

## CSI Resources

### Report to Council Regarding Progress and Next Steps

CSI Resources was established by Council their 2018 meeting to evaluate current and potential future challenges regarding capacity and workload within the ICES' advisory system and to support Member Countries' contributions to ICES advice and science, as well as to address training needs relative to current expertise and education needs relative to building capacity to address future needs. ToRs were to:

1. Map the science and advisory priorities
2. Understand how member countries resource the advisory process
3. Build capacity through education and consider training requirements to address current needs

We have made considerable progress during the year, especially with respect to identifying priorities, challenges and limitations ICES member states are facing when resourcing the ICES advisory system. It has become evident that there are no simple solutions to the problem and this work should continue.

As an initial step, we conducted a survey which was sent to all Delegates. Responses to the survey concern, primarily, resourcing the advisory process (ToR 2, above) but also provide insights regarding ToRs 1 and 3. Below we summarize the major points (this includes input from the ACOM leadership as well as Delegates):

#### General Observations:

- An effective process for providing experts to support the advisory process has evolved over many years. In general, this works well relative to the provision of recurrent advice, but less so for non-recurrent or special requests.
- Improvements in the process for providing non-recurrent advice are ongoing and have been beneficial but additional improvements will be necessary.
- Even for recurrent advice, demands on key experts are high and this can stress the system, but ongoing improvements (such as the Transparent Assessment Framework (TAF)) will likely bring some relief.
- Funding, availability of experts, and the process of nomination to EGs varies considerably among member countries. For some countries expertise and/or money are lacking but this is not true for others.

- The ICES' model assumes shared responsibility among member countries to provide experts to established EGs. But there are limits regarding the extent to which member countries are able to provide experts to specific EGs if the ToRs are not in line with national priorities, as formulated in the response; *"If there is a need, there is money; if there is no real need (but just a wish) there is no money."* Relative to the advisory process and special requests, this leads to the need to prioritize or set limits.
- In general, Delegates do not make decisions regarding EG member nominations independently. Consultation occurs among national leaders responsible for different disciplines and bottom-up requests by individual scientists often occur. Moreover, mandates and competences of Delegates as well as quality and extend of national consultation processes differ among member countries. This can make it difficult for Delegates to respond in a timely manner to requests for non-recurrent advice.
- ICES' Advice and the Advisory Process are highly recognized for their integrity, thoroughness and quality. However, the current system will need to adapt and change if it is to be sustainable:
  - for recurrent (routine) advice concerns include opportunities for training existing experts and educating future experts. It is recognized that much training occurs "on the job" and this is a strength of the ICES' system. The training programme is seen as an asset by many, with potential for expansion (although cost of participation is considered high by some). Training, education and funding to support staff working on stock assessment, management strategy evaluation, and related disciplines will need to be enhanced and properly funded if capacity is to be maintained or even only maintained. Again, some countries (Delegates) expressed greater concerns than others.
  - special requests can be unpredictable although this is not always the case. Therefore, concerns include meeting specific requirements for experts and pressure on advisory programme personnel staff resources to find experts and provide timely (sometimes rapid) responses. Member countries may be unable to find suitable experts and/or may be unwilling to support participation of their experts if this is not a national priority. There is some sense that expertise will be forthcoming if topics are of broad enough interest. On the other hand, cost recovery for special requests may need to include additional costs for providing experts (i.e. in addition to travel and per diem). This raises questions regarding the scope of special requests and whether some requests should not be accepted. We are aware of steps that have been taken by ACOM to prioritize special requests

and improve the process for sharing responsibilities for providing experts among member countries including implementation of a decision tree. We are keen to better understand this process and support the ACOM leadership in making any necessary improvements.

- An ongoing concern relates to the lack of professional recognition for advisory work – scientists are sometimes reluctant to participate in the advisory process because this work does not lead to peer-reviewed publications or other career-building achievements. While this was raised in several survey responses, we are aware that many institutes have implemented measures to address this concern

### **Possible Solutions and Next Steps:**

- To provide support to ACOM and to ICES member countries and encourage innovation we do not only need to understand member state and client priorities, but also better understand the internal advisory process, especially relative to special requests and the effectiveness of recent and ongoing process improvements. We are working with the ACOM leadership to address this need through a workshop or briefing session.
- This will allow us to map the advisory process; at the same time, we think it is important to understand how well the science EGs support current and likely future needs of the advisory process (i.e. client needs) and whether there are any bottlenecks in this interconnection and, if so, work with the ACOM and SCICOM leadership to facilitate solutions. We plan to fine-tune the proposed mapping exercise to accomplish this.
- Encourage the Training Group to review and update training regularly to address needs for developing expertise among the pool of current experts.
- Evaluate suitability of MSc and PhD coursework and research opportunities in member countries relative to future needs. Work with academic institutions to develop multi-national/multi-institutional programmes to ensure we build capacity as an organization
- Within the EU, national processes for funding that support EG participation are complex and varied. One important funding tool for all EU countries is the European Maritime Fisheries and Aquaculture Fund (EMFAF). It may be appropriate to encourage the EU and Member Countries to implement changes and strengthen elements of coordination in their respective work programmes, which better support provision of experts to support EU needs for scientific advice.

- Overall, prioritization will become increasingly important as demands increase and funding remains limiting. This prioritization process will require engagement with Delegates from member countries as well as ongoing evaluation of our priorities as an organization.

As indicated above, CSI Resources should continue its work during the next 2-3 years. This should be guided by the following Terms of Reference (ToRs):

- 1) Map the Science and Advisory Processes to:
  - a. Understand how current Advisory processes work, the nature and effectiveness of ongoing process improvements and potential needs for future improvements.
  - b. Evaluate the effectiveness of Science EGs to support current and potential future Advisory needs and work with ACOM and SCICOM leaderships to identify possible ways to improve this effectiveness.
  - c. Understand how the Advisory Process adapts to changing client needs for recurrent and non-recurrent advice, how well the work of the Science EGs connects to this, and, together with the ACOM and SCICOM leaderships identify possible improvements.
- 2) Improve our understanding of processes employed within each member country for resourcing the advisory process and identify possible approaches resolving concerns
- 3) Build capacity through strengthening training and education
  - a. Engage with the Training Group to understand how the training programme addresses strategic needs by developing skills within the existing pool of experts needs and support necessary process improvements.
  - b. Work with academic institutions in the ICES' member countries to identify and develop multidisciplinary, multi-institutional coursework, research opportunities and scientific personnel exchanges which will build capacity for meeting future science-based advisory needs. An initial workshop will be held in 2020.

The work of the CSI will be prioritized. We will focus initially on ToR 1 (a). Work on ToR 3 will also be continued as detailed above.