

Open session

Functional links between pressure and state indicators

Conveners: Henn Ojaveer (EPISG) and Silvana Birchenough (EPDSG)

The Open session took place on the first day of the Conference over a two-hour slot. Overall there were approximately 15 participants. The first part of the session was covered with 5 introductory presentations from Simon Jennings, SCICOM Chair, to set the scene, helping to illustrate the current knowledge base between functional and state indicators, the current policy drives and the role of ICES science.

The remainder set of the presentations were delivered by EGs chairs covering examples of: i) new emerging pressures (e.g. marine litter) delivered by Thomas Maes (various EG's, ii) the current applied work under marine renewables (Andrew Gill, WGMBRED), iii) examples under fisheries advice and assessments (Steven Degraer, BEWG) and iv) an overview of important tools and sensitivity assessments of Vulnerable Marine Ecosystems (VMEs) in relation to fishing (Neil Golding, WGDEC).

The second part of the session was directed as an interactive discussion for attendees to feedback ideas on specific questions:

- What science is already available or could be added to ICES EGs that could improve this process?
- How this process could be streamlined, to maximise science into advice?
- What opportunities could be explored to foster integration of current approaches (structural and functional)?

These questions were projected on the screen and the responses were collated with post-it notes. The summary about the main points raised is captured below:

- Improve understanding of cumulative pressures and facilitate analysis of cumulative effects;
- Performing regional case study by investigating relative impact of different pressures using some comparable state indicators;
- Develop transparent frameworks with approaches being transferable to other regions;
- Pressure scale considered currently is often too coarse and does not account for different gear impact. Consider future advice taking into account of potential gear changes to better match the pressure scale;
- Linking the function of species for the ecosystem;
- Application of advanced statistical methods to analyse time series;
- Not just answer questions but have early discussions with managers about what questions are upcoming and possible scientific approaches to these;
- The early involvement of both stakeholders and managers in the process might be both painful and productive in helping both design the science and improve the uptake;
- Convincing the advisory system of the rigor, preparedness and repeatability of developing approaches.

The open session provided a good opportunity to communicate between EGs Chairs and helped to discuss further opportunities to explore better integration (via back to back

meetings and dedicated workshops) some of these questions. The overall session feedback was deemed positive and comments provided could help to provide guidance and direction on existing ToRs among EGs, to support more integrated work in order to advance our current knowledge on state and functional links indicators.