

Fourth International Symposium on the Effects of climate change on the world's oceans

2016/3/SSGEPD03 The “Fourth International Symposium on the Effects of climate change on the world's oceans” will be held from 4–8 June 2018 at Washington D.C. (USA) with the support of IOC, PICES and ICES, and Jason Link, USA (ICES), Shin-Ichi Ito, Japan (PICES), and NN (IOC) as conveners. Symposium coordinators are the IOC Head of Ocean Science, the PICES Executive Secretary and the ICES Head of Science Support, as well as a NOAA representative. FAO has been approached as additional sponsor/convenor.

A Scientific Steering Committee has been established with members nominated by the main sponsors in order to assist Conveners in planning the Symposium. In consultation with the Conveners, ICES/PICES/IOC Secretariats will solicit appropriate co-sponsorship from other international organizations.

Supporting Information

Priority:	<p>ICES continues to be concerned by the diverse effects of climate change and variability in the North Atlantic and most ICES member countries finance research programmes and research projects to observe and predict the effects in their regions. Also most (if not all) of the countries represented by IOC and PICES have a clear interest in the possible consequences of climate change and variability in the global marine ecosystem.</p> <p>Therefore ICES, PICES and IOC are the most appropriate scientific entities to provide support for such a symposium and, with respect to ICES, the proposal should have a high priority.</p> <p>This is the fourth symposium in the series, supported by ICES, PICES and IOC. The venue this time round is hosted by a North American country which is likely to have outreach and visibility effects for ICES. The timing of the symposium will be coordinated with other, high-level events related to the topic, such as the Arctic Science week and the SCAR/IASC conference as well as the USGCRP fourth Climate Assessment Report in May 2018</p>
Scientific justification:	<p>Climate change is the most important threat to human livelihoods along the coasts as well as to food security of human populations worldwide. Capture fisheries and aquaculture are important sources of healthy food and are likely to be affected in both positive and negative ways. Even if we stop the emissions of CO₂ now, sea level rise, global warming and ocean acidification will continue. Some direct effects of climate change at sea are visible (e.g. decrease of the seasonal extent of Arctic ice cover, poleward movement of fish species), but others still need to be verified with observations. Assessing the consequences of climate change impacts in the world oceans has a high scientific and social relevance.</p> <p>Although quantitative evidence for the effects and consequences of climate change on the functioning of marine ecosystems has been amassed, and previous workshops and symposia have been convened to discuss specific issues, we lack the complete vision at a global scale needed to assess and project ecological, economic and social impacts in time and with confidence.</p> <p>This Symposium will address a wide diversity of issues related to the many aspects of climate change in the oceans: sea level rise, changes in thermo-haline ocean circulation, acidification of shallow seas, oligotrophy of temperate seas, changes in species abundance, distribution and phenology, all of which will have serious implications for marine</p>

	<p>living resources, etc. This Symposium will bring together experts of different disciplines to exchange ideas, observations, results and models at a global scale. It will examine the science available, consider gaps and insufficiencies in the evidence-base, it will propose priorities for future research and it will derive to appropriate climate-ready policies that can help society adapt and protect the marine environment and living resources in the future.</p>
Resource requirements:	<p>There will be significant resource requirements, most of which will be met by the imposition of a Conference Fee. ICES is asked to cover the publication of a special issue of the ICES Journal of Marine Science.</p>
Participants:	<p>This Symposium will attract a diverse community of scientists from ICES and PICES, but also from other organisations and countries concerned by the diverse effects of climate change in the oceans.</p> <p>Representative participation of scientists from developing countries is intended.</p>
Secretariat facilities:	<p>The Secretariat will be involved, as usual, in the general professional and secretarial support, and the Secretariat, as usual, should provide direct assistance during the Symposium.</p>
Financial:	<p>The conveners expect a financial support from ICES of 10,000 €. This amount will be dedicated to support early career scientists. In addition, the attendance of one or two Secretariat staff at the Symposium, and the presence of the General Secretary/President will place an additional financial burden on the Secretariat.</p>
Linkages to advisory committees:	<p>This Symposium could benefit from synergies with ACOM.</p>
Linkages to other committees or groups:	<p>This Symposium could benefit from strong engagement and buy-in from SCICOM, and more specifically from SICCME (the joint ICES/PICES Strategic Initiative on Climate Change in the Marine Environment) and SSGEPD.</p>
Linkages to other organizations:	<p>The Symposium has relevance for the interests of PICES, IOC, IGBP, IFFET, FAO and other programmes related with UN and the EU, as well as to other actors like WCRP, UNDP, CBD, SOLAS, etc., and many institutions representing marine councils. NOAA is expected to contribute significant resources.</p>
Publication of proceedings	<p>The conveners plan to use the ICES Journal of Marine Science for the proceedings.</p>