

Study Group on Environmental Impacts of Wave and Tidal Energy (SGWTE)

2012/2/SSGHIE05 The Study Group on Environmental Impacts of Wave and Tidal Energy (SGWTE), chaired by Michael Bell, UK, will meet in Cork, Ireland, 19–21 March 2013 to:

- a) Update and extend coverage of country reports on the state of development of wave and tidal energy and associated environmental research in ICES nations, including databases of development activities and research activities and bibliographies of current and research outputs;
- b) Develop a proposal for a new ICES Working Group on Marine Energy to coordinate the flow of science between topic based Working Groups (e.g. marine mammals, seabirds, benthic ecology) and planning, consenting and regulatory processes in relation to marine renewable energy, to consider tidal barrages and offshore wind as well as in-stream tidal and wave energy;
- c) Discuss the application of Integrated Ecosystem Approaches to management of renewable energy activities in the marine environment;
- d) Review the potential of and mechanisms for interaction of ICES science on marine renewable energy with OSPAR, HELCOM and other commissions.

SGWTE will report by 30 April 2013 (via SSGHIE) for the attention of SCICOM.

Supporting Information

Priority	The activities of this Group are leading ICES into issues related to the ecosystem impacts of ocean renewable energies especially with regard to the application of Marine Spatial Planning (MSP) and ICZM. Consequently, these activities are considered to have a very high priority.
Scientific justification	<p>Term of Reference a)</p> <p>The pace of development by the wave and tidal energy industry is rapidly accelerating in a number of ICES nations. In order to appreciate the scale of potential impacts there is an urgent need to keep track of these developments and to integrate the body of research that is growing alongside them. It is currently difficult to keep pace with outputs from the diverse range of research relating to wave and tidal energy. A searchable bibliography of current outputs will be a valuable resource for scientists and regulators. Current research activities are doing much to address important issues relating to the environmental and socio-economic consequences of wave and tidal energy developments, but in order to best direct future research resources and avoid duplication and overemphasis on certain topics it is crucial to keep track of issues that remain unaddressed and to identify those issues that relate to the most immediate needs.</p> <p>Term of Reference b)</p> <p>SGWTE completes its term of three meetings in 2013. It is apparent that there is a growing need for advice on potential impacts in the marine environment of the rapidly developing marine renewable energy sector, and to keep track of the state of development and related marine environmental research. A number of ICES EGs are focusing on science relevant to marine renewable energy (e.g. WGMME) and a new Working Group on Marine Energy would greatly facilitate the flow of science from topic-based WGs to its application in planning, consenting and regulation of marine energy.</p> <p>Term of Reference c)</p> <p>New risk-based and integrated ecosystem approaches to management of human activities in the marine environment are emerging in countries such as Canada. It is timely for SGWTE to consider how these could best be applied in the</p>

	<p>context of wave and tidal energy, particularly in relation to the requirements of the Marine Strategy Framework Directive.</p> <p>Term of Reference d)</p> <p>In order to maximize the utility of ICES science on environmental impacts of marine renewable energy it is essential for information to flow from EGs to OSPAR, HELCOM and other relevant bodies. It is timely for SGWTE to consider how best to interact with and deliver advice to these bodies.</p>
Resource requirements	The research programmes which provide the main input to this group are already underway, and resources are already committed. The additional resource required to undertake additional activities in the framework of this group is negligible.
Participants	The Group consists of experts in ocean energy resources, environmental and socio-economic aspects of marine planning and regulation.
Secretariat facilities	None.
Financial	No financial implications.
Linkages to advisory committees	There are obvious direct linkages with the advisory committees (see last years OSPAR request).
Linkages to other committees or groups	There should be close links with SSGHIE, STIG-MSP, WGMPCZM and several other WGs.
Linkages to other organizations	Need to be established, OSPAR is interested in this issue.