

2013/3/SSGHIE04 The “Third International Symposium on the Effects of climate change on the world’s oceans” will be held [date] 2015, at Santos (Brasil) with the support of IOC, PICES and ICES, and Manuel Barange, UK (ICES), Jacquelynne King, Canada (PICES), and Luis Valdés, Spain (IOC) as conveners. Symposium coordinators are the IOC Head of Ocean Science, the PICES Executive Secretary and the ICES Head of Science.

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: 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.

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.

This is the third symposium on the planned series supported by ICES, PICES and IOC. The venue is hosted for the first time by a South American country which is likely to have outreach and visibility effects for ICES, within but also beyond its affiliate countries Peru and Chile. Brasil is a member of IOC and the offer to host the symposium was made at the IOC GA in summer 2013.

Scientific justification: Climate change is the most important threat to human livelihoods along the coasts but also to food security of human populations worldwide. Capture fisheries and aquaculture are important sources of healthy food and are likely to be affected. Even if we stop the emissions of CO₂ now, sea level rise and global warming will continue. Some direct effects of climate change at sea are visible (e.g. increase of the seasonal Arctic ice cover, northward movement of fish species), but others still need to be verified with real data and observations. To assess climate change consequences in the world oceans has a high scientific and social relevance.

Although we are now beginning to compile quantitative documentation on the effects and consequences of climate change in the functioning of marine ecosystems, and workshops and symposia were held to discuss specific issues, we lack the complete vision at a global scale needed to assess and predict the effects in time and with confidence.

This section will need to be updated, based on the outcome of the ICES and PICES meetings in fall 2013, and subsequent discussions of the conveners and SSC

This Symposium will lead us into 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 living resources, etc. This Symposium is aimed to bring together experts of different disciplines to exchange observations, results and models at a global scale and to discuss the possible chances to mitigate and protect the marine environment and living resources.

Resource requirements: 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.

Participants:	<p>This Symposium will attract a diverse community of scientist from ICES and PICES, but also from other organisations and countries concerned by the diverse effects of climate change in the oceans.</p> <p>The venue in Brasil favours a strong participation of Latin-American countries which will enrich the diversity of participants. In addition, representative participation of scientists from developing countries is intended.</p>
Secretariat facilities:	<p>The Secretariat will be involved, as usually, 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 fund travel and subsistence of keynote speakers or ICES conveners, and to support early career scientists. In addition, the attendance of one or two Secretariat staff at the Symposium, and the presence of the GeneralSecretary/President will place a significant 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 synergies with SCICOM, and more specifically with SICCME, SSGEF.</p>
Linkages to other organizations:	<p>The Symposium has relevance for the interests of PICES, IOC, IGBP, FAO and other programmes related with UN and the EU, as well as to other actors like WCRP, UNDP, CBD, etc. , and many institutions representing marine councils.</p>
Publication of proceedings	<p>The conveners plan to use the ICES Journal of Marine Science for the proceedings.</p>