

Report from the Annual Meeting of Expert Group Chairs (WGCHAIRS)

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i Executive summary

The Annual Meeting of ICES Expert Group Chairs (WGCHAIRS) provides an opportunity for chairs of all ICES working groups to share experiences and ideas, co-ordinate work, meet with their steering group, Advisory Committee and Science Committee chairs, and highlight any support they need from the ICES network. The group also provides participants with updates on developments in the network and their implications, as well as opportunities to identify future science priorities and plans for advisory products.

This 2023 meeting report contains advice-related, science-related and cross-cutting issues. The meeting in 2023 included an extra day for incoming chairs, covering an introduction on the responsibilities for chairs, an introduction to the guidelines for ICES groups and a forum to express expectations and ask questions for the Chairs of the Advisory and Science Committees.

The advice topics that were addressed include conservation aspects in advice, challenges and solutions for advice-based working groups, guidelines for Benchmarks, exploring reference points, the Transparent Assessment Framework (TAF), online advice, and the Workplan for 2023.

The science topics that were addressed include how we can make ICES science more visible, implementing the Science Plan, the next steps for the Ecosystem-Based Management (EBM) Framework, and breakout groups for steering group chair interaction.

Cross-cutting topics included an update on the action items from the WGCHAIRS meeting 2022, gender and inclusivity in ICES, the Code of Ethics and Professional Conduct, developing and implementing methods for the knowledge that flows into advice, ICES Publications and the new ICES library, update from Overviews including the data profiling tool and pipeline, and a presentation and exercise on the role of scientists in ICES, as an applied science organisation

Key actions resulting from the meeting are:

- The Secretariat, ACOM and SCICOM chairs develop an outline for chairs' training in dialogue with chairs.
- An additional meeting in 2023 is needed to discuss the future and next steps on Diversity, Equity, and Inclusion (DEI) implementation together with WGCHAIRS.
- Secretariat, ACOM and SCICOM to work on a communication strategy: what is a
 feasible and meaningful way of communication and how can we use it most efficiently
 are the main questions. Communication needs to be focused, separating the signal
 from the noise. What kind of impact does ICES want to make, and who are the target
 groups?

Monday 23 January (Onboarding session for new chairs) - NEW CHAIRS

1 Welcome and introductions

The ACOM Chair, Mark Dickey-Collas, and SCICOM Chair, Jörn Schmidt, welcomed participants to the first day of the meeting designed for onboarding new chairs. The WGCHAIRS agenda was introduced.

After the welcome, the new working group chairs, the steering group chairs and ACOM vice-chairs were asked to briefly introduce themselves.

ICES General Secretary, Alan Haynie, extended a warm welcome to all participants and in particular, to the new chairs of ICES working groups.

2 Responsibilities of chairs

The network of expert groups is the foundation of ICES. Chairs are the drivers of the network, and chairs have a range of responsibilities, roles and aid to empower them.

SCICOM Chair presented the responsibilities of expert group chairs, explaining that chairs are at the core of ICES work by ensuring that expert groups are successfully generating ICES science and the basis for advice, and that chairs are the drivers of the community, engaging scientists in ICES work and highlighting new areas of science and new techniques. Chairs' responsibilities should be equally distributed among themselves to ensure that all tasks required for efficient operation of their expert group will be completed. Chairs' role is to facilitate good scientific practice in the group's work, to plan the group's work with all members and communicate with ICES structures: steering group chairs, SCICOM chair, ACOM leadership and ICES Secretariat. The main pillars of the recently adopted Code of Ethics & Professional Conduct were presented. Chairs must ensure that ICES Code of Ethics & Professional Conduct and requirements for membership of expert groups are understood and followed by chairs and expert group members. This document can be found on the ICES website and individual SharePoint sites. The main outlet of a group's work is the ICES Scientific Report. Cooperative Research Reports (CRR), Techniques in Marine Science (TIMES), ID Leaflets, the ICES Journal of Marine Science and peer reviewed publications could serve as additional outlets to communicate results. Chairs were asked to ensure that peer reviewed and other publications facilitated by ICES expert groups included an acknowledgement and to report details of peer-review publications produced by expert groups to the ICES Editor and relevant steering group chair. Chairs were strongly encouraged to share their expert group science highlights (e.g., science events, expert group anniversary, publications and other products) with the ICES communications team. Expert Groups seeking to use their science as input to ICES advice (e.g., producing a Viewpoint) should contact ACOM leadership to explore options. Expert group chairs were encouraged to work in close cooperation with respective steering group chairs whose role was to facilitate active horizontal and vertical communication, collaborations and coordination between expert groups and all other relevant ICES groups and identify opportunities for internal and external collaborations.

3 Guidelines for ICES Groups

SCICOM Chair presented all the background information needed as a working group chair, which can be found in the <u>Guidelines for ICES groups</u>, and a summarized version under the presentation <u>"Welcome to ICES"</u>. A new webpage with Frequently Asked Questions (FAQ) will be published.

The guidelines outline information related to expert groups, Science and Advisory Committees. It also included guidance about ICES expert groups seeking to use their science as an input to ICES advice and information about science highlights in ICES. It also clarified the recommendations to chairs of online expert group meetings in ICES. An update would follow that would include hybrid meetings as well. The guidelines also contained the Code of Ethics & Professional Conduct and gave an overview of working groups with ACOM affiliation before 1 Jan 2019. New guidelines will be published and contain new information (e.g., communication with outside organizations). Furthermore, the presentation offered information about the membership, reporting and executive summary.

The new stakeholder engagement and ICES advice strategy was presented. The <u>ICES Stakeholder Engagement Strategy was published at the beginning of the year</u>. Stakeholder engagement was increasingly important in ICES and could have different levels of engagement, from advice requesters and observers to experts from science groups and workshops. There were also different expectations of how the stakeholders should contribute, but also expectations from the stakeholders on what the engagement meant. Information about the mission and goals of the stakeholders' engagement was found in the document.

Questions from the working group chairs followed the presentation.

The WGEF chair asked about inactive members, whether nationally nominated members had an end to their term or how long they remained active. The SCICOM Chair responded that incoming chairs were encouraged to review the list and check whether the members were still active. With the nationally nominated members, there was also an annual process, where ICES reached out to national delegates to update the members' list.

The WGFAST chair asked which details workshop reports needed to have and when they needed to be delivered. The SCICOM Chair replied that it was all detailed in the guidelines. The report should represent the work of the group and should be as concise as possible. The report was expected to be submitted a few months after the workshop meeting ends.

Additionally, the SCICOM Chair advised using the SharePoint site and not an external platform, because this was how ICES could best document the group's work. In future there will be a transition from the SharePoint System to a Microsoft 365 system, where multiple users could modify the documents simultaneously and have the same functionality as Google Docs. The ambition was to have all the groups transitioned by the end of the year.

4 Expectations of new chairs

ACOM Chair led the session on expectations of new chairs. The discussion focused on what chairs wished to achieve through this position, advancing skill sets and career potential, following the science-to-advice process, and learning to work within multidisciplinary groups. The trade-off between innovation and quality assurance that might appear as conservatism was mentioned, and the ACOM Chair pointed out that ICES was considered an innovative organization globally concerning data management and Ecosystem-Based Management (EBM).

The ACOM Chair covered chair roles ranging from a quiet term to an ambitious one. Participants were asked to consider their roles in opening a discussion. Various issues were brought up regarding planned activities, anticipated problems, and reflections on the chair role and how this may contribute to career development.

Transparency in the development and priorities in assessments in the Integrated Ecosystem Assessment (IEA) groups was raised. The IEA groups aimed to work more consistently on the assessments. Still, there was a limitation of the time the experts could dedicate to this and the limitation in the ICES secretariat resources in terms of processing the ecosystem overviews. The connectivity between the IEA groups has been analysed in a recent paper by the Working Group on Maritime Systems (WGMARS) Chair. An increased focus on this was needed. The WGMARS chair expressed aspiration to work closer with other expert groups and the ICES management concerning their ongoing work on the analysis of the cooperation of ICES network. Working Group on Fisheries Acoustics, Science and Technology (WGFAST) chair expressed an interest in working in a multidisciplinary and international environment, commenting on the evolution of the stock assessment and the ecosystem approach and would like to connect more with different groups, data collecting and monitoring, marine spatial planning concerning an interdisciplinary approach that included natural sciences and the human dimension.

The chairs discussed the work of their groups and how chairing may foster acquiring new skills and evolving the existing skills, mentioning the importance of WGCHAIRS in exchanging experiences. New chairs did air some concerns regarding chairing a group as a relatively new member of the group. The ACOM chair expressed understanding of this, and that many different new perspectives were valuable and necessary. Being new in the process was sometimes what was needed, especially in ICES. The Head of Advice Department also agreed and highlighted that change might seem to come slowly in some groups.

It was raised that WGCHAIRS was a good source of information to get some ideas on how to run the group and integrate work in different institutes across groups. There was a hope to minimize the overlap between groups who work on similar areas and be more practical in case studies, learning by sharing how data were collected, and the research design.

The workload of groups was discussed, and in particular that insights into the science-to-advice process hopefully could facilitate a reduction of the workload to a manageable level. The ACOM Chair also expressed concern on the workload and encouraged the groups to work with ACOM, especially as some areas become politically important, e.g., bycatch, and elasmobranchs. The Fisheries Resources Steering Group (FRSG) Chair agreed that there were lots of new small processes added, specifically with data-limited methods and Surplus Production in Continuous Time (SPict) methods and would like to add some more resources to assist this work. It was mentioned that for similar stock assessment expert groups, there were so many tasks that an expert group did not have the time to develop new science and ideas. Most of the terms of reference (ToR) come from outside the group; the planning was left to the group, so there were no great expectations but business as usual. A strategy of task/ToR leaders' work in making people

engaged and delegating the workload was discussed. The FRSG chair acknowledged this and mentioned the hope that after the pandemic getting together again might give groups the will to explore more pioneering works and different ideas; having more unofficial meetings throughout the year has also been a successful process.

Chairing from the perspective of early-career-scientists (ECS) was debated. Some of the more experienced chairs expressed motivation in wanting to give back to the group and the community that has supported their development, welcoming new people. Some of the ECS expressed the difficulty of getting funding to travel. Chairs were to connect to other groups for sustainable development, learning about multiuse and preparing for the future and the exchange of practices from different countries, and were excited about bringing in new members. The SCICOM chair mentioned that there were some independent funds to increase mobility, and ICES encouraged individual countries to save money for this fund. In terms of hybrid meetings, these offered a better opportunity for ECS to participate; being adaptable was key here; however, there was a downside to them as fewer people may be engaged, and the actual networking was difficult online.

5 Open for questions

The floor was open for questions to SCICOM and ACOM Chairs and the heads of Science and Advisory Departments.

How do nominations of new members to the working groups work?

In general, experts could be nominated either by ICES country delegates or by the chairs (chair invited expert). For example, the latter could invite ECS to join the working groups.

ICES has 13–15 working groups (listed in Annex 10 of <u>Guidelines for ICES Groups</u>) that were only accessible for experts nominated by ICES country delegates. These groups are assessment groups that contribute directly to providing annual advice. The group membership was limited to ensure they were "protected" so that perceived and actual scientific integrity remains intact.

A mechanism to attract new members was to organize "open sessions" that usually occurred with a working group meeting, typically for 2 hours at the beginning or end of the actual meeting. These open sessions could also be used to promote the group's work. An example was given from the Working Group on the History of Fish and Fisheries (WGHIST), which had organized a public lecture at the aquarium.

ICES has experts from over 70 different countries, which is testament to the openness towards experts, not restricting access to the 20 ICES member countries. This message was important to convey – ICES is an open and transparent scientific organization.

How are references for grant applications written?

Official letters of support from ICES are written centrally by SCICOM (and/or the secretariat). ACOM/SCICOM leadership (or the secretariat) should be contacted to help initiate the process. Working group chairs may be approached to check planned project work for which a letter was being written to inform about the nature of the envisioned collaboration.

Who can represent ICES?

To represent ICES per se, experts or chairs would need to be in touch with ACOM/SCICOM leadership (or the secretariat) to get approval to speak on behalf of ICES. Experts were free to speak in their independent capacity or the capacity of their working group. In general, notifying

ACOM/SCICOM leadership (or the secretariat) was good practice as other discussions and sensitivities can be factored in before engaging.

How are difficult discussions documented? Does the working group report require consensus by all experts?

If there was disagreement in a working group, and consensus was difficult to achieve, a minority statement could be included in the report as an Annex. If a similar situation arose when drafting advice, it was only documented in the advice drafting group minutes, not in the actual advice. At a higher level (ICES Council and Bureau) decisions were only made by consensus.

How have long-standing chairs experienced being involved with ICES?

Having been involved in ICES as a chair for over 10 years provided opportunities to network with peers and to establish professional friendships. ICES provides a platform for innovation, that could develop over time into significant outputs. For example, ICES benthic assessment methods were started as ideas shared amongst colleagues within working groups. These ideas developed into large EU-funded projects and have now been incorporated into how ICES provides advice. In general, bringing both the different cultures, politics and backgrounds together has been very fruitful to progress joint work. Senior members of ICES working groups have the incentive to continue providing input and encouraging others to engage with ICES to get the same benefits they have received.

How to invite experts to be members of working groups?

There was no obligation to use the corporate design of ICES when inviting experts. If a larger number of experts needed to be invited or otherwise contacted, then it may be more effective to request the secretariat to send such an email on the behalf of the chairs.

In general

Chairs were encouraged to contact ACOM/SCICOM Leadership (or the Secretariat) to share their hopes, aspirations or any questions.

Tuesday 24 January (Day 1) - ACOM

6 Welcome

On behalf of the ACOM Leadership the ACOM Chair welcomed participants to the second WGCHAIRS meeting day which concentrated on advice related topics.

The agenda for the day was introduced and participants asked to briefly introduce themselves.

The conflict of interest statement. (https://doi.org/10.17895/ices.pub.21647825) was reflected on.

7 Conservation aspects in advice

The rationale, guidelines for the conservation aspects advice and their use were presented. Chairs were asked for their views.

For several fish stocks, key anthropogenic pressures on population dynamics do not come from fishing. These issues were not reported in the fishing opportunity advice until 2022, where conservation advice was added to the ICES fishing opportunities advice for European eel.

Advice on conservation status could be given only when a clear management action could be recommended for any non-catch anthropogenic pressure (e.g., blocked water passage, eutrophication, or degradation of habitat). It could be also used to highlight sensitivity to climate change.

Four sections of the ICES fishing opportunities advice sheet were edited/added to report on advice on conservation status: Advice on conservation aspects, conservation status, basis of the advice and issues relevant to the advice.

To support ICES expert groups, a decision tree was developed based on two closed questions. Three options were available to the groups depending on the answers (cf. technical guidelines).

2022 Example of European Eel Advice:

The section ICES Advice on Conservation aspects has been edited in consultation with ACOM, stakeholders and recipients of the advice. The new section Conservation status was added with clear message to managers. The sub-section Basis of the advice contains more detailed information with a list of essential conservation measures. Following the technical guidelines, the section Issues relevant to the advice presents issues related to the Marine Strategy Framework Directive (MSFD), published ICES advice and further activities and non-anthropogenic factors.

ACOM Leadership encouraged the ICES expert group chairs to review the European eel advice sheet and read the technical guidelines. This was a new path of the advice that would concern a small number of stocks (i.e., eel, Eastern Baltic Cod, salmon, elasmobranchs).

The chairs confirmed that the elasmobranchs stocks could be difficult to address because of the large number of conservation measures. An incremental roll out of the 56 stocks should be implemented starting with the high priority stocks.

8 Challenges and solutions for advice-based working groups

Before the meeting, WGCHAIRS were asked to view a video on the use of MIRO virtual white-boards: https://www.youtube.com/watch?v=Zbde_j3CbYo

After a presentation by the ACOM Chair, WGCHAIRS split into subgroups and used a MIRO virtual whiteboard. The subgroups were asked to list and prioritise the day-to-day challenges that they encountered. Each prioritised challenge was then linked to a potential, and pragmatic solution. Operational, personal and strategic challenges were considered and solutions that were beyond "provide more resources or expertise" provided.

In plenary, one rapporteur from each of the seven subgroups was asked to report back on one of the issues brought up in their discussions.

Subgroup 5. For assessment working groups, priority was given to conduct and update a high number of stock assessments and time allocated for scientific discussion at the meetings was limited. If some of the stock assessments were to be conducted every 2–3 years (using some kind of risk-based framework to select the frequency of the assessment/advice) that would save time to be allocated to other tasks in the working groups. There was a question about how much update was needed for a stock assessment in a given year if updated advice was not requested for that year. If all updates for an assessment were needed except for the advice sheet itself there would not be much workload reduction.

For working groups feeding into ecosystem advice there were challenges related to the number and timing of the various requests that frequently overlap, which stresses the network. It would be beneficial to work with advice requesters to negotiate a more reasonable timetable.

Subgroup 4 highlighted that on some occasions access to relevant data was a challenge since not all in the network were willing to share it or the data have not been published, which compromises the production of best available science.

Subgroup 3 noted that it was a challenge to keep experts engaged after the working group is over. Another important challenge was to properly evaluate the quality of ICES advice. There was a section of "quality of the advice" in stock assessment sheets, but this section sometimes includes statements that are subjective, and it lacks an overview of the process that leads to the advice. The subgroup found that it was not clear what to highlight in this section.

Subgroup 1 noted that access to travel funding could be a challenge for some experts, also individual capacity and time. The hybrid format of the meetings means that there could be several separate preparatory meetings in advance of the working group. Hybrid meetings made it more difficult for some to get funding to attend the meetings in person. Subgroup 1 also noted the difficulty of translating complex ecosystem issues into simple advice messages for ecosystem advice. Another challenge was the introduction of too many new systems at once, e.g., TAF, new Data Limited Stock (DLS) rules, conservation advice, which could be problematic for assessment working groups.

Subgroup 6 highlighted four issues; integration of EBFM, workload, the reduction in scientific survey effort (one chair noted that the report from WKUSER2 would be soon released), and the fact that single stock advice sometimes did not match with management units. In relation to the last point, it was not clear what managers should do when the catch advice relates to an area that was shared by several advice requesters.

Subgroup 7 pointed out that there could be unexpected challenges during the working group. For example, if one expert suddenly needed to leave due to personal matters before the work was finalized. Delays in data delivery could also be an issue. In stock assessments even if a small fraction of the input data were missing, the assessment still needed to be rerun. These delays kept the assessors engaged in their own work during the working group and they were not able engage in general discussions. The solution was to get the data in good time.

Subgroup 8 noted that efficient communication between working groups was a challenge. The use of acronyms for working group names that many times do not relate to the subject of the working group made it difficult to know what the main subject of interest was for each of the groups. For assessment working groups it was difficult for stock assessors to pick up relevant information to their stocks coming from other working groups. This could improve by allocating coordination/interaction sessions between working groups during the first day of the meetings.

The Head of Advice Department mentioned that the issue of frequency of delivery of single stock advice was being discussed with the advice requesters and some of them were interested in reducing the frequency. What to deliver in those years when advice was not provided still needed to be agreed. Data were mentioned on two counts during the discussion: data not delivered and data not being available at the start of a working group. Sometimes data providers were not able to deliver the data at the time it is requested by working groups. It was useful for the ICES Secretariat to know if the delay was by a specific country and by how much. More details about what was not available to ICES would help to follow up on these issues with relevant data submitters. This feedback could be provided in the Stock Information Database (SID).

The ACOM Chair summarized the **action points** from this session; summarized the issues and challenges described in the MIRO board, and highlighted prioritizations.

9 Guidelines for Benchmarks

New guidelines for benchmarks were being developed. The purpose of benchmarks, the distinction between a benchmark and review, and the flexibility to explore methods within the working groups was discussed. WGCHAIRS were asked for their views.

ACOM Leadership presented the new guidelines for benchmarks including the expanded scope beyond fisheries advice.

The different types of processes (expert group, review and full benchmark) were introduced too.

There was a question on whether the review process was the same or independent from the expert group. ACOM Leadership responded that expert groups were indeed a part of the process. The review was done intersessionally to decouple from meetings.

Another chair asked for clarification on whether the review replaced the interbenchmark and how expert groups were informed about the ACOM decisions. ACOM Leadership responded that the current structure gave more power to the expert groups and that the Benchmark Oversight Group (BOG) took care of communicating ACOM decisions to expert groups.

Another chair asked about the priority given to new stocks as the criterion 'last time since benchmark' did not apply. ACOM Leadership responded that new stocks would score the highest under this criterion.

There was a question on how to fit the benchmarks in the expert group timeline and ACOM Leadership responded that the prioritization of tasks corresponded to expert groups.

A chair asked whether harvest control rules (HCR) and evaluations were embedded in the process. ACOM leadership responded that HCR and Management Strategy Evaluation (MSEs) were not included yet but was aware of the need to highlight and re-evaluate.

There was a question/comment on the lack of expertise to perform the assessments after the benchmark. The ACOM leadership responded that there have been and would continue being sessions for the application of methods to educate experts.

The different levels approach was praised by one of the chairs who recognized the benefit the more 'environmental' benchmarks like the vulnerable marine ecosystems (VME) and offered to provide more specific examples. ACOM Leadership agreed to the proposal and thanked the chair for the offer.

10 Exploring reference points

After the workshops on guidelines for reference points 1 and 2 (WKREF1 and WKREF2), the ICES network needed to explore the implications and potential challenges of their concepts. A draft proposal was presented to test the concepts on a wide range of stocks. WGCHAIRS was asked for their views and to suggest potential approaches.

ACOM Leadership presented ICES' plans to progress on reference points in 2023. Workshops have been established with ToRs to address issues regarding developments of the ICES reference point framework (following from WKREF1+2) and evaluation of rebuilding plans (building on work in the previous Workshop on guidelines and methods for the evaluation of rebuilding plans (WKREBUILD)). Both processes have made recommendations that have not yet been agreed by ACOM, since more work was required to evaluate their practical suitability and general applicability. WKREBUILD would meet later in 2023 to determine appropriate reference points and HCRs for rebuilding stocks. WKREF3 would select a number of stocks from each assessment working group to test the new proposed framework of reference points for Category 1 stocks. The plan is to have around 25 Category 1 stocks representing a range of life histories and models etc.

There were some questions from the chairs about who would select the 25 stocks for WKREF3. The idea was that the groups themselves would propose candidates, based on suitability of the stock and availability of expertise to attend WKREF3 and work on the reference points. If there were too many stocks proposed, ACOM Leadership and the workshop chairs would ensure that a representative selection of stocks was made. It was also asked whether the new framework would have an option to have a "bespoke" reference points for difficult stocks where standard methods may be inappropriate. e.g., the framework was not designed for stocks where fishing pressure was not the key pressure. This would require extra thought, but the hope was that testing the framework for stocks with different life histories and assessment models would allow for enough leeway to ensure that most stocks fit into the new framework.

11 Transparent Assessment Framework (TAF)

The take up of TAF has slowed down. The benefits and value of TAF were discussed and WGCHAIRS was asked why take-up has slowed.

The subject of TAF was introduced by the ACOM Chair. It was emphasised that TAF would remain and that ICES guidelines required assessments to be available on TAF after a benchmark.

A presentation was made by the ACOM Vice-Chair highlighting that TAF was more than a system to make assessments easier to find and run – it was an integral part of ICES quality management system, and relates to three of the ten principles of ICES advice:

- Document openly
- Apply FAIR principles
- Undergo peer review

The adoption of TAF increased strongly in 2019, but has stalled since the pandemic, at around 25% of stocks. TAF offers the benefits of ease of repeating the assessment process, provides a common framework for assessors to view each other's codes, supports the audit process and helps ease succession between assessors. TAF would not be restricted to assessments, and for example would also be implemented in Regional Database & Estimation System (RDBES) and linked to the standard graphs, eliminating the need for the Excel (xml) spreadsheet intermediate stage.

An example of the workflow under TAF was presented – data, model, output, report – with each stage being flexible and adaptable. Training on the system was being supported by the secretariat, with a number of workshops organised (including one taking place at the same time as WGCHAIRS, with 33 participants). ICES was looking to recruit "TAF ambassadors" within each assessment working group to provide support and guidance to working group members, and to be a link to the wider TAF community.

A number of questions were raised by the group and responded to by the ACOM Vice-Chair.

- Q. One barrier to uptake is having to ask the ICES secretariat to create a repository in Github each year would it be possible to do this automatically?
- A. This sounds feasible and the TAF team at the secretariat would look into its implementation.
- Q. At what point in the year do stocks in TAF become available outside the assessment working group?
- A. The answer to this was not clear and this would be investigated before reporting back.
- Q. A number of assessors, particularly those dealing with data limited stocks, are less familiar with R and have other workflows. How will they be supported in using TAF?
- A. ICES was currently organising a series of workshops for assessors, and these were primarily focused on people working on category one and two stocks. After these workshops were complete, ICES would consider the options for broadening out uptake across other groups.

12 Advice online

The latest developments concerning online fisheries advice were presented. The process of turning the standard PDF advice sheets into a more accessible/interactive format (i.e., online advice) has been under development for the past two years, and a beta version of the online advice app¹ was released at the end of January 2023. So far, the beta version contains only online versions of single-stock advice, but other types of ICES advice were planned to be added in future (e.g., online versions of fisheries overviews are planned to be introduced summer of 2023) along with its integration with the Transparent Assessment Framework (TAF).

By using the online advice app, catch scenarios and other underlying data were more readily accessible and downloadable for users and generally allow for a better way to visualize the data. It was noted that the classic PDF advice sheets would also continue to be available for download. The app thus offers an additional interactive tool to further interrogate advice and was furthermore easy to integrate across different products and was customizable. Users would also be able to provide feedback through a form provided within the app.

The online advice app draws from a few different databases including the standard assessment graphs (SAG) and a new one: 'Advice View' (working off the standard graph template), created especially to store catch scenarios. Currently, the online advice app contained 100 of the 200+ ICES stocks because the specificity of each stock (and ensuring the app works properly for all) has been one of the main difficulties in developing online advice. For stocks to show up online, they will require the creation of an 'Advice View' entry at the end of working group meetings (much like the SAG template).

A quick tour of the app's interface and a demonstration of its use were then presented.

13 Workplan for 2023

The advisory workplan was scheduled-based on Expert Group meeting dates and Advice Requester deadlines with the Advice Drafting Group and ACOM Meeting to finalize the advice intersessionally and also taking into account time needed for data calls.

Planning was the key and the time needed to do the work was often underestimated by the experts concerning special requests. The Advisory workplan was planned without a mandate. During the last couple of years with online and hybrid meetings real time multi-tasking of experts has increased and there have been cases where experts pulled out of processes due to either time limitations or having been allocated to other processes. This has had an impact of the work and it has become difficult in some cases to deliver agreed contractual advice and corrections that had to be made to advice documents have increased.

Information on how the workplan could be accessed through different links on the ICES website and SharePoint sites was presented. Expert group chairs were encouraged to get in contact with the Secretariat or national ACOM member if they had questions or concerns regarding the advisory processes and planning.

¹ https://ices-taf.shinyapps.io/online-single-stock-advice/

Wednesday 25 January (Day 2) – JOINT ACOM/SCICOM

14 Welcome

ACOM Chair welcomed all participants to the meeting on behalf of SCICOM Chair and himself. The agenda was introduced.

ACOM Chair drew the attention of participants to the new <u>ICES Code of Ethics and Professional</u> <u>Conduct</u> and asked if any participants wanted to declare a conflict of interest. No conflict was declared.

15 Action items from WGCHAIRS meeting 2022

SCICOM Chair presented an update on the three action items derived from the WGCHAIRS meeting held in January 2022:

- Gender and inclusivity in ICES. A WGCHAIRS Diversity, Equity, and Inclusion (DEI) subgroup was formed, and the meeting would receive an update from the subgroup under Agenda Item 16.
- Reinvigorating the community. It was agreed that the ACOM leadership, SCICOM and steering group chairs together with Secretariat would use the input received through the 'reinvigorating the community' exercise to identify measures to support the ICES community.
- The Secretariat had been asked to add an example of a **technical executive summary for science experts**, as the current summaries are aimed for a broader audience and details interesting for literate experts are missing. Currently, [the secretariat(?)] is working with the groups on a case-by-case study, but the plan is to add an additional template as an appendix to the next edition of the Guidelines for ICES Groups.

SCICOM Chair suggested to form a WGCHAIRS subgroup to identify elements for a chairs training course to be run via the ICES Training Programme; "How do I run a technical or a hybrid meeting". The subgroup would be tasked to present a proposal for review by the Science Committee (SCICOM) or ICES Training Group in September.

Action: The Secretariat, ACOM and SCICOM chairs to develop an outline for chairs training in dialogue with chairs.

16 Gender and inclusivity in ICES

The ICES Coordinating Officer presented a progress update on the ICES Gender and Equality Plan (GEP).

The 2019 ICES Strategic Plan set the stage to create a welcoming, resourceful, inclusive and gender-balanced organization. In 2022, the gender equality plan was developed through a

participatory process. A WGCHAIRS sub-group was formed to facilitate discussion and develop guidance for Chairs on how they could foster great inclusion and diversity in the operation of their working groups.

One of the GEP indicators that would be monitored annually was the gender balance of chairs in the ICES expert groups. In 2022, the gender distribution of chairs of ICES groups was 37% women and 63% men. Unfortunately, ICES currently lacks the infrastructure required to systematically collect gender-disaggregated data beyond the gender binary.

Some overarching recommendations were made by the WGCHAIRS DEI subgroup, including:

- Regular DEI sessions at ASC.
- Training for chairs on: DEI; orientation on working in the ICES system; leading a meeting; and interaction with groups.
- Improved databases to have systematically collected information on ICES community demographic (including not only gender but ethnicity and other elements).
- Encourage National Delegates to consider DEI/EDI (equity, diversity and inclusion) in their nominations.
- Consider if a more formal structure is needed for the DEI work in ICES.
- Update guidelines for ICES groups with ideas developed by the WGCHAIRS DEI subgroup.

A report with more detailed information on each specific session of the subgroup has been included in the meeting documents at the WGCHAIRS SharePoint. Additionally, a DEI Theme session (Theme session Ghttps://www.ices.dk/events/asc/2023/Pages/Theme-session-G.aspx) would be part of the ASC 2023, interested participants were encouraged to submit their abstracts.

During the discussion, additional actions, points and suggestions were included:

- Recommendations from the subgroup that are supported by expert group chairs could be actioned immediately.
- The community needed to continue to engage and regularly discuss DEI. To open this
 discussion, people were welcome to submit papers to the ASC 2023 session for DEI.
- Where participation data were collected (e.g., Annual Science Conference Registration), ICES collects self-identified gender-disaggregated data inclusively, beyond the gender binary. Unfortunately, the current national nomination system does not facilitate collecting self-identified gender-disaggregated data. Therefore, gender was inferred based on name, limiting the historical data to binary gender data. A planned revision of the nominations system would address this issue in future. A more diverse group would be welcome to contribute to the discussions and steps forward in 2023.
- While gender has been a starting point for highlighting inequity in the system, the approach has been to work towards fostering greater inclusion, recognizing the importance of diversity broadly.

Action: An additional meeting in 2023 is needed to discuss the future and next steps on DEI implementation together with WGCHAIRS.

17 Code of Ethics and Professional Conduct

SCICOM Chair presented the Council-approved <u>Code of Ethics and Professional Conduct</u>, which defines ICES principles, guidelines, and practices for key areas of organizational activity. Chairs were expected to highlight and comply with the Code of Ethics and Professional Conduct, including following and encouraging others to uphold a safe and welcoming working environment, following Good Scientific Practice and declaring any Conflict of Interest. Furthermore, the chairs were expected to assist expert group participants and chairs in applying the Code, and to highlight actions in the event of any breach of the Code.

Issues related to misconduct should be resolved directly. In cases where it was not possible, ICES HR officers were the first point of contact. ICES was developing an anonymous tool for reporting misconduct, which should be available to the wider community in the second half of 2023.

WGCHAIRS were invited to share their views on how the Code of Ethics and Professional Conduct should be implemented. The discussion was centered on how to plan for an expert group meeting considering the variety in time zones among the groups' participants. The first discussion point included whether ICES guidelines should also include general rules for managing differences in time zones among participants within a group. It has been recognized that this was a challenge for an increasing number of groups with global participation. Instructions for managing global-scale cooperation should be better defined in the future to elevate and better support scientific discussion and ideas exchange among all participants. WGCHAIRS have been advised to define meeting times individually, considering the best option for the range of time zones within the expert group and the ability of their members to participate. The importance of addressing inclusivity for participants caring for children or other personal reasons has been recognized.

18 Developing and implementing methods for the knowledge that flows into advice

WGCHAIRS meet in subgroups to share and discuss experiences on creating, implementing and/or receiving new knowledge and rapporteurs highlighted 2-3 main points from their groups:

Subgroup 01:

- The workload was too big during the working groups and there was only time to think about the advice, not in the science.
- Do science working groups know the advice working groups that can use their science to contact them? ACOM and SCICOM could facilitate the links for science transfer into the advice groups.

Subgroup 02:

- Improving communications within ICES on what was done and what would come new
 in the following year in the groups. Also intensifying the communication with the requesters.
- Having guidelines for all actions in ICES places the working groups in a mental box that may prevent innovation.

Subgroup 03:

 How to move from an EU project to generalize it in ICES. Sometimes people do not want to change.

- Demonstration advice was a good tool to expose people to new ideas.
- Innovation could also be problematic when data requirements change. It may require
 running the old system in parallel to a new system to prove the added value of the
 changes.

Some changes were so rapid the scientists could keep up with the pace. It also required budget (and time) to innovate and transfer knowledge.

Subgroup 04:

- It was difficult to go through the ICES system from a new idea to a benchmark to review
 to real application, etc. In addition, when the *Innovation* arrives to the working groups it
 also needed a workshop to explain it before could be directly applied, as the guidance
 documents, comments and reviews were in different places and only a few people know
 them.
- An assurance process was needed to ensure that a particular change was really needed, and ICES has responsibility to assure that the science is robust.

Subgroup 05:

- It was difficult to get the new idea to be taken up.
- There was a barrier to reaching out and getting the right people and expertise in the working groups. Young people were keen to join and collaborate with the right guidance and mentorship.

Subgroup 06:

- Need to better communicate and integrate multidisciplinary science in the working groups. Most future challenges would require this multidisciplinary approach and knowledge transfer.
- Innovation needed space and time to develop and to assure that the science was robust
 and it was often limited by time scheduled and other requests and tasks. There was a
 need to explore more flexible tools to facilitate knowledge exchange; at the moment pdfs
 were the common transfer tool in ICES.

SCICOM Chair explained the exercise done with stakeholders at MIRIA and MIACO (managers and stakeholders) to identify what science is missing or what needed more focus in the long-term in ICES. ICES has operational needs for science that are required immediately for advice and the medium-term to long-term strategic development of science that is not connected directly to advice (i.e., offshore windfarms). The results of the exercise would be available to WGCHAIRS in the MIRIA and MIACO reports.

19 ICES Publications and the new ICES library

The ICES Lead Editor introduced the various ICES publications, in-house as well as the ICES Journal of Marine Science. It was underlined that the editorial office was here to help the community publish with ICES. There was a brief overview of Editorial Office staff and their roles.

The ICES Editor focused on the TIMES and CRR series, giving a description of what they cover and what kind of publications they are. They should not be viewed as competing with journals, and authors were welcome to submit to other journals after publishing in those series. The ICES Editor showed the broad geographic readership of those series and emphasized that external authors could be invited to contribute.

The External Publication Database was presented. External publications were now part of the online library. Instructions were provided on what kind of content should be submitted, and on the process of making those submissions public.

The ICES Editor issued a reminder that the ICES Journal of Marine Science is now fully Open Access, and that all articles as well as the whole archive were available for free. This would have no impact on editorial standards for this journal, and the Editorial Board believed strongly that no researcher should be put off submitting to IJMS due to financial issues. Often costs were already covered through institutional schemes. In addition, Oxford University Press offers a simple waiver scheme.

A demonstration of the ICES Library site was given, including a highlight on each expert group's 'homepage' listing all their reports and other publications. The basic statistics pages were shown, and some search tips were provided. The advantages of creating a FigShare account was demonstrated; registered users could follow searches and groups, getting email alerts, as well as create a reading list.

Questions:

There were questions about user accounts, and how they could be matched up to existing authors listed in the library. It was noted that user accounts could be connected to ORCID accounts.

A comment was also made about how to easily find expert group reports by publication date.

A note was made that content on the library was constantly being cleaned up and republished, so if an item seemed to be missing the Editorial Office should be informed.

Update from Overviews: data profiling tool and pipeline

The data profiling tool was presented by the ACOM Vice-Chair to the group emphasising its aim and the reasons for the need for such a tool. The tool supports expert groups in evaluating the completeness of supporting information for a data product, data source or web application. It was designed as a checklist for dataflows and data products primarily feeding scientific or advice outputs through ICES working groups. The aim was to both document the dataflow or product, but also to check for completeness of the dataflow, and to document ICES efforts to quality assure all aspects of its advice production. The tool helps identify the use rights of the data and the storage location.

No comments or questions were asked.

20 The role of scientists in ICES, an applied science organisation

Marta Ballesteros, CETMAR, gave a presentation about the use of scientific evidence and how decisions are made in the policy process. Before the meeting, participants were asked to answer a survey. Using drawings as a social research method, chairs were invited to jointly reflect on the role of scientists within ICES and how scientific research reaches society and leads to public policy decision-making.

The presenter went over the basics of the policy process, with the purpose of framing the debate afterwards. The idea was that this could be an initial draft to spark the discussion on the role of scientists within ICES.

What role for scientists in ICES?

Key results from survey were shared and challenges were outlined:

- Unprecedented **challenges** on a scale that has never been seen before (Anthropocene and Blue Acceleration).
- Edge of planetary boundaries where ecosystems may collapse, threating societal well-being and prosperity (Rockström et al. 2009; Steffen et al. 2015; Nash et al. 2017)
- **Unsolved tensions**: an appreciation of the limits of science as an impartial arbiter among policy options comes at exactly the moment when demands for scientific input to policy are increasing (Bijker *et al.* 2009).
- Claims for societal goals to align more strongly with broad values like justice, stewardship, unity and responsibility, both towards other people and towards nature (IPBES, 2022).

Additionally, around half of the chairs had experienced frustration due to the lack of use of their evidence.

Action point

Proposal to draft three complimentary streams for scientists within ICES.

- 1. Doing science involves exploration, analysis, idea creation and testing. If possible, explain the benefits and implications for society.
- 2. Making sense space for creating actionable knowledge. Defining what knowledge is relevant to a policy choice/setting, finding mechanisms for accommodating research policy agendas, and developing and strengthening integrative and holistic approaches.
- 3. Providing advice Guide to ICES framework and principles.

Ouestions/comments

- Question about national and international politics and how they meld with everything mentioned? The presenter responded that politics is embedded in everything, therefore it is not explicitly mentioned. Politics and science are both core elements of policy making. If this initial idea is continued, politics needs to be factored in, as well as how to deal with politics. Several of the insights from the survey were about tensions with politics and the policy area, that need to be dealt with.
- Comment of the necessity to be precise when looking into the elements of the system.

A challenge is that scientists are operating in different ways in the system depending on the group to which they contribute. Where do we see the translation happening and what is the role in terms of the management? The presenter responded that what was presented mainly to get the ball rolling, and now it was up to chairs to continue discussions and maybe for some groups to take the lead in addressing specific issues and questions. The collective intelligence of ICES network is key to bridging the gap between science and policy.

- Question from the perspective of a social scientist in a science group that would love to talk to policymakers and help translate questions coming to ICES. Can we be there when questions are asked and help unpack them, ensuring that more social science is recognised? Response from presenter demonstration and pilot projects. Social scientists need to improve at delivering outputs that are tangible and usable. Considering the reluctance when social policy is mentioned, it is necessary to be sure that our steps are robust to guarantee that our side of the table is not immediately removed. Comment from an observer's point of view about the politics involved, and part of the reason for the current setup was a trust factor and safe space for discussion and debate, where information could be very guarded. It prioritises the relationships with requesters of advice without pushing agendas or dealing with some underlying issues or insights. Certain lobby groups also use ICES on different sides of issues in a power-dynamic way.
- Comment about the difficulty and the dense nature of the subject being harder for non-social scientists to follow. The survey posed a problem with wanting to provide multiple answers, which was impossible, or to answer 'other,' 'I do not know', or give no answer. Response from the presenter that there was a trade-off and balance between the complexity and usability of the survey. In different settings, there would be different methods to gather replies. Comments and issues with the survey were noted and would be considered for future surveys.
- Comment that the conversation would be useful to continue in a longer format and in
 other forms, and whether an analysis of the drawings would be provided. The presenter
 responded that, indeed, analysis of the submitted drawings and poll results would be
 included as part of the overall conversation and moving forward.
- Comment that communication was an issue. Protecting outputs could benefit, perhaps through steering group chairs, communicating to groups and highlighting their priorities and where they are coming from with stakeholders and advice requesters.
- Question to the presenter about the survey. Was it considered that some working groups
 provide data and do not go into policy, though there are the same problems with communication? Our aspects of policy would be different from an advice group. The presenter responded that this was critical and that there was differentiation for groups
 providing advice to ACOM.

Thursday 26 January (Day 3) - SCICOM

21 Welcome

SCICOM Chair welcomed all participants to the meeting, introduced the principles for equitable and thoughtful communication and briefly introduced the agenda.

22 How can we make ICES science more visible?

Background: Science produced in ICES expert groups is published in ICES Scientific Reports and often also in peer-reviewed publications. We are looking for ways to make ICES science more visible beyond these and invite chairs to share examples to initiate a discussion on ways to increase the visibility of ICES science. The session was organized as an interactive session with short presentations and work on a MIRO board to collect, organise and prioritize ideas.

SCICOM Chair presented this item.

The main way of disseminating ICES Science was through news items on the webpage and via ICES social media platforms. Different ICES products have different visibility. How could the visibility of ICES science be increased? To whom should the science be made visible internally and externally (which can be very diverse)? Ideas were discussed in six subgroups on how these goals could be reached, as summarised below:

Subgroup 1: A better website that was easier to navigate. Training courses were not accessible widely and were hard to find unless someone knew about them.

Subgroup 2: Who to speak to? Policymakers do not know much of ICES work. YouTube channel – panellists would present publications or ICES products on a recurrent basis. Collaborate with other institutes on similar topics for wider reach.

Subgroup 3: Clickable interfaces could be created by working group themes to navigate the complex world of groups more easily. Adapt the scientific language so it was easier to read. It would be good to translate it into different languages for stakeholder engagement.

Subgroup 4: The usability of ICES webpage should be improved. Communication among working groups should also be improved and to determine where the research overlaps. Enhance the visibility of the YouTube channel. Standard policy flyers could be developed. Training courses were difficult to find, prohibitive in cost or were only in person without an online option. Online courses could be a way forward.

Subgroup 5: Video series on common ICES topics/issues could be developed. Storymaps could be created. The Science part of the website could be clearer. Infographics on what is ICES, especially for students. Stakeholders, most of the time, do not know about the groups.

Subgroup 6: Fishers do not know what ICES does – translate some communications material into local languages. Internal communication within groups should be improved too. Explainers to newcomers to ICES.

Actions: Identify what are feasible and meaningful ways of communication, and how to use them most efficiently. Identify what kind of impact does ICES want to make, and who were the target groups?

SCICOM Chair gave a presentation on 'Communication within and across', explaining that since the ICES network is extensive, it is sometimes difficult to easily see the work being done. The steering groups are facilitating communication between themselves, and ways to improve the communication across the groups are continuously being sought.

One concrete proposal to increase communication across expert groups was presented by the Conference Coordinator, inviting working groups to submit overview posters for an interactive working group poster session during the ASC 2023 in Bilbao, Spain. Each ICES working group would be allowed to provide a poster to be displayed at the session and shared on social media. A template would be provided in March to give guidance on what the focus and objective for the poster should be, and there would be a QR code on the poster linking to the relevant website. The deadline for submitting posters would be end-June. It was noted that the proposed session would not compete with the traditional poster session; it would be set up as a separate session.

Questions/comments

- Chairs applauded the initiative. It was suggested that ICES could fill in the template on behalf of the working groups to save them some time. SCICOM Chair responded that receiving insider information from the group members would be more useful, i.e., things the Secretariat need to be made aware of.
- Suggestions were made to combine the proposed session with a speed-dating event and add a game to make it fun and engaging experience.
- A suggestion was made to use the posters as infographics on the website. This was a
 perfect opportunity to refresh the working group web pages by adding posters to the
 working group community pages. It would help address the previous item on making
 science more visible.
- Feedback regarding the template. Some felt it would be good to have a standardised template, while others commented that it could lead to a wall of boredom; if they all looked the same it could become unengaging. Also, for the posters to be used by ICES and promoted more widely, they needed to have some generic elements. Both were useful, but essential to steer the groups in the right direction (whether to focus on generic elements or highlights of the year)
- A suggestion was made to add colour coding on the posters to show to which steering group they belonged.
- Since not all expert group chairs were expected to attend ASC in person, the chairs may want to delegate the posters' staffing to other group members.

23 Next steps for the EBM Framework

Chair of the Integrated Ecosystem Assessment Steering Group (IEASG) presented on behalf of the Ecosystem-Based Management Framework subgroup.

The ecosystem-informed science and advice framework aimed to further ICES commitments to progress ecosystem-based advice by incorporating wide-ranging scientific information, methods and approaches into advice, including experiential knowledge and narratives. The group started in 2020, but outputs (CRR, publication) have been delayed due to unforeseen circumstances.

The framework aims to:

- Move from a conventional route from science and advice to ecosystem-informed science and advice where it was much more integrated (across disciplines, sectors, pressures, knowledge types, data types and availability) but necessarily more complicated.

- Use a common direction, yet a flexible approach, through a system of indicators (in the broadest sense) to consolidate the evidence base to support EBM and risk-based approaches to operationalise these indicators.
- Provide opportunities for groups interested in contributing to ecosystem-informed advice.

Key message: ecosystem considerations would affect the level of risk associated with the advice. The risk-based approach enables trialling, identifying and communicating the different hypotheses for these ecosystem effects and incorporate that into the advice. All of which helped to then progress ecosystem-based management. Essentially, risk was used as a common currency to discuss EBM and then communicate those outcomes.

The EBM framework subgroup had been collecting a range of examples to help illustrate the different pathways that ecosystem-informed science and advice could take, to try and make it more tangible and real for the community.

Ecosystem-based fishing mortality reference points (Feco) were presented as an example of quantitative indicators being used in component-specific advice, e.g., the current eel advice. The risk assessment and prioritisation in the Ecosystem Overviews was an example of semi-quantitative indicators that include qualitative information in context evaluation and advice. The fishing communities' maps in the Ecosystem Overviews exemplify quantitative indicators included in context evaluation and advice.

The framework aims to provide an avenue for both top-down requests and bottom-up proposals for ecosystem-informed advice by providing a common language and format for science development, advice production and request formulation. This would facilitate horizon scanning in the community, enabling emerging issues to be addressed by providing a structure for developing and proposing ecosystem-informed advice. Overall, the framework creates a shared approach, although there was more that needs to be done in order to ensure this common understanding, particularly when talking about risk, which means different things to different people.

The subgroup was currently working on a CRR and a peer-reviewed publication. Active engagement would be needed throughout the network to help to communicate the framework among the groups. Suggestions for implementation steps were welcomed. Initial ideas could be identifying relevant, and/or establishing a dedicated working group(s), and/or nominating EBM champions. Further work was needed to identify how to move this forward and monitor success.

The floor was opened for comments, questions and discussion.

Concern was raised about some aspects of the infographic, and the implication that qualitative knowledge was low data quality. IEASG Chair assured that this was not the intention and committed to working to address this.

Concern was raised around indicators' limitations, reliability, and ability to integrate everything/representativeness. IEASG Chair reiterated that indicators were referred to in the term's broadest, most inclusive sense, ranging from qualitative to quantitative. There was no perfect bullet or suite of indicators, and sensitivity testing could be done, etc., and there were lots of frameworks available using indicators, care was needed not to reinvent the wheel. Questions remain in how to move forward, which would be specific to each case.

Concern was raised about being more prescriptive and maintaining flexibility to each case to ensure appropriateness. IEASG Chair agreed and highlighted that the framework was not

intended to be prescriptive, but, instead, an umbrella that helped to bring people together. There is already much science and advice that could/does contribute to ecosystem-informed advice, but it still needed to be coherent, rather than scattered. It is hoped that the framework will bring it together. There has not yet been a type of advice that it is not possible to fit into the framework.

Ultimately, the framework aims to get the community thinking about ecosystem-informed advice in general, how they can contribute to it, sparking ideas for what should be done, and helping to show that there is a pathway to advice, whether the information is qualitative or quantitative.

24 Steering Group Chair interaction

The chairs of the Aquaculture Steering Group (ASG), Data Science and Technology Steering Group (DSTSG), Ecosystem Observation Steering Group (EOSG), Fisheries Resources Steering Group (FRSG), Human Activities, Pressures and Impacts Steering Group (HAPISG), and Integrated Ecosystem Assessments Steering Group (IEASG) led breakout meetings of their steering groups.

Ecosystem Processes and Dynamics Steering Group (EPDSG) did not meet back-to-back with WGCHAIRS but would set up an online meeting intersessionally.

Annex 1: List of participants

Last name	First name	Country	Email	Group	Steering Group
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Annex 2: Action items

Section	Action	Deadline	Responsible
Section 15 Action items from WGCHAIRS meeting 2022	The Secretariat, ACOM and SCICOM chairs to develop an outline for chairs training together in dialogue with chairs.	WGCHAIRS 2024	SCICOM and ACOM Chairs
Section 16 Gender and inclusivity in ICES	An additional meeting in 2023 is needed to discuss the future and next steps on DEI implementation together with WGCHAIRS.	June 2023	ICES Coordi- nating Officer
Section 23 How can we make ICES science more visible?	Identify what are feasible and meaningful ways of communication, and how to use them most efficiently. Identify what kind of impact does ICES want to make, and who were the target groups?	September 2023	SIPG and ICES Communica- tions