

SCICOM FEBRUARY/MARCH 2018

ICES SCIENCE COMMITTEE

ICES CM 2018/SCICOM:01

REF. COUNCIL

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

27 February to 1 March 2018



ICES
CIEM

International Council for
the Exploration of the Sea

Conseil International pour
l'Exploration de la Mer

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

Recommended format for purposes of citation:

ICES. 2018. Minutes from the meeting of the ICES Science Committee (SCICOM), 27 February to 1 March 2018. ICES CM 2018/SCICOM:01. 25 pp.

For permission to reproduce material from this publication, please apply to the General Secretary.

The document is a report of an Expert Group under the auspices of the International Council for the Exploration of the Sea and does not necessarily represent the views of the Council.

Contents

1	Opening and welcome	1
2	Agenda and timetable.....	1
3	Follow-up on decisions taken at the meetings of SCICOM (September 2017) and SCICOM Forum and ICES Resolutions Forum	1
4	Information on Council actions and recommendations for SCICOM.....	1
5	SCICOM Operational Groups	2
5.1	ICES Training Group (ITG)	2
5.2	Science Impact and Publication Group (SIPG)	3
5.3	Horizon scanning: Data	3
6	Science Planning and Priorities: introduction and breakout groups.....	4
7	Strategic Initiatives: Review of activities and plans	4
7.1	SCICOM Strategic Initiative on Climate Change (SSICCME)	4
7.2	Strategic Initiative on the Human Dimension (SIHD).....	5
8	Council Strategic Initiative on the Marine Strategy Framework Directive (MSFD).....	5
9	Feedback from WGCHAIRS.....	5
10	Steering Groups	6
10.1	Steering Group structure in ICES.....	6
10.2	Call for new Steering Group Chair.....	6
10.3	Aquaculture Steering Group.....	6
10.4	Ecosystem Processes and Dynamics Steering Group	7
10.5	Human Activities, Pressures and Impacts Steering Group	8
10.6	Ecosystem Observation Steering Group.....	9
10.7	Integrated Ecosystem Assessments Steering Group.....	11
10.8	Steering Group Funding	11
10.9	Revision of Guidelines for ICES Groups	11
11	Science Highlights and Science Promotion	12
11.1	Increasing profile of ICES science and review of recent web content	12
11.2	Science highlights	12
11.3	ICES bibliography and standard acknowledgement for ICES	12
11.4	Authorship of EG Reports	12
12	ICES Journal of Marine Science.....	13

12.1	Secretariat request for review of IJMS mission statement.....	13
13	Action Areas and benefits for member countries.....	13
13.1	Arctic research.....	13
13.2	Transatlantic Cooperation – AORA	14
14	Fisheries and ecosystem overviews.....	15
15	Science Cooperation.....	15
15.1	ICES co-sponsored symposia.....	15
15.2	PICES Cooperation.....	16
15.3	External projects and their benefits for member countries	16
15.4	Opportunities for ICES	17
15.5	Purpose and planning of ASC Open Sessions	17
15.6	Appointment of 2019 ASCG.....	18
16	ASC 2018 – Conference programme	18
16.1	Conference Introduction/Programme.....	18
16.2	Operation of Award Selection Group	19
16.3	Appointment of Hamburg ASC 2018 Award Selection Group	20
16.4	Chaperoning keynote speakers.....	20
17	ICES Viewpoints.....	20
18	Science Planning and Priorities: feedback and conclusions.....	20
18.1	Dates for next meetings	21
19	Closure.....	21
	Annex 1: SCICOM List of participants.....	22

1 Opening and welcome

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

A special welcome was extended to Maris Plikshs who had taken over from Georgs Kornilovs as the member for Latvia, and to Eva-Lotta Sundblad, co-Chair of the Strategic Initiative on the Human Dimension (SIHD), who was joining the meeting as an observer.

Apologies had been received from Nils-Olav Handegard (Norway) and Mette Skern-Mauritzen (Integrated Ecosystem Assessment Steering Group, IEASG Chair), from Daniel Duplisea as ICES Training Group chair, and Strategic Initiative on Climate Change Impacts on Marine Ecosystems (SICCME) Co-Chairs, John Pinnegar and Myron Peck. John Pinnegar would present the SICCME report by WebEx and Mark Dickey-Collas would present on behalf of the IEASG Chair.

SCICOM noted that this would be the last spring meeting for Henn Ojaveer in his capacity as Human Activities, Pressures and Impacts Steering Group (HAPISG) Chair. Although his term does not end until the end of 2018 the post has been advertised to ensure a period of overlap.

SCICOM Chair asked for a tour de table to introduce attendees (see Annex 1) and SCICOM was welcomed by the ICES President, Cornelius Hammer.

The Chair highlighted that SCICOM is empowered to speak on behalf of ICES on science priorities and strategies and on the state of knowledge on topical marine issues and should work with ACOM on measuring science impact.

In general, the priorities for SCICOM continue to be:

- to substantially increase the relevance, influence and impact of ICES science
- to build stronger and enduring links between science and advice
- to stimulate closer, more active and more effective communication with the EG- which recognises their critical role in the ICES system

2 Agenda and timetable

The agenda was approved and no new items were brought up for inclusion.

3 Follow-up on decisions taken at the meetings of SCICOM (September 2017) and SCICOM Forum and ICES Resolutions Forum

SCICOM Chair, with reference to the minutes from September 2017 and Doc 5, gave a summary of the decisions taken on the SCICOM Forum and ICES Resolutions Forum.

4 Information on Council actions and recommendations for SCICOM

At the Council October 2017 meeting the SCICOM Chair presented the SCICOM Annual report to Council describing the scope, scale and impact of ICES science and plans for future science delivery. Council commended the report from SCICOM, noting the importance of the science priorities work and ensuring coordination between on-going processes at the Council level. The importance of including regional as well as national priorities was highlighted.

SCICOM was informed of the work of the Council Working Group on the Code of Conduct (CWCCODE), led by Tammo Bult. A final proposal was signed off by Bureau for further Council review. The Code of Conduct governs the rules of engagement for experts in the ICES system and how to address Conflicts of Interest. Once signed off it will also become part of the “Guidelines for ICES groups”. The Code of Conduct would have a trial period of three years and then be evaluated.

The SCICOM role in relation to the new Strategic Plan remains to feed in a view on Science Priorities, along with the flagship activities, and these would be further refined at this meeting.

5 SCICOM Operational Groups

5.1 ICES Training Group (ITG)

Anna Davies, Training Coordinator, gave an update from the ICES Training Group (Doc 6).

Online training courses

In 2017, a webinar was held on MSY reference points. Through a collaboration with the Danish Technical University (DTU) and with funding from the BlueBRIDGE project, ICES developed its first online training programme on oceanography for bachelor university level. Online Training Coordinator, Morten Holdt gave a live demonstration of the online training course.

Action: Training Group to report to the SCICOM September meeting on a possible way forward for the continuation of online training course via the Coursera platform (one of the biggest online course providers), and also look into the process for selecting the topics, how many courses to offer per year, and course fee.

Potential for training collaboration with IOC

SCICOM noted that the Intergovernmental Oceanographic Commission (IOC) is keen to partner with established marine science organisations on training. This could be an option for increasing the profile of ICES training, capacity building, and reaching beyond ICES member countries. The two organisations offer different scales of training, but have overlapping strategic priorities. Rafael González-Quirós presented the strategy for capacity development in IOC and would work inter-sessionally to summarise IOC capacity building activities and assess the extent to which ICES and IOC activities might be aligned.

Action: Rafael González-Quirós will prepare a document summarising the capacity building activities in IOC and report back to the SCICOM September meeting on the extent to which ICES and IOC activities might be aligned.

Training course on ICES Advice process

A possible topic for an online training course could be an introduction to the ICES advice process. Similar to the topic taught at the DG MARE courses. This would be relevant, and the material already exists.

Action: ICES Training Coordinator will follow up on the suggestion to consider development of an online training course on the advice process and report back to SCICOM in September.

Developing a strategy for the ICES Training Programme

There is a request for elevated engagement from SCICOM, both for spreading the word about training, and for strategic planning for the training course programme. The training programme could be an important driver of engagement throughout the ICES community. SCICOM Chair was very pleased to see courses driven bottom up, but SCICOM should really help in developing a strategy.

Action: SCICOM members to contribute to the work of the ICES Training Group by helping them to develop a strong strategy for the ICES Training Programme. Training Group should solicit their contributions from SCICOM before the 2018 ASC.

5.2 Science Impact and Publication Group (SIPG)

Celine Byrne, ICES Editor, gave an update on the first year of SIPG and progress on the SIPG Terms of Reference.

SIPG membership. SIPG has four members and more are welcome to join the group. SIPG will be chaired by the SCICOM Chair until ASC this year, and after that a call for nominations will be opened.

Publications database. Regarding ToR (a) (i) *“Catalogue and report on the types and quantity of published outputs facilitated by ICES network”* Celine highlighted the development of a publications database to track ICES output.

Publications: SCICOM was informed that the Secretariat has started to apply DOI for all in-house publication series and ICES Advice. The plan is to apply DOIs to EG reports at some point this year, and they will also be applied retroactively for the past years.

SCICOM was informed that no new draft resolutions for publications had been submitted since SCICOM September 2017 meeting.

In discussions, SCICOM members commented on the need to identify methods for capturing publications to ensure they were included in the database, to ensure ICES papers were acknowledged (attention was drawn to the guidance on acknowledgements in the ‘Guidelines for ICES groups’) and to interrogate the database. A number of actions resulted from these discussions.

Action: SIPG will investigate how to encourage inputs to the new publications database

Action: SIPG Chair to contact Kevin Friedland regarding his offer to contribute to the work of SIPG

Action: SCICOM members were encouraged to identify further members for SIPG.

5.3 Horizon scanning: Data

Jens Rasmussen, DIG Chair, presented Future Data Challenges in ICES (Doc 8).

Three priority future challenges have been identified, some of which are already being addressed within the ICES community, while some touch on all aspects of our work and collaborations:

- Machine learning
- Cloud environments and related services
- Open Data and code sharing

The ICES community are already working on, or developing an understanding of these challenges – but they are also the ones who are likely to place the greatest pressures and expectations on ICES data operations in the coming years, and, as such, require strategic consideration.

SCICOM welcomed this as a good initiative, and agreed that it is important for ICES to meet future data challenges with a pro-active approach. A workshop on machine learning will be held in mid-April to explore how these methods can contribute to ICES science, and SCICOM noted that it might be worth considering workshops on other areas described in the document, e.g. the open data and credibility or cloud environments.

SCICOM Chair thanked Jens for the presentation and noted the good collaboration between DIG and Data Centre.

Action: SCICOM members were invited to provide further feedback on the futures document to DIG Chair, Jens Rasmussen, after the meeting.

6 Science Planning and Priorities: introduction and breakout groups

SCICOM Chair introduced the breakout groups, which were asked to report back to SCICOM on Thursday morning with one or two proposals for flagship activities, with stated links to one or more of the priority areas in the Science Priorities document. Following the reporting back, SCICOM will prioritise/rank the flagship science activities in plenary.

SCICOM Chair recalled that the “flagship activities” are scientific challenges, which would inspire and engage the ICES network, drive discovery, support the ICES vision and mission and (collectively) provide benefits direct and indirect benefits for member countries. The operational side of ICES flagships has been left open; e.g. they could become additional action areas, but, for now, in terms of the SCICOM role, it was more important to develop science questions that detail delivery structures and processes. .

7 Strategic Initiatives: Review of activities and plans

7.1 SCICOM Strategic Initiative on Climate Change (SICCME)

SICCME Co-Chair, John Pinnegar, gave an update on SICCME via WebEx (Doc 10).

SCICOM Chair thanked SICCME for a clear report and thanked all SICCME Chairs for continuing to drive the Strategic Initiative. The great strengths of the initiative are the outward looking approach that engages PICES and developing the opportunity for ICES engagement in the IPCC 2021 report. SCICOM also noted the positive developments relating to collaboration across the strategic initiatives, with SIHD and SICCME now working together.

During discussions, Inigo Martinez thanked the SICCME co-chairs for contributing, via the vulnerability workshop, to the development of a template that will become part of the ecosystem overviews.

DIG Chair, Jens Rasmussen reported that a data hub for climate change data will be included in one of the flagship proposals. He also noted that there is no central repository for data on pH and ocean acidification type information in Europe and ICES seems to be the right place for that.

7.2 Strategic Initiative on the Human Dimension (SIHD)

Eva-Lotta Sundblad, SIHD Co-Chair, reported from SIHD (Doc 11). The report included coverage of the Workshop on Balancing Economic, Social, and Institutional Objectives in Integrated Assessments (WKSIED-BESIO), possible ToR for a proposed expert group (WGBESIO), ToRs for a new group on social indicators (WGSOCIAL), SIHD Vision document on EBM, ASC 2018 Open Session and related external activities. SIHD are developing a 'vision document' to describe the longer-term role of social and economic science in ICES.

SCICOM Chair thanked Eva-Lotta for the presentation and was pleased to see SIHD activities and engagements with external players coming to fruition.

In discussion, it was suggested that the SG could contribute to helping develop and facilitate integration of social and economic science into ICES work, although it was noted that SIHD is already working with SICCME and IEA groups. One area where SIHD identified a need for support was in relation to improving national engagement – and SIHD asked SCICOM members to help SIHD with this.

Action: SIHD Co-Chairs to share drafts of the SIHD vision document with SG Chairs for their input and feedback.

8 Council Strategic Initiative on the Marine Strategy Framework Directive (MSFD)

Mark Dickey-Collas, Ecosystem Approach Coordinator, gave an update from the Council Strategic Initiative on the Marine Strategy Framework Directive (MSFD).

Tammo Bult is leading this initiative since the ASC 2017 and has been working internally, with relevant Ministries in the Netherlands (LNV/I&W) on a proposal to develop ecosystem requests for advice. A draft proposal is being developed, including possible advice questions about reconciling objectives on generating renewable energy, food production (fishing) and conservation. Also the work for DGENV by ACOM for the MSFD was highlighted, this includes species biodiversity D1, seabed impact D6, size of fish in populations D3c3.

SCICOM Chair thanked the presenter and noted the encouraging development of science into advice in this area.

9 Feedback from WGCHAIRS

SCICOM Chair with reference to the WGCHAIRS report (Doc 12) reported from the meeting held from 23–25 January 2018. It was a great meeting with attendance of ca. 65 Expert Group chairs across science and advice. The topics addressed were specific to the chairs, how to better support them, to review the revised guidelines for ICES Groups, and to discuss the development of viewpoints and science highlights. There were also many productive breakout groups on a range of topics. A number of actions came out of the meeting and the ICES Secretariat and network, including SCICOM and ACOM, are very committed to fulfil them. This is because we see the EG chairs as the engine of ICES and want to support them as effectively as possible.

10 Steering Groups

10.1 Steering Group structure in ICES

ACOM Chair, Eskild Kirkegaard, updated SCICOM on the progress in relation to the Steering Group structure in ICES. The SCICOM and ACOM Chairs tabled a proposal before ASC September 2017 to have all Expert Groups under a Steering Group, which would mean that an additional Steering Group for Stock Assessment Expert Groups should be created. This was discussed at ASC and received support from SCICOM, but ACOM was more reluctant and questioned the value added. The issue was revisited at the November 2017 meeting of ACOM and a subgroup led by Nathalie Steins and Els Torreele was established to address the key issues. The concern is that we are adding another layer of bureaucracy and ACOM still seek clarification on the operational questions.

SCICOM was invited to appoint Steering Group Chairs as members of the Subgroup, which will be working by correspondence and will report to both ACOM and SCICOM in September 2018.

During discussions, concern was raised that ACOM members were not aware how Steering Groups work and thus may not understand whether the existence of a Steering Group is beneficial or not. It was suggested that we need to communicate the benefits of Steering Groups more clearly, and, in particular, how the Steering Groups can improve the information flow between science and advice. In future, ICES was expected to draw on more of the Expert Groups to generate a broader range of advice, and changes to the Steering Group structure would help to support this.

Decision: SCICOM Steering Group Chairs (Henn Ojaveer, Silvana Birchenough, Sven Kupschus, Mike Rust, and Mette Skern-Mauritzen (in absentia)) agreed to join the ACOM subgroup on Steering Group structure and will help to explain the benefits of Steering Groups.

10.2 Call for new Steering Group Chair

SCICOM Chair, with reference to Doc 14, highlighted the process for the call for nominations for a new Chair for the Human Activities, Pressures and Impacts Steering Group, to replace Henn Ojaveer (Estonia), when he stands down at the end of 2018. The call was distributed in mid-February with a deadline for nominations of 27 April. In May 2018, nominated candidates will be offered the opportunity to share their CV with the Science Committee and to present their vision for the HAPISG at a SCICOM WebEx meeting. SCICOM will elect the new Steering Group Chair, by electronic secret ballot, before 25 May 2018, and will be given 48 hours to vote.

Action: SCICOM members were asked to seek and nominate good candidates for the job as HAPISG Chair, with nominations submitted by 27 April 2018.

10.3 Aquaculture Steering Group

Mike Rust, Chair of Aquaculture Steering Group (ASG), gave an update from ASG (Doc 15).

SCICOM was updated on the work of existing Expert Groups under the ASG:

- Working Group on the Application of Genetics in Fisheries and Aquaculture (WGAGFA; formerly WGAGFM). Will meet 15–17 May under the new Chair: Jann Martinsohn.

- Working Group on Pathology and Diseases of Marine Organisms (WGPDMO; Chair: Ryan Carnegie, continuing for a second 3-year term) Final Meeting: February 13–15, 2018.
- Working Group on Social and Economic Dimensions of Aquaculture (WGSEDA; Chair: Gesche Krause) Meets for the first time under the new multi-annual TORs May 29-31, 2018. New ToRs have been approved for 2018–2020.

Three new working groups are in the pipeline:

- Working Group on Environmental Interactions of Aquaculture (WGEIA)
- Working Group on Scenario Planning on Aquaculture (WGSPA)
- Working Group on Ecological Carrying Capacity in Aquaculture (WGECCA)

The Aquaculture SG has modified the ToRs and names to align with ICES vision and mission, and to enhance team building. There was a slight refocus of ToRs on management needs, with peer-reviewed publications, management tools and viewpoints as deliverables. There have been over 20 self-identified scientists interested in the three new groups (WGEIA -15, WGSPA- 9 and WGECCA -10). Four of these scientists expressed interest in being chair or co-chair of one of the groups.

At the ASC 2018 a theme session will be held on “Working toward an ecosystem approach to North Atlantic marine aquaculture with Martinsohn, Carnegie and Krause as co-conveners. The format will be an Aquaculture Video Festival, and there will be electronic posters and a live session. The session will use the World Café format, which received very positive feedback at the ASC 2017 meeting.

AORA and ICES: The AORA Perceptions working group is conducting a survey on how various groups message about marine aquaculture. They ask for responses before March 30, 2018. SCICOM members were encouraged to reply or forward to relevant representatives of their host institution. The survey can be found [here](#).

SCICOM Chair thanked Mike Rust for the presentation and noted that the formation of this steering group is already starting to attract a community outside the traditional ICES network, that is dealing with global and emerging questions.

During discussions, SCICOM noted some suggestions for topics for future ASG expert groups including offshore aquaculture, engineering offshore structures, economic impact analysis, seaweeds, ecological aquaculture, and disruptive technologies.

Comments were made on including work on aquaponics and recirculation systems as well as more on land–sea interactions. The HAPISG suggested the ASG Chair should contact WGECON Chairs to advance economic aspects in the planned work.

10.4 Ecosystem Processes and Dynamics Steering Group

Silvana Birchenough, the Chair of EPDSG, gave an update on the Ecosystem Processes and Dynamics Steering Group (Doc 16), which oversees 20 EGs and 4 workshops.

Highlights: regular updates have been provided by the EG Chairs. It is very encouraging that most EGs are developing and planning scientific publications, participation at workshops and chairing scientific meetings with ICES endorsement.

Working Group on Oceanographic Hydrography: The production of the IROC report is the main contribution from this EG. The new chairs (César González-Pola and Paula Fratantoni) are keen to develop new products.

The EPI and EDP joint open session on “Methodological advances to evaluate ecosystem impacts of human activities” to be held at ASC 2018 is being planned and the intention is to have a mix of presentations and discussions.

SCICOM Chair thanked Silvana for the report and noted that this is a very diverse SG. He remarked that it was excellent to see the strong focus on the published outputs from the EGs and asked that they were reminded to submit these to the publications database via Celine Byrne and also to communicate science highlights to Terhi Minkkinen.

Discussions focused on IROC, based on a comment that despite the best efforts to turn the IROC into an outline product, it risked being outpaced by other players such as COPENICUS, IOC and EMODnet. The empirical datasets are not being used, because there are other alternatives, although it was noted that many model-derived products are not necessarily accurate and having access to observations is valuable. Moreover, the link to oceanography in ICES science is really valuable and something we may wish to strengthen again in future.

Action: EPDSG Chair and Mark Dickey-Collas will work with WGOH Chairs to find a way forward for IROC and report back to the SCICOM September 2018 meeting on progress and options for a way forward.

10.5 Human Activities, Pressures and Impacts Steering Group

Henn Ojaveer, Chair of HAPISG, reported from the Human Activities, Pressures and Impacts SG (Doc 17)). The group had expanded rapidly during the past six months with seven new working groups established:

- 1) Working Group on Economics (WGECON) [Co-chairs: Hazel Curtis, Olivier Thebaud and Rasmus Nielsen]
- 2) Working Group on Fisheries Benthic Impact and Trade-offs (WGFBIT) [Co-chairs: Tobias van Kooten, Ole Ritzau Eigaard, Gert Van Hoey]
- 3) Working Group on Methods for Estimating Discards Survival (WGMEDS) [Co-chairs: Thomas Catchpole, Sebastian Uhlmann]
- 4) Working Group on Marine Litter (WGML)[Co-chairs: Thomas Maes, Francois Galgani, Andy Booth]
- 5) Workshop on Co-existence and Synergies in Marine Spatial Planning (WKCSMP) [Co-chairs: Kira Gee, Eirik Mikkelsen]
- 6) Workshop on Integrating historical data into modern stock assessment (WKIHSD) [Co-chairs: Massimiliano Cardinale and Giuseppe Scarcella]
- 7) A Workshop on Vulnerabilities and Risks to Culturally Significant Areas (WKVCSA) [Co-chairs: Andreas Kannen, Kira Gee]

The priority actions for HAPISG in 2018 are to:

- Finalise ICES-PICES-CIESM Viewpoint *Evaluating and mitigating introduction of non-native species via vessel fouling*
- ICES ASC 2018 Open Session *Methodological advances to evaluate ecosystem impacts of human activities*
- Work with new EG (WKIHSD, WGLITTER, WGECON) to ensure communication and cooperation with existing EG.
- Recruit new HAPISG chair and ensuring smooth transition of the SG work.

The draft viewpoint on “**Vectors and management of invasive species**” will be finalised at the WGITMO/WGBOSV meeting. The draft viewpoint will then go to an advice drafting group. SCICOM members were encouraged read the document and provide feedback.

Non-responsive chairs

SCICOM discussed how to deal with situations where EG Chairs are non-responsive. In such situations, consideration should be given to the whole EG as the members are not necessarily aware that the Chair is not responsive.

Action: SCICOM and Secretariat will prepare a general draft guideline on how to deal with non-responsive EG Chairs for SCICOM to review.

How should ICES engage in shipping and who to engage?

SCICOM considered that this topic was very important to ICES and that knowledgeable individuals from across the ICES regions and beyond needed to be identified to contribute to this field in the future.

Action/Decision: SCICOM agreed that work on shipping needed to be broadened going forward and to cover more regions than those that had been addressed by the WG on Risks of Maritime Activities in the Baltic Sea (WGMABS), which had now reached the end of its term. SCICOM proposed that any new Working Group should be broadened to cover at least North America and the Mediterranean. SCICOM and the HAPISG Chair will focus on keeping members of WGMABS engaged in the process of developing a broader group and will ask them to contribute their experience to this process.

10.6 Ecosystem Observation Steering Group

Sven Kupschus, Chair of EOSG, reported from the Ecosystem Observation SG.

Science highlights

EOSG Chair noted that the working groups under EOSG are contributing mostly to the advisory side, either directly or through their data QAQC processes, rather than focusing on the generation of science highlights. Where nodes of integration exist between science and data collection the preference seems to be to present this work under the more science-oriented SG. The science-focused EGs under EOSG are also frequently involved in providing answers to advisory questions based on scientific analysis, and care must be taken when developing their science highlights to avoid circumventing or undermining the rigorous ACOM review process.

The science highlights are an outward facing priority for ICES, whereas the data collection working groups under EOSG are mainly inward facing. These groups spend 95% of their time providing data and they are doing a sterling job on that, contributing to excellent science. There is data underneath the science highlights! EOSG Chair will try to work harder to encourage science highlights from these groups.

During discussion, it was agreed that it was unreasonable if data generators and processors were not receiving adequate credit for their work and this should be fixed. It was commented that some EGs such as WGELECTRA, WGRFS, WGFAST and WGFTFB did conduct science that could readily be communicated as highlights. SCICOM also commented that improvements in methods, comparisons in age estimation, wide-band acoustics, automated procedures for otoliths, DNA protocols for stomach contents could also be highlighted and pushed forward to make them more visible.

Action: The guidelines for ICES Groups should be updated by the SCICOM Chair to specify a clear process to ensure that the contributions of those EG generating and processing data are recognised.

Ecosystem observation and future of monitoring

The EOSG Chair reported that the following groups could contribute to developing an ecosystem observing system: WGISUR, WGISDAA, WKPIMP, a number of survey WGs, WGECON, EA-modelling groups. But a vision is needed as is a process to receive and use what these groups provide.

EOSG Chair hopes to initiate activities that allow ICES to promote a vision for monitoring of the future. The difficulty is making it specific enough to make a difference, but not so specific that people cannot agree.

In discussion, SCICOM Chair commented that he was extremely positive that EOSG is looking into a future ecosystem observing system. This is a big step forward for the SG. There is the conflict that DCF funding tends to discourage innovation at the national level. Working directly at that level is always going to be a challenge. Thus it is good to separate the future vision from where we stand today. The future of monitoring can be very exciting! In the DIG Report, there was focus on disruptive technology, because we need to stay aware of that. The fact that EOSG is now presenting this as future monitoring, allows us to be radical in our thinking and engage more people. This should develop well as a flagship for ICES.

SG communication and complexity

EOSG Chair commented that EOSG is the largest SG with many additional responsibilities (Data QA, SISPs, liaison with Data Centre, ACOM, ACOM leadership, across three ICES contact persons responding to two bodies). He commented that the SharePoint site has been reorganised as the main information hub because the SG is too large for communal WebEx to be effective (covering 40 EG) and that he is now working with EG Chairs individually or across topics.

In discussion, SCICOM members suggested that it may be worthwhile to cluster/combine sets of similar EOSG groups for management purposes and to make interaction with groups more manageable.

Feedback on data needs

EOSG Chair commented that the DCF places great importance on the requirements of end-users (ICES being an important, if not the most important, end-user of fisheries survey data). ICES is also the coordinator for many of these surveys as well as the data repository and as such should be in a strong position to affect improvements in data availability and quality for stock assessment and ecosystem indicators.

WGBIOP ToRs

EOSG Chair made SCICOM aware that the new WGBIOP ToR which would soon be posted on the Resolutions forum for approval. WGBIOP wants to change the data on Datras to make it suit their needs. Their interpretation of what Datras is that it is merely to support the stock assessment process. The EOSG Chair has concerns that it is used for many other things too. These ToRs would set a precedent, and therefore SCICOM members were asked to be aware and comment if not in agreement.

Peter Wright commented that he shared the concern in relation to changing Datras data. Tampering with the historical information is quite dangerous, but there would not be a problem adding to the information.

10.7 Integrated Ecosystem Assessments Steering Group

Mark Dickey-Collas, Ecosystem Approach Coordinator, reported from Integrated Ecosystem Assessments SG on behalf of Mette Skern-Mauritzen (Doc 19).

A session at WGCHAIRS led by IEASG Chair spurred a number of ideas for further development of IEA; e.g. increased transparency of the science; inclusion of decadal predictions; inclusion of management objectives. A proposal was made for a new EG to develop Ecosystem and Fisheries Overviews from PDF format into interactive presentations.

General comments

Overall, work has progressed according to ToRs. There has been formal and informal collaboration between EGs;

- WGMARS – WGNARS-WGINOSE-SIHD.
- WGMARS - WGIAB
- WGINOSE – WGIPEM
- WGIAB- WGEAWESS- WGCOMEDA
- WGINOR – WGINOSE – WGIBAR - WGICA

IEASG Steering Group met during WGCHAIRS in January, and the next meeting is scheduled to take place during ICES ASC

The SCICOM Chair thanked the IEASG Chair for providing a detailed report (Doc 19) and thanked Mark Dickey-Collas for presenting it.

Future of WGLME

The Head of Science Support explained that LME have been the focus of a NOAA-developed programme for years. ICES together with BONUS have supported the LME process from the beginning. However, it has become increasingly difficult to attract membership from the ICES area, and therefore it would be better to move work on LME outside the ICES EG system and developing a broader initiative.

Action: To develop WGLME into a broader initiative. IEASG Chair, Mette Skern-Mauritzen and Head of Science Support, Wojciech Wawrzynski, will develop a process to maintain the LME work stream, potentially along the lines of an action area.

10.8 Steering Group Funding

Wojciech Wawrzynski, Head of Science Support, reminded the five SG Chairs that there is funding available in the core budget to facilitate the work (DKK 100,000 per SG per year).

10.9 Revision of Guidelines for ICES Groups

SCICOM Chair, with reference to Doc 10, informed SCICOM that a substantial revision of the Guidelines for ICES groups has been completed. The new version of the Guidelines was issued to the network on 15 February 2018 and an updated version is being prepared for release in Q4 2018.

The new Guidelines cover ACOM, SCICOM, Steering Group and Operational Group roles and their interaction with Expert Groups. The document contains essential information for those Chairing and involved in Expert Groups, ACOM, SCICOM, Steering Groups and Operational Groups. The Guidelines are supported by a PowerPoint presentation for new Expert Group Chairs (and shortly a presentation for new members of Expert Groups as requested at WGCHAIRS)

11 Science Highlights and Science Promotion

11.1 Increasing profile of ICES science and review of recent web content

Terhi Minkinen, Communications Officer, gave an update from Communications on Science Highlights and other ways of sharing ICES science, such as group webpages, news articles on ices.dk, the bi-monthly newsletter including feature articles, and social media (facebook, twitter, linkedin). SCICOM was informed that a graphic designer, Olle Mølgaard Bang, had recently joined the Communications team.

11.2 Science highlights

SCICOM discussed ways of improving the process for collating and communicating the science highlights from Expert Group reports. The following actions were agreed:

Action: Communications to prepare a clear, concise and short message to EG Chairs about communications and Science Highlights and the options for promoting EG meetings via social media. The extracted text on science highlights from the 'Guidelines for ICES groups' would be appended to this.

Action: Secretariat to include information in the intro email to Group chairs about opportunity to have news items on specific groups.

Action: SCICOM Chair to work with Communications to prepare a template for submitting highlights. This would sit alongside the text on highlights in the 'Guidelines for ICES groups'.

11.3 ICES bibliography and standard acknowledgement for ICES

ICES Editor, Celine Byrne, with reference to Doc 22a and b, gave an update on the recent developments with the ICES bibliography.

SCICOM members were requested to help encourage EG members to use the following generic acknowledgement when ICES facilitates or supports the scientific work and/or resulting publication. The most important requirement is to name the "International Council for the Exploration of the Sea" in full as well as referring to "ICES".

The authors thank the [XXX Group] of the International Council for the Exploration of the Sea (ICES) for facilitating this research

Using the acknowledgement will enable the Secretariat to pick up the ICES outputs.

Action: SCICOM members and SG Chairs were asked to highlight the acknowledgement text in the 'Guidelines for ICES groups' to EG Chairs and members, so that SIP can easily track ICES involvement in all publications.

11.4 Authorship of EG Reports

ICES Editor, Celine Byrne, introduced this issue, which related to a request from the WGCHAIRS January meeting to change the authorship of EG reports to list the participants as authors. For many EG Chairs, particularly the ones outside the national labs,

it would be a massive incentive to go to ICES meetings to be named as authors and would also be valuable for Chairs in terms of securing funding to attend ICES meetings. SCICOM was presented with a chart of options for how the authorship could be changed to give more credit to Expert Group participants. There was general support for option 4 (see Doc 23, Section 5, Table 2) and broad support in SCICOM to explore this issue further and to ensure that the Chairs and members see the rewards for participating in ICES EG meetings.

Peter Wright brought up the issue of double publication (the possibility of having a paper rejected by a journal because the work had been published in an EG report).

Action: SIPG Chair/SCICOM Chair to check if a change in the authorship of EG reports would result in primary journals refusing submissions (on the basis that they had already been published by ICES) and report back to SCICOM following consultation with EG Chairs.

12 ICES Journal of Marine Science

12.1 Secretariat request for review of IJMS mission statement

SCICOM Chair with reference to Doc 25 introduced the current *ICES Journal of Marine Science* mission statement.

The ICES Secretariat had requested that SCICOM review the Mission Statement of the ICES Journal of Marine Science and report and comment on (1) whether it is still fit for purpose and (2) if it is not, a recommended procedure for review.

Conclusion: SCICOM expressed a general preference for a shorter text with a more global emphasis. SCICOM recommended to expand the domain of the mission statement to reflect the types of papers that are accessible to the Journal. It was also noted that the mission statement is difficult to find on the ICES website. SCICOM suggested that the mission statement should clearly align with the guidance for authors, but should reflect the mission pursued by the publisher and Editor in Chief and it should be clear that it was not additional guidance for authors, given there was separate guidance for authors already available.

Action: SCICOM will report the outcome of the SCICOM review to the ICES Secretariat by 23 March 2018.

13 Action Areas and benefits for member countries

13.1 Arctic research

ICES General Secretary, Anne Christine Brusendorff, gave an update on ongoing work in the Arctic area:

- Fifth Meeting of Scientific Experts on Fish Stocks in the Central Arctic Ocean (FiSCAO), October 24-26, 2017, in Ottawa, Canada. *Agreement reached to prevent unregulated high seas fisheries in the central Arctic Ocean, concluded 4 December 2017. ICES was given an action to do a pilot study on the data management and sharing policy in cooperation with NOAA and PICES.*
- The Arctic Council is currently chaired by Finland, and in 2019 Iceland will take over the Chairmanship in the Arctic Council and the Nordic Council. ICES will try to do a concerted action to see whether it will be possible to bring some ICES contributions into their work.

- ICES is applying for UN Observer status (with Norway as lead).
- ICES is exploring the possibility of arranging an informal ICES/PICES meeting to discuss Arctic issues in connection with the 4th ICES/PICES/IOC/FAO Symposium on Climate Change and Impacts on the World's Oceans, 4–8 June 2018 in Washington D.C., USA.
- 2nd Arctic Science Ministerial meeting, 25–26 October 2018, Berlin. Co-arranged by Finland (in their capacity as Arctic Council Chair), Germany and EU. Preceded by one day science meeting and ICES is invited to give an overview of our work.

Action: In connection with the 2nd Arctic Science Ministerial meeting, ICES would like to know the national ministerial contact points for Arctic work in the participating countries (all ICES members except for Ireland, Estonia, and Latvia and Lithuania). SCICOM members were requested to provide this information to Vivian.Piil@ices.dk by 16 March. The request would also be sent to ICES Delegates.

SCICOM Chair thanked the members for the material fed into the summary XL sheet of ICES-related activities in the Arctic and also mentioned Doc 27 on the ICES role in Arctic Science, which provides a nice summary of ICES activities in this area which can be used when attending meetings or speaking on behalf of ICES.

13.2 Transatlantic Cooperation – AORA

The Head of Science Support and the Ecosystem Approach Coordinator gave an update on the AORA process (channelled through the H2020 AORA-CSA project). The Atlantic Ocean Research Alliance was founded in 2013 – this year celebrations of its 5th anniversary will take place. In the meantime the EU Commission has formally extended the AORA to the South Atlantic by signing the Belem Statement with the governments of South Africa and Brazil. The EU has an open call for an AllAtlantic CSA, ICES is not a part of any application to it.

Within the AORA-CSA Aquaculture WP several workshops have been organized (reported under the Aquaculture SG agenda point), several workshops in 2018, within the 'Ecosystem Approach to Ocean Health and Stressors' WP will be co-organized by ICES. The Knowledge Sharing Platform WP is working with the AORA-CSA WP leaders on transferring their 'cooperation inventories' into an online platform.

The Ecosystem Approach Coordinator reported from the AORA group on the ecosystem approach to ocean health and stressors, looking at research needs for ecosystem based management in the North Atlantic. Three workshops are planned to create a research agenda for the future for USA, Canada and EU on ecosystem based management and the ocean health: one on shared mandates with lawyers and government experts, reaching out to a new community; another workshop is linked with World Conference on Marine Biodiversity looking at tools for ecosystem management, and the third is linked through an Ocean Frontier Institute in Canada conference in October, to which stakeholders will be invited.

ICES Data Centre is involved in building a knowledge-sharing platform.

SCICOM Chair noted that outside the AORA process, it might good to draw the community of lawyers into other ICES activities.

Ellen Kenchington raised concern that ICES risks duplicating our efforts in AORA. One way to avoid this would be to ensure that relevant Steering Group and Expert Group Chairs are represented in the AORA groups to solidify links.

Action: ICES Coordination Group to develop an AORA-workshop follow-up plan to suggest ways of effectively engaging maritime lawyers in ICES work.

14 Fisheries and ecosystem overviews

The Advisory Programme Professional Officer, Inigo Martinez, gave an update on the Fisheries and ecosystem overviews with reference to Doc 28. Both ACOM and SCICOM members were invited to explore the overviews and give their feedback to the Secretariat on ways to improve the process. Making the overviews an ICES Flagship would be a good way of promoting the overviews. The overviews were discussed as part of the flagship activities under Ecosystem Exploration and Observation. EOSG Chair stressed the importance of the link to data collectors.

In discussion, it was pointed out that not all ecosystem overviews have the same format and, when going to the overview diagrams, more consistency is needed.

SCICOM members complemented the progress with the fisheries and ecosystem overviews, which were seen as a big step forward to better communicate the ecosystem approach to management. They noted that it was also very encouraging to observe the demand for these documents.

15 Science Cooperation

15.1 ICES co-sponsored symposia

Wojciech Wawrzynski, Head of Science Support, with reference to the Revolving list of ICES co-sponsored symposia (Doc 29) and Symposia Report 2017 (Doc 30) gave a progress update on ICES co-sponsored symposia. No new requests for ICES co-sponsorship had been received since the SCICOM September 2017 meeting.

Two symposia were held since the last SCICOM meeting in the autumn of 2017:

- Science delivery for sustainable use of the Baltic Sea living resources held in Tallinn, Estonia from 17–19 October 2017. Organised by two BONUS projects, INSPIRE and BIOC3, also involving transatlantic research.
- Ten International Flatfish Symposia and more than 30 years of advanced research: Flatfish Ecology in 2017 held in St. Malo, France from 11–16 November 2017 organised by Ifremer, summarising the past 30+ years of flatfish ecology.

This year, three ICES co-sponsored symposia will be held:

- 4th ICES/PICES/IOC Symposium on Climate Change and Impacts on the World's Oceans to be held from 4–8 June in Washington D.C., USA
- Management tools and standards in support of Sustainable Development Goal 14 to be held from 9–12 October in Reykjavik, Iceland
- Conference on “Oceans Past VII” to be held from 22–26 October in Bremerhaven, Germany

In 2019, three symposia are planned:

- Symposium on “Shellfish - Resources and Invaders of the North” to be held in Tromsø, Norway (date tbc).

- Symposium on “Challenging the scientific legacy of Johan Hjort: Is it time for a new paradigm shift in marine research?” to be held from 12–14 June in Bergen, Norway.
- NASCO Symposium on “The International Year of the Salmon” (running title) to be held back to back with NASCO from 3–5 June.

In 2020, a Symposium on “Marine Socio-Ecological Systems - MSEAS 2020: Navigating global change in the marine environment with socio-ecological knowledge” will be held in Yokohama, Japan.

15.2 PICES Cooperation

SCICOM was informed that the ICES President took part in the 2017 PICES annual meeting in Vladivostok, the Russian Federation. The ICES President gave presentations to both the PICES Science Board and Governing Council and PICES reinforced their interest to work together with ICES in the Arctic. Some member countries expressed their wishes for even closer cooperation between PICES and ICES in other areas such as aquaculture.

ICES/PICES co-sponsoring of theme sessions:

- ICES is co-convening the ‘Ocean acidification and deoxygenation and their impact on ocean ecosystems: synthesis and next steps’ session at PICES 2018 in Yokohama.
- PICES will co-convene the 2018 ICES ASC Theme Session I (Tipping points complex nature and implications to marine socio-ecological systems management) and Theme Session Q (Sustainability thresholds and ecosystem functioning: the selection, calculation, and use of reference points in fishery management)
- ICES-PICES 2018 symposium ‘The effects of climate change on the world’s oceans’, 4–8 June 2018, Washington D.C. The session and workshop schedule has been finalized; abstract submitters received notification emails regarding the acceptance of their abstracts, financial support to ECS has been distributed; current cooperation within the coordinating committee focused on awards, communication and publication plans.

Both the Secretariats are in process of cooperating on exploration of joint actions in connection with the IOC Decade of Ocean Science (2021–2030), and Arctic research.

Cooperation on Aquaculture

Action: Head of Science support and SCICOM Chair will send an update to PICES on the recent developments in the Aquaculture Steering Group.

Action: The ICES President will attend the PICES annual meeting and will report on aquaculture developments in ICES.

15.3 External projects and their benefits for member countries

Science Programme Project Officer, Lise Cronne, presented a short update on the external projects: divided in four sections: Running Projects, Projects in pipeline (not yet evaluated), Subcontracts and Upcoming calls.

The SCICOM Chair expressed his thanks for this update and was pleased to see the narrative on relevance added to the reporting. This would help SCICOM and member countries understand the relevance of ICES engagement in these projects.

15.4 Opportunities for ICES

Wojciech Wawrzynski, Head of Science Support presented Doc 33 on “Seascape of opportunities for ICES science”, bringing to SCICOM’s attention the emerging topics and processes to support the ICES mission and vision:

- Ocean governance under the UN 2030 agenda and the SDG14
- IOC-UNESCO ‘International Decade of Ocean Science’
- IOC-UNESCO Global Ocean Science Report
- MSP, marine plastics, Arctic and Aquaculture research
- International Year of the Salmon

SCICOM Chair thanked Wojciech for the presentation and the good work with the document, which had been very useful (1) for the sub-groups working in WGCHAIRS as they were commenting on ICES science priorities and (2) to SCICOM as background to the identification of flagship science activities.

15.5 Purpose and planning of ASC Open Sessions

Based on the discussion at the SCICOM September meeting, SCICOM Chair suggested to streamline the process for planning ASC Open Sessions so that it was more consistent with the process for Theme Sessions, thus helping to address the concerns about the lack of a level playing field in the selection process which were raised at ASC 2017. SCICOM Chair proposed that all ASC sessions should be called ‘Theme Sessions’. SCICOM could then harmonise the process of selecting the sessions, which would also be beneficial from a Secretariat point of view. The ASC would be run with a pre-determined number of Theme Sessions that could take a variety of formats.

Following discussion SCICOM agreed to streamline the Open Sessions and Theme Sessions in terms of the timing of the calls for proposals and the decision process. But, there was a preference in SCICOM to keep the distinction between the bottom-up and top-down sessions, both in terms of naming and also with timeslots dedicated to engage with the community. It was also necessary to more clearly define the differences between these sessions and to make it clear that ‘Open’ sessions were actually not as open as ‘Theme Sessions’.

Action: Based on comments from SCICOM members and in discussion with the Secretariat, SCICOM Chair together with HAPSIG Chair will put forward a proposal for streamlining the Theme Sessions and Open Sessions, and in particular the deadline for proposals, the decision process, the name and definition of sessions, definition of time-slots allocated and the number of sessions.

Action: SCICOM Chair to draft a definition of the two types of session used at the ASC to reflect differences in planning and development (top-down and bottom-up), attendees and session content.

ICES President, Cornelius Hammer, reminded SCICOM that an evaluation of the four-day format of the Annual Science Conference should be made after two-years.

15.6 Appointment of 2019 ASC Group

Decision: Mats Svensson (Sweden, Chair), Jörn Schmidt, Mike Rust, Peter Wright, Brian MacKenzie, Silvana Birchenough, Laura Uusitalo, Hedinn Valdimarsson, Pierre Petitgas, Niall O Maoiléidigh, Wojciech Wawrzynski and a representative from ACOM (TBA) volunteered to be members of the 2019 ASC Group doing the pre-selection of 2019 theme session proposals for final decision of SCICOM.

16 ASC 2018 – Conference programme

16.1 Conference Introduction/Programme

Anna Davies, Conference Coordinator, presented the ASC plans for 2018 with reference to Doc 35.

The ASC 2017 participants' survey was provided in the 'Background documents' folder. It included a lot of positive and constructive feedback for ICES to take into consideration for future ASC.

SCICOM noted that the conference venue, University of Hamburg, would offer four theme session theatres, and that the conference would be spread between the historical, main building of the university, and the new, modern west wing of the university building. There would be limited rooms for meetings, and thus SCICOM members were encouraged to reserve early.

The conference events were presented:

- **The Welcome Reception** to be held on Monday 24 September, at a very grand venue, close to the University building.
- **The Poster Session** to be held on Tuesday evening
- **Marine Science Slam (Open session)** to be held on Tuesday evening, prior to/combined with the poster session.
- **The Conference Dinner** to be held on Wednesday evening, at a venue in the city centre (~30 EUR for a ticket, payable on site, or at registration. 400 places available).
- **Networking meeting for communications professionals:**

Action: SCICOM members were encouraged to contact ICES communications (terhi.minkkinen@ices.dk), with any suggestions for persons from your institute who should be invited to the Networking meeting for communications professionals at the 2018 ASC (Wednesday daytime, TBC).

- **Excursions and activities** would be available for purchase from the local tourist board.

Accommodation. Unfortunately, the ASC collides with other large conference events in Hamburg, so hotels in the city centre are proving to be expensive and hard to come by. Only a few kilometres from the city centre the hotels are much cheaper. The conference venue is centrally located and very easy to reach by metro or bus. SCICOM members were advised to make individual hotel reservations as soon as possible.

Transportation. The German organizers have negotiated free public transportation tickets for all conference participants during the conference, covering all systems and the entire Hamburg area.

SCICOM members were informed that an EG Chairs event would be planned and SCICOM members were also invited to contribute to the event.

The 2019 ASC will be held in Gothenburg, Sweden, from 9-12 September.

16.2 Operation of Award Selection Group

SCICOM reviewed and discussed Doc 36 drafted by Myron Peck to address the challenges of the Award Selection process, i.e. the last minute rush before the Award Ceremony and the challenge of covering and evaluating all theme sessions.

ASG Membership

The challenge in previous years was to have adequate cover of all sessions. In order to cover all sessions there should be 8 or 10 members of the Award Selection Group (ASG), but this means that all members have to attend all sessions and this is difficult to achieve. Therefore the number of members should be increased.

SCICOM agreed that the membership should be expanded from the current 8–10 members and it was suggested to invite more ACOM members, former members of SCICOM and ACOM and EG Chairs to become members to give them more involvement in the process. ACOM Chair would favour recruiting people with the right expertise within stock assessments, etc. and not only ask ACOM members to serve.

The session conveners have a good idea of who is eligible for awards and who is not, and therefore formalising the input from conveners asking them to evaluate the oral presentations and posters would be helpful.

SCICOM noted that it is important that the members and contributors to the award selection process are perceived as impartial and this should be taken into consideration by its members.

SCICOM Chair summarised the discussion and thanked Myron Peck for preparing the discussion document. SCICOM agreed to the following decisions and actions:

Decisions:

Timing issue. 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. This would also provide a 'draw' for attendees to enjoy the full meeting.

Chair of ASG: SCICOM agreed that the Chair of the Award Selection Group should always be a member of SCICOM.

Membership. To ensure adequate coverage of all sessions SCICOM agreed to appoint a core awards group consisting of at least six SCICOM members responsible for judging the awards, and in addition to the core group the Chair of the ASG would reach out to EG Chairs and other experts in the system. The work of ASG would also be informed by views of the session conveners.

Action: SCICOM Chair in cooperation with Myron Peck and Chair of the ASC 2018 ASG will fine-tune the details of Doc 36 on the Operation of the Award Selection Group before it is reissued via the SCICOM Forum asking for comments and approval. The existing rules regarding posters would be included in the document.

16.3 Appointment of Hamburg ASC 2018 Award Selection Group

Decision: Rafael González-Quirós (Chair), Jan Jaap Poos, Antonina dos Santos, Steven Degraer, Silvana Birchenough, Antanas Kontautas, Laura Uusitalo, and an ACOM member (to be announced), were appointed for the 2018 ASC Award Selection Group.

16.4 Chaperoning keynote speakers

SCICOM representatives were appointed as hosts and contact persons for the keynote speakers, to introduce them to the plenary and to hand over a gift from ICES. The SCICOM Chair thanked the volunteers for their willingness to contribute.

Decision:

Jan Jaap Poos was appointed as host for Ingrid van Putten, CSIRO Oceans and Atmosphere, Australia.

Peter Wright was appointed as host for Murray Roberts, University of Edinburgh, United Kingdom.

SCICOM did not appoint a chaperone for the local German keynote speakers, Christian Möllmann and Martin Quaas, but Jörn Schmidt would introduce them to the plenary.

17 ICES Viewpoints

ACOM Chair, Eskild Kirkegaard, gave a presentation on ICES Viewpoints covering the criteria for viewpoints, viewpoints in progress and the process of developing a viewpoint from submitting a proposal to releasing the completed viewpoint.

Following a call for proposals via the Steering Group Chairs, and a selection process involving the SCICOM and ACOM Chairs, Steering Group Chairs and the ICES Secretariat, three viewpoints are now under development in 2017-2018. These are:

- **Future fish production in the Arctic** (Lead: Hein Rune Skjoldal)
- **Consequences of large fish stocks** (Lead: Anna Rindorf)
- **Vectors and management of invasive species** (Lead: Cynthia McKenzie, Bella Galil, provisionally with PICES and CIESM)

SCICOM noted that the call for viewpoints remains open and that ideas for viewpoints are always welcome. An official call would not be repeated. The process of identifying topics should be a combination of bottom-up and top-down.

It was clarified that ICES viewpoints would be given the same quality stamp as ICES advice, and therefore it would be published as an ICES product with no authors. If the people involved would see a benefit from producing a paper, this would be possible.

18 Science Planning and Priorities: feedback and conclusions

Eleven candidate flagships were presented by the breakout groups.

Three proposals, covering the vulnerability of human systems, food from the sea and future monitoring (including data) were regarded as having broad appeal and were relevant to the priorities identified by member countries and in the science priorities document.

Other proposals were narrower and SCICOM considered approaches to group them into wider flagships covering marine habitats (coupling between benthic and pelagic

realms, ocean migration and distribution of pelagic fish stocks, plankton) and pressure-state relationships (nonlinear and nonstationary effects of pressures; biodiversity, adaptive and evolutionary responses to pressures).

One further proposed topic on closed areas was regarded as important to ICES but it was rather specific and it was proposed to add this to the wider science priorities text rather than to address as a flagship.

In discussion, SCICOM Chair commented that the flagship activities were intended to inspire and engage the ICES network. SCICOM did not attempt to rank the flagships at the meeting, but a total of five were carried forward for further development in the science priorities document. He commented that the flagships cover big public challenges that ICES might address and would go forward as recommendations for Council decision, as SCICOM cannot commit to local allocation of resources. They have the potential to become ICES action areas in the future, but that would also be the decision of the Council.

In summary, the SCICOM Chair reported that short titles and descriptions for the proposed flagships would be developed with the breakout group leads and added to the science priorities document. The document would be posted on the SCICOM Forum for review and approval by 13 March 2018.

Action: SCICOM Chair in cooperation with Steering Group Chairs will finalise flagships based on the proposals received from the breakout groups and seek SCICOM review and approval via the SCICOM Forum.

18.1 Dates for next meetings

SCICOM meeting alongside ASC 2018, Hamburg, Germany

Sunday, 23 September (09:00 to 18:00)

Friday, 28 September (09:00 to 18:00)

SCICOM spring meeting 2019, Copenhagen, Denmark

Tuesday, 26 March (13:00 to 18:00)

Wednesday, 27 March (09:00 to 18:00)

Thursday, 28 March (09:00 to 13:00)

The Joint ACOM/SCICOM leadership will meet on

Thursday, 28 March (14:00 to 17:00)

19 Closure

The ICES President commented that he was very pleased to see how the ICES flagships had developed. He extended his thanks to all SCICOM members and the SCICOM Chair for doing a marvellous job in stimulating discussions and bringing all the information forward.

SCICOM Chair thanked SCICOM for good engagement, volunteering to contribute to ICES processes and producing papers in preparation of the meeting. He also thanked the ICES Secretariat for providing great support to SCICOM and the EGs.

Annex 1: SCICOM 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
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@cefas.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@cefas.co.uk
Mette Skern-Mauritzen (Norway), IEASG Chair APOLOGIES RECEIVED	Institute of Marine Research (IMR) Nordnes 5817 Bergen Norway	Phone +47 924 62 615 Email mette.mauritzen@imr.no
Mike Rust (USA), ASG Chair	NOAA Fisheries Office of Aquaculture 1315 East-West Highway Silver Spring, MD 20910 United States	Phone +301.427.8335 Email
Operational Group and Strategic Initiative Chairs		
Eva-Lotta Sundblad, SIHD Co-Chair	Swedish Institute for the Marine Environment	Email eva-lotta.sundblad@havsmiljoinstitutet.se
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 APOLOGIES RECEIVED	Fisheries and Oceans Canada Institut Maurice-Lamontagne, Mont-Joli, QC, Canada G5H 3Z4	Phone: (418) 775 0881 daniel.duplisea@dfo-mpo.gc.ca

Ex officio and guests:

Anne Christine Brusendorff, General Secretary (will attend 28 February and 1 March)	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	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

National members and alternates:

Steven Degraer (Belgium) (may have to leave on Wednesday evening)	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
Brian MacKenzie (Denmark)	DTU Aqua -National Institute of Aquatic Resources Kemitorvet Bygning 202 2800 Kgs. Lyngby Denmark	Email brm@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
Laura Uusitalo (Finland)	Finnish Environment Institute (SYKE) Mechelininkatu 34a 00251 Helsinki Finland	Email: laura.uusitalo@ ymparisto.fi
Pierre Petitgas (France)	IFREMER Nantes Centre P.O. Box 21105 44311 Nantes Cédex 03 France	Phone +33 240 37 40 00 Fax +33 240 37 40 75 Email pierre.petitgas@ifremer.fr

National members and alternates (continued)

Jörn Schmidt (Germany) and SIHD Co-Chair (will attend from Wednesday afternoon and on)	Christian-Albrechts- University of Kiel Department of Economics Wilhelm-Seelig-Platz 1 24118 Kiel Germany	Email jschmidt@economics.uni- kiel.de
Hedinn Valdimarsson (Iceland)	Marine Research Institute Skúlagata 4 IS-121 Reykjavík Iceland	Phone +354 Email hedinn.valdimarsson@hafogvat n.is
Niall Ó Maoiléidigh (Ireland)	Marine Institute Fisheries Ecosystem Advisory Services Farran Laboratory Furnace Newport Co. Mayo Ireland	Phone +353 9842300 Fax +353 9842340 Email niall.omaileidigh@marine.ie
Maris Plikss (Latvia)	Institute of Food Safety Animal Health and Environment (BIOR) 8 Daugavgrivas Str. Fish Resources Research Department Riga 1048 Latvia	Email Maris.Plikss@bior.gov.lv
Antanas Kontautas (Lithuania)	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) APOLOGIES RECEIVED	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

National members and alternates: (continued)

Svetlana Kasatkina (Russian Federation, Alternate member)	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 Gijón, Spain	Email rafael.gonzalez-quiros@ieo.es
Mats Svensson (Sweden) (Will attend 27 and 28 February)	Swedish Agency for Marine and Water Management PO Box 11930 40439 Göteborg Sweden	Email mats.svensson@havochvatten.se
Peter Wright (UK)	Marine Laboratory 375 Victoria Road Aberdeen AB11 9DB United Kingdom	Email Phone +44 1224 295436
Kevin Friedland (USA)	National Marine Fisheries Service 28 Tarzwell Dr. Narragansett, RI 02882 United States	Phone (401) 782-3236 E-mail: kevin.friedland@noaa.gov

ICES Staff:

Celine Byrne; Editor	Celine.byrne@ices.dk
Lise Cronne, Science Department Assisting Secretary & Science Programme Project Officer	lise.cronne@ices.dk
Anna Davies, Conference and Training Coordinator	anna.davies@ices.dk
Mark Dickey-Collas, Ecosystem Approach Coordinator	mark.dickey-collas@ices.dk
Julie Hallin Krogh, Science Department Assisting Secretary	julie.krogh.hallin@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
Inigo Martinez, Ecosystems and Advice Professional Officer	inigo@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