

2015/2/SSGEPI15 The Workshop on Understanding the Impacts and Consequences of Ocean Acidification for Commercial Species and End-users (WKACIDUSE), chaired by Silvana Birchenough (UK, ICES), Catriona Clemmesen-Bockelmann (BioAcid, Germany) and Tsuneo Ono (Japan, PICES) will meet at ICES Headquarters in Copenhagen, Denmark, 5–8 December 2016 to:

- a) Provide scientific evidence to support demonstration advice (meaning, who is going to use this information, what is the level of evidence/detail needed) to inform end-users. Overall there is a pressing need to translate existing information to dedicated advice to make long-term investments decisions;
- b) Examine existing evidence from a 'objective basis' what is the reality of the OA effects and potential consequences (considering the effects of single or multiple stressors);
- c) Provide examples to illustrate what are the current 'prevailing conditions' (spatio-temporal scales to explain the local variability of exposure). This information will help placing into context specie's responses.
- d) Deliver an assessment for potential for adaptation from commercial species (considering phenology, physiology, behaviour and genetics);
- e) Understand what will be the consequences for end-users and who could be likely to be affected (answering the "so what question?");
- f) Suggest practical solutions for end-users to prepare and adapt to potential ocean acidification effects in conjunction with combined multiple stressors effects;
- g) Discuss the best way to continue to support ICES/PICES and OSPAR/HELCOM this area (e.g. setting up an OA Working Group to summarise the 'state of the art' science to support advisory requests).

WKACIDUSE will report by 10 February 2017 (via SSGEPI) for the attention of SCICOM.

Supporting information

Priority	The activities of this Group will lead ICES into issues related to the understanding of ocean acidification (OA) effects, especially with regard to the potential development of 'demonstration of advice'. Consequently, these activities are considered to have a very high priority and will help to provide evidence-based on these issues for end-users as well as policy colleagues (OSPAR, AMAP, etc.).
Scientific justification	OA has become one of the most studied topics in the last 10 years. The majority of published research to date suggests that the expected effects of OA will vary between groups of marine organisms and in some cases there may be dramatic consequences for ecosystems. There is plethora of published laboratory and field based experiments, showing apparently contradictory biological responses and likely impacts. Identifying factors responsible for this variability in species/ecosystem sensitivity is a priority. Therefore, there is a real need to focus on the biological consequences resulting from OA effects with: i) other stressors, ii) overall repercussion for ecosystems (including fisheries and aquaculture) and iii) end-users.

Resource requirements	ICES Secretariat and advice process.
Participants	The Group will likely be attended by some 20–25 members and guests. A wide range of end-users (e.g. shell fish farmers, processors, retailers, national fisheries policy managers, MSFD/HELCOM/OSPAR advisors) with an interest in this topic are welcomed.
Secretariat facilities	Data Centre, Secretariat support and meeting room
Financial	No financial implications.
Linkages to advisory committees	Direct link to ACOM and OSPAR as well as end-users
Linkages to other committees or groups	Links to OSPAR, HELCOM, JPI Oceans
Linkages to other organizations	Global Ocean Acidification Observatory (GOA-ON- biology network), International Regulators Users Group (iRGUG), Arctic Monitoring and Assessment Programme (AMAP)