. ICES is open to discussions with the All-Atlantic and thereby ICES will position itself in the spin-off endeavours, i.e. potential participation in related EU research projects in EU H2020, FP9 and beyond. During ASC the Head of Science Support was informed that by the AORA coordination support action director that there is funding available to organise aquaculture-related training courses. Head of Science Support will convey the good news to Aquaculture Steering Group Chair, Mike Rust.

Action:

- Proposals for training course topics – also for project-funded courses – should be sent to the ICES Training Group (via [Anna Davies](#)).
- Head of Science Support will discuss aquaculture training opportunities with the ASG.

Large Marine Ecosystem programme. ICES cooperates with NOAA, IMR and several UN Agencies on global implementation of ecosystem approach management of human maritime activities. Online toolkits for ocean governance, MSP, assessment and management are being finalized under the LME-LEARN project and ICES has contributed to organization of ocean governance training courses (online course NOAA/UNDP-CAPNET; face-to-face ICES/NOAA courses for developing countries).

SCICOM was informed that the ICES/UNECE 2018 symposium / workshop on 'Management tools and standards in support of SDG14', will be held in Iceland from 9–11 October 2018.

15.2 Arctic research

Anne Christine Brusendorff, General Secretary, with reference to Doc 36, informed SCICOM of recent and forthcoming activities related to Arctic Research.

The Fifth Meeting of Scientific Experts on Fish Stocks in the Central Arctic Ocean (FiSCAO) was held in 24-26 October 2017. A Council proposal on how ICES could contribute to the work of FiSCAO was brought forward at this meeting by ACOM Chair, Eskild Kirkegaard. ICES has offered to support aspects related to monitoring and observation and also support work in relation to management and collection of data. Importantly Council stated that ICES will cooperate with PICES. At the 5th FiSCAO meeting it was agreed that USA, ICES and PICES in cooperation would undertake a data management/sharing pilot study.

The 2nd Arctic Science Ministerial meeting is scheduled to take place in Berlin, 25-26 October 2018. The Ministerial meeting will be preceded by an [Arctic Science Forum](#), on 25 October, and ICES has received an invitation to participate in the science event on the 25 October, and to report on the organization as well as our contribution to the three overall themes. Anne Christine Brusendorff, ICES General Secretary will participate in the event.

ICES has a lot to offer-in relation to the Arctic, via our working groups:

- Working Group on the Integrated Assessments of the Barents Sea (WGIBAR);
- Working Group on the Integrated Assessments of the Norwegian Sea (WGINOR);
- ICES/PICES/PAME Working Group on Integrated Ecosystem Assessment (IEA) for the Central Arctic Ocean (WGICA);
- Arctic Fisheries Working Group (AFWG);
- [ICES Report on Ocean Climate](#);

ICES is now starting to receive requests from managers, which are linked to Arctic and sub-Arctic areas. ICES, together with our strategic partners, will continue to work towards providing the necessary scientific information for managers to take their decisions on a sustainable management of the Arctic.

16 ICES Strategic Plan and Science Plan

16.1 ICES Strategic Plan

Anne Christine Brusendorff, General Secretary, with reference to Doc 37, presented the Draft ICES Strategic Plan, which is under development and will be tabled for adoption at the Council October meeting. The vision and mission are almost unchanged compared to our current plan. We still want to be a world leading marine science organisation providing the impartial evidence which is necessary for the sustainable use of our oceans. Also, as our mission we want to advance and share our understanding of marine ecosystems to be able to provide advice so that managers can meet conservation and sustainability goals. The General Secretary highlighted the activities under each component (Science, Data, Evidence-based Advice, People, Secretariat).

With this strategic plan ICES will renew our commitment to increase our understanding of marine ecosystems, and we want to stress that one of the central elements of this strategic plan is the role of the expert network in the organization and the responsibility of the higher-level commitment of the member countries. We will achieve this through our work with joint sub-objectives and we have made a joint working plan,

working across the organisation with joint reporting to Bureau and Council. There will be an annual evaluation with the possibility for updates to ensure we are up to date. SCICOM will be looking into the implementation of the science plan and the resource requirements and these need to be reflected in the joint work plan. Bureau has reflected on the comments received in response to the draft Strategic Plan and has taken on-board many of these. The edited version will be sent to Council and will be discussed at the Council October meeting and hopefully will set the frame for our work in the next decade in ICES.

16.2 ICES Science Plan

SCICOM Chair, with reference to Doc 38, gave an update on the Science Plan. The document has been given a title: “Marine ecosystem and sustainability science for the 2020s and beyond”. The audience for the science plan is the marine science community in ICES countries and also more broadly around the globe. In terms of timing, the plan is to present a revised version of the science plan to Bureau/Council in October and to finalise the science plan and the implementation plan via the SCICOM Forum. The final Science plan will be implemented from 1 January 2019. The SCICOM March meeting 2019 will be looking at the detailed implementation planning, including the technical details of how we distribute actions.

For now, the flagship activities are not mentioned in the science plan. There may be resource implications connected to these and we need to have a debate across ICES on action areas, flagships and emergence of missions. It is desirable to have some flagship activities or action areas in our plan, but a high risk to flag and promote these without reassurance from member countries on resourcing.

Comments/discussion

Objective/purpose: SCICOM Chair asked if SCICOM members were content with the way the science plan expresses the *objective* and *purpose*, or whether there would be a preference for only stating the *objective* of our science priorities.

Action: The split of the science priority bylines into separate goal and purpose was not favoured. SCICOM agreed to redraft the bylines as single sentences. Approval of the revised text sentences would be sought via the SCICOM Forum by 5 October.

SCICOM members were asked to review the plan and provide comments to improve the clarity of presentation, links to Strategic Plan and support for ICES vision and mission, appropriateness and completeness of proposed actions, and any other aspects of implementation.

Linkages between Science plan and Strategic Plan. SCICOM Chair clarified that the Science Plan is a stand-alone document explaining what is done in science. The seven science priority areas will be referred to in the strategic plan, and this is the only cross linkage between the two plans. All agreed actions in the Science implementation plan will be included in the joint work plan of the secretariat. This will ensure that any resource implications will be considered by the Secretariat.

Cross-departmental activities/linkages. The science plan explains that we are doing science to support the advice and ACOM has been asked for comments on the Science Plan to ensure the advisory needs are covered. The Advisory Plan will be one of the main topics for discussion in ACOM in November. ICES is working to ensure there is integration, not only between science and advice, but also with data. We need to await

the outcome of the ACOM November meeting to understand plans for the Advisory Plan.

Strategic Initiatives. Jan Jaap Poos (the Netherlands) commented that he would like a description of the role and stated goal of the strategic initiatives to be added to the science plan, as well as a description of how the Council strategic initiatives relate to the SCICOM strategic initiatives.

Action: Increase clarity of description of role of strategic initiatives in the Science Implementation Plan. The text should be phrased to allow flexibility to create and dissolve Strategic Initiatives.

IEAs. IEASG Chair, Mette Skern-Mauritzen, flagged that the IEAs could be better reflected in the text. They are only mentioned three times and they are relevant for all the goals. We could include IEAs under Goal 1. Understanding ecosystems, and perhaps add a specific task under Goal 6 Conservation and management science.

Action: Ensure an explicit mention of IEA is included in the Science Plan.

Flagships. Concern was raised that although flagships are an excellent idea, and could draw in EGs, we risk this will be too prescriptive/restrictive. We need to allow for flexibility in the language. SCICOM Chair commented that a big coordinated ambitious activity would still be good for ICES and would make this plan more interesting and inspiring, i.e. the idea of food in 2050 previously presented by Mike Rust. Another flagship could be a coordinated activity across ICES member countries on research ships (e.g. a large habitat mapping exercise). These require significant resources and thus we can't include until we have reassurance that we can deliver.

Oceanography is mentioned in connection with shelf seas, and we would like to see it mentioned in its own right. We previously agreed to make the focus coastal, but there has been an increasing focus on offshore oceanography as well. SCICOM agreed to broaden the wording.

Action: Ensure that the description of oceanography in the science plan does not exclude offshore oceanography.

17 Operational evaluation of ASC 2018

Anna Davies, Conference and Training Coordinator, summarised the statistics and main events of the ASC 2018. The full report on the ASC 2018 is included in the [SCICOM Progress Report 2018](#).

SCICOM reflected on what worked well and did not work so well at this ASC. The overall feeling is that it was an excellent conference, and it was great to see so many Early Career Scientists.

Issues to consider:

Lunch breaks. Some SCICOM members felt the lunch breaks were too short.

Time allocated for theme sessions was too short. Conveners had to discard 50% of the presentations. Many presenters were not aware of the traffic light rules and thus there is a need to explain better how the sessions are organised. Maybe SCICOM needs to be more strategic when organising the programme.

Presentations of posters scheduled after the poster session night did not work so well as some posters had been removed. Thus we need to consider a different approach.

Conference app. It was difficult to find your way in the program, it difficult to find the speakers. For next year Jan Jaap Poos offered to set up a web app for free.

Award selection process (posters and presentations). We tried something new this year for the first time and some things worked well, some didn't. Next year we will build on the experience from this year and make preparations for a better, more streamlined process.

Disability access. For future conferences we need to raise the issue of disability.

18 Planning for ASC 2019

18.1 Timetable (Anna Jöborn, Swedish host representative, and Anna Davies, Conference and Training Coordinator)

Not addressed.

18.2 Selection of theme and network sessions

Anna Jöborn, Swedish host representative, presented the ASC Session Group's proposal for the ASC 2019 Session package. Basing their work on the votes and rankings provided by SCICOM members, the ASC group had reviewed the 33 ASC Session proposals and proposed a package of 17 Theme Sessions and 4 Network Sessions. In some cases the proposed sessions were based on mergers of the original submissions and convenors.

The sessions proposed by the bottom-up process did not provide a complete coverage of all topics in relation to the breadth of science interests in the ICES community, and SCICOM discussed the best way forward to address gaps identified in the theme session packages. The following actions were agreed by SCICOM.

Action/decisions:

Decision: The list of theme sessions (17) and network sessions 4 proposed by the subgroup for 2019 was approved by SCICOM.

Action: Convenors should be contacted (both for individual sessions and mergers) to broaden scope of all sessions before publication of call.

Action: Theme Session group to continue by correspondence and identify gaps in the scientific programme in relation to the science plan. Swedish hosts to propose session(s) on invited topics to fill these gaps, and a short call on these will follow.

The longer term strategy (leading up to the next call for proposals) will include the following actions:

Action: Provide guidance on proposing theme and network sessions to emphasise importance of broad appeal across ICES countries, to reflect priorities of the ICES Science Plan. This will also be consulted at WGCHAIRS.

Action: Update of ASC Session Guidance Document will be provided.

Action: Analysis of Early Career Scientists attendance in relation to topics.

Action: March SCICOM to consider ways to encourage session proposals that reflect scope of ICES science priorities.

19 Science Cooperation (B)

19.1 Update on external projects and their benefits to member countries and the network

The Head of Science Support, Wojciech Wawrzynski, gave an update on externally funded projects (Doc 40), including projects in the pipeline and upcoming calls which will close in February. The table overview of projects had been rearranged following a requests from Bureau. Two projects have concluded in 2018, Columbus and Bluebridge. There are 11 ongoing projects. Some are focused on data services, some are supporting ecosystem based approaches, studies on ocean governance, climate change, stock assessment methods, and aquaculture.

19.2 ICES contributions to planning an Atlantic Ocean Observing System (AOOS)

Rafael González-Quirós, Spanish SCICOM member, with reference to Doc 41, reported from a workshop held in Brussels 4–5 June on 'A European Vision for an Atlantic Ocean Observing System'. The meeting revised the draft content of the 'Blueprint for an Integrated Atlantic Ocean Observing System' and discussed the European vision towards the AOOS initiative. AOOS is meant to complement the European Ocean Observing System (EOOS). Two document of interest for the ICES community were highlighted:

- [The GOOS Biology and Ecosystems EOVS Paper, Deep Ocean Observing Strategy](#)
- [Strengthening Europe's Capability in Biological Ocean Observations](#) (published recently by the Marine Board)

The following comments were highlighted by the ICES representative at the meeting:

- the lack of reference to ICES in the document,
- ICES has coordinated stock assessments for several decades and has moved from single stock perspective to ecosystem approach, and is in itself an observing network,
- Observation is one of the seven pillars of our draft science plan,
- scientific collaboration initiatives should also be considered,
- the document should also refer to the MSFD.

SCICOM Chair thanked Rafael González-Quirós, for engaging in this process on behalf of ICES.

Comments

It is disappointing to hear that AOOS do not see ICES as a data contributor; but as data receiver or a stakeholder. It has to be reiterated that this is not the case.

The physical oceanography community is changing; they are becoming more open to ship-based observations. They are aware that they have to relax their demand for real-time programmes.

Jörn Schmidt mentioned that the Tropical Atlantic Observing System is currently under review, linking to the southern part of the Atlantic. With respect to integration, ICES could contribute via Oceanobs'19 next year.

DIG Chair said we have to recognise it is a two-way learning experience. The strength of ICES lies in the ability to merge and build architecture around highly diverse systems.

Action: Rafael González-Quirós to share information on planning of the Atlantic Ocean Observing System with DIG and Data Centre.

19.3 ICES–IOC interaction

Rafael González-Quirós, Spanish SCICOM member, with reference to Doc 42, informed SCICOM about recent IOC initiatives of interest to ICES. SCICOM members were requested to identify links between IOC initiatives and activities in our expert group network and to contact the IOC national contact points and send them any comments regarding IOC initiatives. Two initiatives with strong relevance for ICES were mentioned:

1) The [Global Ocean Observing System 2030 Strategy](#). The document is very general, with the vision and strategy objectives outlined in 3 pages and further elaborated in an annex (another 12 pages). Any comments on the document should be sent to the IOC National Focal Points.

2) United Nations Decade of Ocean Science for Sustainable Development (2021–2030). By Resolution A/RES/72/73, the UN General Assembly proclaimed the UN Decade of Ocean Science for Sustainable Development (2021–2030) in December 2017 and mandated the IOC to prepare an Implementation Plan in consultation with Member States, UN partners and other relevant stakeholders, including ICES. There is already a [Roadmap](#) available that is understood as an evolving document. The Decade is seen by IOC as an opportunity to enhance ocean science, ocean observation, capacity-building, etc., nevertheless, the challenge is to fill the Decade with content.

Action: SCICOM members were requested to feed insight into the development of the ICES-GOOS document through national contact points.

19.4 ICES co-sponsored symposia 2018

Wojciech Wawrzynski, Head of Science Support, with reference to Doc 43, presented the revolving list of ICES cosponsored symposia.

The symposia in the pipeline (for which approval has not yet been requested) include:

- 5th Symposium on Climate Change and Impacts on the World’s Oceans (2021)
- 7th Zooplankton Symposium (2021)
- 4th PICES/ICES Early Career Scientist Conference (2022) – on the outlook for an ICES host

The World Fisheries Conference was discussed. A draft resolution will be posted on the resolutions forum later this year for SCICOM review and approval.

Actions:

SCICOM members were requested to consider host countries for the next Early Career Scientist Conference to be held in 2022. Traditionally the host country has covered the expenses related to the venue and food for ECS participants, and all other expenses have been covered by ICES and PICES.

SCICOM members will be requested to contribute suggestions for theme session topics and conveners for the World Fisheries Conference if a resolution is submitted and approved.

Discussion on IJMS symposium volumes

All recent resolutions approved include a request for a special volume. Concern was raised that the number of submissions for IJMS symposium volumes are dropping.

It was clarified that SCICOM can only approve cosponsoring, but the question of ICES IJMS needs to go directly to the journal for approval. The request for ICES IJMS is between the conveners and IJMS Editor in Chief.

20 Draft resolutions for symposia and publications

20.1 Draft resolutions for publications

SCICOM Chair presented the CRR draft resolution for a Handbook on maturity staging of fish in the ICES area. SCICOM noted that there are currently pending reports from the same author and it was therefore suggested to make the approval conditional on delivery of the other pending reports (from WKMATHis and WKMSH2) from the same author.

Decision: SCICOM gave conditional approval of the CRR for a Handbook on maturity staging of fish in the ICES area, requesting delivery of pending reports from the same author before accepting this CRR for publication.

20.2 Draft resolutions for symposia

Head of Science Support, Wojciech Wawrzynski, presented the draft resolution for “An international symposium on the threat of plastic to Arctic and Sub-Arctic marine ecosystems” to be held in Reykjavik, Iceland, in April 2020. The symposium is expected to attract up to 400 participants and will be held in connection with the period of the Icelandic Chairmanship of the Arctic Council and the Nordic Council of Ministers.

Decision: SCICOM approved cosponsorship including 10,000 EUR for Early Career Scientists.

21 Science Plan implementation

SCICOM Chair, with reference to Doc 47, gave a brief introduction to the Science Plan implementation and suggested postponing further discussion until SCICOM March meeting or via SCICOM Forum.

Science Implementation actions

1. Conduct science addressing all priorities identified in the science plan to advance understanding of marine ecosystems, improve assessments of the effects of human activities, improve observations of the seas and oceans and provide evidence and solutions to support conservation and management
2. Catalyse, shape, facilitate and promote marine science which has a high and beneficial impact on society

3. Exchange knowledge and expertise with regional and global partners through collaborative projects, networks and training; to shape and advance marine science and advice
4. Engage with partners to meet joint scientific goals
5. Provide an efficient, collaborative, respectful and rewarding working environment for all scientists, as well as the resources and infra-structure needed by groups to develop and share knowledge and expertise
6. Ensure expert groups have flexibility to innovate and explore new topics
7. Encourage and support cross-cutting (across expert groups) science activity
8. Encourage engagement of a new and emerging generation of scientists with expert groups
9. Provide more and better networking opportunities
10. Provide more and better training opportunities
11. Increase the visibility of, and access to, our science, data and advice and recognise, promote and use the science outputs from expert groups
12. Guide overall implementation, monitoring and reporting of the science plan

Action: SCICOM members were requested to review the actions offline and provide feedback on their feasibility. **Deadline:** 12 October.

21.1 Promotional activities and material

21.2 Role of flagship activities

21.3 Mapping and monitoring implementation, including benefits and methods of evaluation and self-evaluation of Expert Groups

22 Science review of ASC 2018 and recommendations for future ASC

General discussion about the length of sessions

Several ASC participants and conveners had raised the issue of theme sessions being too short. The alternative under the four-day format would be to reduce the number of theme sessions. SCICOM agreed to await the feedback from the ASC survey and address the issue in more detail at the SCICOM March meeting.

Only one person had submitted an e-poster. SCICOM also agreed to reconsider the issue of e-posters at the SCICOM March meeting.

Action: Include item in SCICOM March meeting on formats for the ASC, informed by responses to ASC survey.

22.1 Brief feedback to SCICOM on quality, highlights and implications of activities and discussions at ASC 2018 Open Sessions

The full reports from the Open Sessions are included in the [SCICOM Progress Report 2018](#). SCICOM Chair thanked the Open Session conveners for their reports. All sessions seemed to have a great turnout and participants also seemed to have had fun mixed with a decent amount of good science.

22.2 Feedback from Awards Selection group

The Chair of Award Selection Group, Rafael González-Quirós, reported that the process of selecting the winners of ASC merit awards had been less stressful this year than the previous year. The fact that we rescheduled the last keynote to the end of the day, allowed more time for evaluation.

Comments

A suggestion was made to limit merit awards to early career scientists; this would simplify the process considerably. SCICOM deferred the discussion to the March SCICOM meeting.

This year conveners were asked to complete scoring lists, but many felt it was difficult to run their theme sessions and do the scoring at the same time. Also, many conveners had a conflict of interest. In future years Award Selection Group would not rely on conveners to do the scoring. It would be better for members of the Award Selection Group to approach conveners after the theme session to discuss potential candidates.

It would be useful for the award candidates to know the criteria they are judged against and it would also be helpful if the secretariat could mark early career scientists in the overviews of authors.

Posters should be separated from theme sessions; the poster scoring should be made using a separate sheet.

Poster presenters should be informed that if they would like their posters to be considered for a poster award, they should email the Secretariat a pdf of their poster. This way the Award Selection Group would have easy access to all the posters.

SCICOM Chair thanked Rafael González-Quirós for doing a great job at chairing the group.

Actions:

Guidance document for Award Selection Group to be updated by 5 October, based on experience/ understanding gained at ASC 2018.

Session chairs will not be asked to act as formal judges in future, but Award Selection Group are encouraged to consult them on their views about ASC talks that the ASG see as potential winners.

Add to guidance document and call a request to submit a poster pdf if you want to be considered as an entrant for the best poster or best early career poster award.

At March meeting determine whether awards should be limited to ECS.

22.3 Outcomes and actions from ACOM/SCICOM joint leadership meeting

ACOM and SCICOM Chairs gave a brief summary of the joint leadership meeting held during ASC. The minutes will be circulated to SCICOM.

22.4 Feedback from Awards Committee

SCICOM was informed that the Awards Committee will seek feedback from the community via a survey regarding the ICES Outstanding Achievement Award and Prix d'Excellence.

23 SCICOM Annual Report to Council

SCICOM Chair outlined the structure of the annual progress report to Council and reminded the contributors of the 5 October deadline.

24 Closing remarks

SCICOM Chair thanked SCICOM for a good meeting. Thanks were also extended to the Secretariat for their meeting preparations.

Thank you to outgoing chairs

SCICOM Chair thanked the outgoing Chairs:

- ACOM Chair, Eskild Kirkegaard,
- Training Group Chair, Daniel Duplisea,
- HAPISG Chair, Henn Ojaveer,

for their engagement in SCICOM work, which has been highly appreciated. A framed print was presented to each of them signed by all SCICOM members.

25 Dates of next meetings and close

<p>Decision: The next SCICOM meeting will be held in Copenhagen from Tuesday 26 March (starting at 13:00) till Thursday 28 March (ending at 13:00). The Joint ACOM/SCICOM leadership will meet on Thursday, 28 March from 14:00 till 17:00.</p>
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Annex 1: List of participants

NAME	ADDRESS	PHONE/FAX/EMAIL
Chair:		
Simon Jennings Chair, Science Committee	International Council for the Exploration of the Sea (ICES) H. C. Andersens Boulevard 44-46 1553 Copenhagen V, Denmark	Phone +45 3338 6725 Mobile +45 3121 5484 Email simon.jennings@ices.dk Skype jennings.science
Steering Group Chairs :		
Henn Ojaveer (Estonia) HAPISG Chair (and national member, Estonia)	Estonian Marine Institute University of Tartu 2a Lootsi EE-80012 Parnu Estonia	Phone +372 443 4456 mobile: +372 5158328 Fax +372 6718 900 Email henn.ojaveer@ut.ee
Sarah Bailey (Canada), incoming HAPISG Chair as from 1 January 2019	Great Lakes Laboratory for Fisheries and Aquatic Sciences Fisheries and Oceans Canada 867 Lakeshore Road Burlington, ON, Canada, L7S 1A1	Ph: (905) 336-6425 Fax: (905) 336-6437 email: sarah.bailey@dfo- mpo.gc.ca
Silvana Birchenough (UK), EPDSG Chair	Marine Climate Change Centre (MC3), Cefas Lowestoft Laboratory, Pakefield Road, Lowestoft, Suffolk, NR33 0HT, UK	Phone +44(0) 1502 527786 Mobile +44(0) 07827661379 Email: silvana.birchenough@cefasc.co.uk
Sven Kupschus (UK), EOSG Chair	Fisheries Division, Cefas Lowestoft Laboratory, Pakefield Road, Lowestoft, Suffolk, NR33 0HT, UK	Phone +44 1502 562244 Email sven.kupschus@cefasc.co.uk
Mette Skern-Mauritzen (Norway), IEASG Chair	Institute of Marine Research (IMR) Nordnes 5817 Bergen Norway	Phone +47 924 62 615 Email mette.mauritzen@imr.no
Operational Group and Strategic Initiative Chairs		
Jens Rasmussen, DIG Chair	Marine Laboratory 375 Victoria Road Aberdeen AB11 9DB United Kingdom	Email J.Rasmussen@marlab.ac.uk
Daniel Duplisea, Chair of Training Group	Fisheries and Oceans Canada Institut Maurice- Lamontagne, Mont-Joli, QC, Canada G5H 3Z4	Phone: (418) 775 0881 daniel.duplisea@dfo-mpo.gc.ca

NAME	ADDRESS	PHONE/FAX/EMAIL
Myron Peck, SICCOME Co-Chair	University of Hamburg Institute of Hydrobiology and Fishery Science Olbersweg 24 D-22767 Hamburg	myron.peck@uni-hamburg.de
John Pinnegar, SICCOME Co-Chair (will attend Friday, 28 September)	Cefas Lowestoft Laboratory Pakefield Road Lowestoft Suffolk NR33 0HT	john.pinnegar@cefas.co.uk
Alan Haynie, SIHD Co-Chair	Alaska Fisheries Science Center Seattle USA	Email: alan.haynie@noaa.gov
Ex officio and guests:		
Anne Christine Brusendorff, General Secretary	International Council for the Exploration of the Sea H. C. Andersens Boulevard 44-46 1553 Copenhagen V Denmark	Email anne.christine@ices.dk
Eskild Kirkegaard, ACOM Chair ' (Friday 28 September)	International Council for the Exploration of the Sea (ICES) H. C. Andersens Boulevard 44-46 1553 Copenhagen V, Denmark	Email eskild.kirkegaard@ices.dk
Cornelius Hammer, President	Thünen-Institut für Ostseefischerei (TI-OF) Thünen-Institute of Baltic Sea Fisheries Alter Hafen Süd 2, 18069 Rostock, Germany	Phone +49 381 8116 -101, -102 (f) Email cornelius.hammer@ti.bund.de
Chul Park, PICES Chairman (Friday, 28 September)	PICES Daehangro 99, Youseong- gu Daejon 34134 Korea, Republic of	Email chulpark@cnu.ac.kr
Hiroaki Saito, PICES Science Board Chairman (Friday, 28 September)	PICES/The University of Tokyo 5-1-5 Kashiwano-ha Atmosphere and Ocean Research Institute 5-1-5 Kashiwano-ha Atmosphere and Ocean Research Institute Kashiwa 277-8564 Japan	hsaito@aori.u-tokyo.ac.jp
Floor ten Hoopen (Sunday, 23 September)	Swedish Agency for Marine and Water Management Gullbergs Strandgata 15,	floor.hoopen@havochvatten.se

NAME	ADDRESS	PHONE/FAX/EMAIL
	Box 11 930, 404 39 Göteborg	
Anna Jöborn: (Friday, 28 September)	Swedish Agency for Marine and Water Management Gullbergs Strandgata 15, Box 11 930, 404 39 Göteborg	anna.joborn@havochvatten.se

National members and alternates:

Steven Degraer (Belgium)	Royal Belgian Institute of Natural Sciences (MUMM) Gulledelle 100 B-1200 Brussels Belgium	Phone +32 27732103 Email steven.degraer@naturalsciences. be
Ellen Kenchington (Canada)	Fisheries and Oceans, Canada 1 Challenger Drive Dartmouth NS B2Y 4A2 Canada	Phone + 1-902-426-2030 Email Ellen.Kenchington@dfo- mpo.gc.ca
Corinne Pomerleau	Institut Maurice- Lamontagne Fisheries and Oceans Canada 850, route de la Mer, C.P. 1000 Mont-Joli, Québec, Canada, G5H 3Z4	Phone: (418) 775-0637 or (418) 516-9271 Email corinne.pomerleau@dfo- mpo.gc.ca
Brian MacKenzie (Denmark) (Sunday, 23 September)	DTU Aqua -National Institute of Aquatic Resources Kemitorvet Bygning 202 2800 Kgs. Lyngby Denmark	Email brm@aqua.dtu.dk
Clara Ulrich (Denmark) (alternate for Brian MacKenzie; Friday, 28 September)	DTU Aqua -National Institute of Aquatic Resources Kemitorvet Bygning 202 2800 Kgs. Lyngby Denmark	Email clu@aqua.dtu.dk
Henn Ojaveer (Estonia and SSG Chair)	Estonian Marine Institute University of Tartu 2a Lootsi EE-80012 Parnu Estonia	Phone +372 443 4456 mobile: +372 5158328 Fax +372 6718 900 Email henn.ojaveer@ut.ee
Olivier Thébaud (France, Alternate)	IFREMER Technopole de Brest-Iroise 29280 Plouzané France	Phone +33 (0)2 98 22 49 89 & mobil +33 (0)7 89 05 83 44 Email Olivier.Thebaud@ifremer.fr
Jörn Schmidt (Germany) and SIHD Co-Chair	Christian-Albrechts- University of Kiel Department of Economics	Email jschmidt@economics.uni- kiel.de

NAME	ADDRESS	PHONE/FAX/EMAIL
	Wilhelm-Seelig-Platz 1 24118 Kiel Germany	
Hedinn Valdimarsson (Iceland)	Marine Research Institute Skúlagata 4 IS-121 Reykjavík Iceland	Phone Email hedinn.valdimarsson@hafogvatn.is
Francis O'Beirn (Ireland)	Marine Institute Rinville, Oranmore Galway, Ireland	Phone +353 (0)91 387250 Mobile: +353 (0)87 9683094 Email Francis.XOBeirn@Marine.ie
Ivars Putnis (Latvia, Alternate)	Institute of Food Safety, Animal Health and Environment "BIOR" Lejupes Street 3, Riga, LV- 1076, Latvia	Email Ivars.Putnis@bior.lv
Antanas Kontautas (Lithuania) (Sunday, 23 September)	Klaipeda University Coastal Research and Planning Institute Herkaus Manto str. 84 92294 Klaipeda Lithuania	Email antanas.kontautas@ku.lt
Jan Jaap Poos (the Netherlands)	Wageningen IMARES P.O. Box 68 1970 AB IJmuiden Netherlands	Phone +31 317 487 189 Fax +31 317 480 900 Email Janjaap.Poos@wur.nl
Nils Olav Handegard (Norway)	Institute of Marine Research P.O. Box 1870 Nordnes 5817 Bergen Norway	Phone +47 55238500 Email nils.olav.handegard@imr.no
Dariusz Fey (Poland)	National Marine Fisheries Research Institute ul. Kollataja 1 81-332 Gdynia Poland	Phone +48 58 735 61 30 Email dfey@mir.gdynia.pl
Antonina Santos (Portugal)	Portuguese Institute for the Sea and the Atmosphere (IPMA) Avenida de Brasilia 1449-006 Lisbon , Portugal	Phone +351 21302 7000 Email antonina@ipma.pt
Svetlana Kasatkina (Russian Federation)	AtlantNIRO 5 Dmitry Donskogo Street RU-236000 Kaliningrad Russian Federation	Phone +7 0112 225 769 Fax +7 0112 219 997 Email kasatkina.svetlana@gmail.com
Rafael González-Quirós (Spain)	Instituto Español de Oceanografía Centro Oceanográfico de Gijón	Email rafael.gonzalez- quiros@ieo.es

NAME	ADDRESS	PHONE/FAX/EMAIL
	Gijón, Spain	
Peter Wright (UK)	Marine Laboratory 375 Victoria Road Aberdeen AB11 9DB United Kingdom	Email Phone +44 1224 295436
Thomas Noji (US)	Northeast Fisheries Science Center Milford, CT Sandy Hook, NJ	Phone 203-882-6540 Phone 732-872-3024 Email thomas.noji@noaa.gov

ICES Staff:

Anna Davies, Conference and Training Coordinator	anna.davies@ices.dk
Mark Dickey-Collas, Ecosystem Approach Coordinator	mark.dickey-collas@ices.dk
Neil Holdsworth, Head of Data and Information	neil.holdsworth@ices.dk
Ellen Johannesen, Coordinating Secretary	ellen.johannesen@ices.dk
Maria Lifentseva, Science Department Assisting Secretary	Maria.lifentseva@ices.dk
Terhi Minkkinen, Communications Officer	terhi.minkkinen@ices.dk
Vivian Piil, Departmental Secretary, Science Department	vivian.piil@ices.dk
Wojciech Wawrzynski, Head of Science Support	wojciech.wawrzynski@ices.dk

Annex 2: List of SCICOM actions and decisions

Action/Decision	Section	Deadline	Responsible
Call for new chair and members of Training Group – SCICOM members were encouraged to consider the open position as Training Group Chair in ICES, replacing Daniel Duplisea, who would be stepping down by the end of the year – and also to consider becoming a member of the Training Group. The task of Training Group Chair is fully supported by the ICES Secretariat, so what is needed from a chair is intellectual leadership and a steer on the types of courses ICES should be offering.	2 Introduction of agenda and timetable	Completed	SCICOM members
SCICOM should continue to review the utility of the ICES Resolutions Forum and SCICOM Forum	3 Follow-up on decisions taken at the meetings of SCICOM	Ongoing	SCICOM Chair, Secretariat
Ensure in future years that the theme session convenors get guidance as soon as their session is approved, and well in advance of ASC to indicate that they are expected to play a role in scoring.	4.2 ASC Award Selection Committee Process and Planning	01-04-2019	Award Selection Group, Secretariat
Theme and Network Session Group should report back on any gaps in coverage of science topics that follow from the 2018 call for the 2019 ASC.	4.4 Preview of Theme Session proposals for ASC 2019 and call for suggestions for plenary speakers	01-09-2018 (Completed)	
In future years the submission deadline for theme and network sessions should be amended to at least one month before ASC so SCICOM can review coverage of science topics and solicit additional sessions to fill major gaps.	4.4 Preview of Theme Session proposals for ASC 2019 and call for suggestions for plenary speakers	01-04-2019	SCICOM Chair, Secretariat
Brian MacKenzie, Myron Peck, Hedinn Valdimarsson, and SCICOM Chair to prepare short paper for March SCICOM meeting describing process and to finalise after feedback.	4.4 Preview of Theme Session proposals for ASC 2019 and call for suggestions for plenary speakers	01-02-2019	Brian MacKenzie, Myron Peck, Hedinn Valdimarsson, and SCICOM Chair
Better guidance on the expectations of the self-evaluation is required, even though the questions asked are fine. WGCHAIRS meeting in January to highlight the self-evaluations and what is a good report and evaluation. Consider providing boxes to make clear the expected level of content on the form. Chairs need to be informed that self-evaluations are required in the first year and we will also consider	5.2 Evaluation of multi-annual groups	01-01-2019	SCICOM Chair, Secretariat

Action/Decision	Section	Deadline	Responsible
adding more details of the requirements to the Guidelines for ICES groups).			
IEASG Chair and Olivier Thebaud (France, Alternate) to follow up on role of IEA and ecosystem overviews in global processes like IPBES.	6.1 Integrated Ecosystem Assessments SG	01-02-2019	IEASG Chair and Olivier Thebaud
IEASG Chair to provide guidance to HAPISG EG Chairs on how to contribute to fisheries and ecosystem overviews and to invite them to attend the planned workshop to define the third generation of ICES Ecosystem Overviews which will be announced in November 2018 (and take place in February or March 2019).	6.1 Integrated Ecosystem Assessments SG	01-12-2018	IEASG Chair
SCICOM should try to catalyse a new small pelagics group in cooperation with PICES	6.3 Ecosystem Processes and Dynamics SG	01-02-2019	EPDSG Chair, SCICOM Chair, Secretariat
SCICOM requested a paper from EOSG to be tabled at the SCICOM March meeting addressing the pressures on EOSG and proposing a set of options and their consequences. The paper should be seen in the context of the decision by ACOM to establish new Steering Groups.	6.4 Ecosystem Observation SG	01-02-2019	EOSG Chair
Francis O'Beirn and Tom Noji agreed to review the distribution lists for EGs under Aquaculture Steering group for other potential contributors to existing and emerging aquaculture expert groups and to share with Mike Rust.	6.5 Aquaculture SG	01-01-2019	Francis O'Beirn and Tom Noji
At the national level SCICOM members were requested to identify experts who could contribute to the new aquaculture groups.	6.5 Aquaculture SG	Ongoing	SCICOM members
Proposals for training course topics – also for project-funded courses – should be sent to the ICES Training Group (via Anna Davies).	7.1 ICES Training Group	Ongoing	SCICOM members
An agenda item will be added to the WGCHAIRS January agenda on the role of DIG in supporting expert groups with planning data work. This could include a worked ex-ample of good practice (e.g. SFD).	7.3 ICES Data and Information Group (DIG)	01-01-2019	SCICOM Chair, Jens Rasmussen, Secretariat
ACOM priorities were identified as mixed fisheries, management strategy evaluation (MSE), reconciling fisheries and conservation objectives and communicating advice.	8 ICES initiatives and cooperation	01-10-2018 (Completed)	SCICOM Chair

Action/Decision	Section	Deadline	Responsible
SCICOM Chair to ensure they are covered in latest iteration of science plan.			
New agenda item to be added to WGCHAIRS draft agenda requesting feedback from new/incoming EG Chairs on whether they felt any information was missing from the guidelines they received.	10.3 Update of Guidelines for ICES groups	01-01-2019 (Completed)	SCICOM Chair
Nils Olav Handegard (Norway) commented that the proposed citation proposal does not fit with how most journals would do this and was asked to contact Celine Byrne to review plans for citing of EG reports and share this review with SIPG.	11.3 Authorship of ICES Expert Group reports	01-12-2018	Nils Olav Handegard, Celine Byrne
SICCME Co-Chairs to take the lead to set up a joint PICES/ICES workshop and suggest actions to get biogeochemical projection modellers from Europe and the US collaborating.	13 Self-introduction by PICES guests and brief update on PICES news	01-02-2019	Myron Peck and John Pinnegar
Through our national contact point in IOC, Rafael González-Quirós, in co-operation with the ICES Secretariat, engage in discussions with IOC on the potential collaboration between ICES and PICES on ABNJ and BBNJ, including the suggestion to establish a joint study group on ABNJ and the health of ecosystems including biodiversity. After 2020 when ABNJ is in place as a legal instrument there might also be a role in helping the states to implement their rights and obligations under the new legal regime. As a first step, before entering discussions with IOC, Rafael González-Quirós was asked to prepare a document for SCICOM review via the Forum.	13 (Biodiversity of Areas Beyond National Jurisdiction (BBNJ) and Marine Areas Beyond National Jurisdiction (ABNJ))	01-01-2019	Rafael González-Quirós, Secretariat
SICCME Co-Chairs to take the lead to set up a joint PICES/ICES workshop and suggest actions to get biogeochemical projection modellers from Europe and the US collaborating.	13 Self-introduction by PICES guests and brief update on PICES news	01-03-2019	Myron Peck and John Pinnegar
A document/summary describing existing ICES work on ABNJ and BBNJ will be prepared to inform the work of the Study Group with help from Mark Tasker.	13 (Biodiversity of Areas Beyond National Jurisdiction (BBNJ) and Marine Areas Beyond National Jurisdiction (ABNJ))	01-12-2018	Mark Tasker

Action/Decision	Section	Deadline	Responsible
Ellen Kenchington (Canada) to provide SICCME with names of Canadians who can contribute downscaled models to the work of SICCME, particularly in the Arctic.	14.1 ICES/PICES Strategic Initiative on Climate Change and Marine Ecosystems (SICCME)	01-12-2018	Ellen Kenchington
SCICOM Chair encouraged SIHD Chairs to seek guidance/insight from Myron Peck on how to use workshops with focused goals to produce high-impact, tangible outputs. Clara Ulrich as STECF representative would be invited to give her view on what tractable topics might be addressed.	14.2 Strategic Initiative on the Human Dimension (SIHD)	01-12-2018	SIHD Chairs, Myron Peck, Clara Ulrich
Proposals for training course topics – also for project-funded courses – should be sent to the ICES Training Group (via Anna Davies).	15.1 PICES co-operation and benefits to member countries and the network	Ongoing	SCICOM members
Head of Science Support will discuss aquaculture training opportunities with the ASG.	15.1 PICES co-operation and benefits to member countries and the network	01-12-2018 (Completed)	Head of Science Support
The split of the science priority bylines into separate goal and purpose was not favoured. SCICOM agreed to redraft the bylines as single sentences. Approval of the revised text sentences would be sought via the SCICOM Forum by 5 October.	16.2 ICES Science Plan	05-10-2018 (Completed)	SCICOM Chair, SCICOM Members
Increase clarity of description of role of strategic initiatives in the Science Implementation Plan. The text should be phrased to allow flexibility to create and dissolve Strategic Initiatives.	16.2 ICES Science Plan	05-10-2018	SCICOM Chair
Ensure an explicit mention of IEA is included in the Science Plan.	16.2 ICES Science Plan	05-10-2018 (Completed)	SCICOM Chair
Ensure that the description of oceanography in the science plan does not exclude off-shore oceanography.	16.2 ICES Science Plan	05-10-2018 (Completed)	SCICOM Chair
The list of theme sessions (17) and network sessions 4 proposed by the subgroup for 2019 was approved by SCICOM (see Annex X).	18.2 Selection of theme and network sessions		
Convenors should be contacted (both for individual sessions and mergers) to broaden scope of all sessions before publication of call.	18.2 Selection of theme and network sessions	01-11-2018	Secretariat

Action/Decision	Section	Deadline	Responsible
Theme Session group to continue by correspondence and identify gaps in the scientific programme in relation to the science plan. Swedish hosts to propose session(s) on invited topics to fill these gaps, and a short call on these will follow.	18.2 Selection of theme and network sessions		Theme Session Group, Secretariat
Provide guidance on proposing theme and network sessions to emphasise importance of broad appeal across ICES countries, to reflect priorities of the ICES Science Plan. This will also be consulted at WGCHAIRS.	18.2 Selection of theme and network sessions	Call for proposals in spring	SCICOM Chair, Secretariat
Update of ASC Session Guidance Document will be provided.	18.2 Selection of theme and network sessions	Call for proposals in spring	SCICOM Chair, Secretariat
Analysis of Early Career Scientists attendance in relation to topics.	18.2 Selection of theme and network sessions	01/12/2018	Secretariat
March SCICOM to consider ways to encourage session proposals that reflect scope of ICES science priorities.	18.2 Selection of theme and network sessions	01-02-2019	SCICOM Chair
Rafael González-Quirós to share information on planning of the Atlantic Ocean Observing System with DIG and Data Centre.	19.2 ICES contributions to planning an Atlantic Ocean Observing System (AOOS)	01-12-2018	Rafael González-Quirós
SCICOM members were requested to feed insight into the development of the ICES-GOOS document through national contact points.	19.3 ICES-IOC interaction	01-01-2019	SCICOM members
SCICOM members were requested to consider host countries for the next Early Career Scientist Conference to be held in 2022. Traditionally the host country has covered the expenses related to the venue and food for ECS participants, and all other expenses have been covered by ICES and PICES.	19.4 ICES co-sponsored symposia 2018	01-03-2019	SCICOM members
SCICOM members will be requested to contribute suggestions for theme session topics and conveners for the World Fisheries Conference if a resolution is submitted and approved.	19.4 ICES co-sponsored symposia 2018	01-12-2018	Secretariat, SCICOM members
SCICOM gave conditional approval of the CRR for a Handbook on maturity staging of fish in the ICES area, requesting delivery of pending reports from the same author before accepting this CRR for publication.	20.1 Draft resolutions for publications		

Action/Decision	Section	Deadline	Responsible
SCICOM approved cosponsorship including 10,000 EUR for Early Career Scientists to attend Icelandic symposium	20.2 Draft resolutions for symposia		
SCICOM members were requested to review the actions offline and provide feedback on their feasibility. Deadline: 12 October.	21 Science Plan implementation	12-10-2018 (Completed)	SCICOM members
Include item in SCICOM March meeting on formats for the ASC, informed by responses to ASC survey.	22 Science review of ASC 2018 and recommendations for future ASC	01-02-2019	SCICOM Chair, Secretariat
Guidance document for Award Selection Group to be updated by 5 October, based on experience/ understanding gained at ASC 2018.	22.2 Feedback from Awards Selection group	05-10-2018 (Completed)	Rafael González-Quirós
Session chairs will not be asked to act as formal judges in future, but Award Selection Group are encouraged to consult them on their views about ASC talks that the ASG see as potential winners.	22.2 Feedback from Awards Selection group		
Add to guidance document and call a request to submit a poster pdf if you want to be considered as an entrant for the best poster or best early career poster award.	22.2 Feedback from Awards Selection group	01-02-2019	Secretariat (Anna Davies)
At March meeting determine whether awards should be limited to ECS.	22.2 Feedback from Awards Selection group	01-02-2019	SCICOM Chair, Secretariat
The next SCICOM meeting will be held in Copenhagen from Tuesday 26 March (starting at 13:00) till Thursday 28 March (ending at 13:00). The Joint ACOM/SCICOM leadership will meet on Thursday, 28 March from 14:00 till 17:00.	25 Dates of next meetings and close		