

Working Group on Marine Benthic and Renewable Energy Developments (WGMBRED)

2015/MA2/SSGEPI04 The **Working Group on Marine Benthic and Renewable Energy Developments (WGMBRED)**, chaired by Jennifer Dannheim, Germany, and Andrew B. Gill, UK, will meet to work on ToRs and generate deliverables as listed in the Table below.

	MEETING DATES	VENUE	REPORTING DETAILS	COMMENTS (CHANGE IN CHAIR, ETC.)
Year 2016	14–18 March	Delft, the Netherlands	Interim report by 31 May to SSGEPI	
Year 2017	6–10 March	Gdynia, Poland	Interim report by 1 May to SSGEPI	
Year 2018	TBD	Galway, Ireland	Final report by Date Month to SSGXXX	

ToR descriptors

ToR	Description	Background	Science Plan topics addressed	Duration	Expected Deliverables
a	Critically assess relevant temporal and spatial scales in relation to the effects of MREDs on the benthic ecosystem and evaluate the consequences in relation to environmental policy and decision-making.	Based on the first 3 years of WGMBRED the spatio-temporal aspect has risen to the top of the priority list for determining the interaction between the benthic ecosystem and MREDs	14, 25, 31	3 years	Manuscript submitted to a peer-reviewed scientific journal
b	Review progress on filling knowledge gaps relating to the benthic ecosystem including differentiation among MRED technologies using e.g. reports of national activities.	The need to update in light of new knowledge and expansion of MREDs is fundamental to feed into advice and assessment of MREDs in relation to benthos. It also enables the WGMBRED to feed into the identified science plan topics	8, 11, 25, 27	1,2,3 years	Matrices – updated knowledge base
c	Analysis of network and interactions amongst WGMBRED and other relevant groups including regulators, stakeholders, policy makers and scientists, in order to evaluate the impact of MBRED science.	It is evident that only a coordinated effort to harness the wide international interest and requirement to understand MREDs and the benthic ecosystem is needed to then provide the evidence for policy makers	15, 26	1,2 years	Collated list -1 Network map -2
d	Identifying and operationalising relevant indicators in relation to	The benthic ecosystem is complex so to convey important changes to the	5, 6, 8, 9, 11,	3 years	Manuscript submitted to a peer-reviewed scientific journal

assessing ecosystem functioning and change in relation to MBRED at scales related to ToR A.	system relating to MREDS suitable indicators are required. This also fits with a number of aspects relating to the science plan topics
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Summary of the Work Plan

Year 1	Begin review paper to start to address ToRs a and d; develop and set out matrix of knowledge gaps for ToR b; gather information on network of experts for topic to address ToR c
Year 2	Continue review paper activity to address ToRs a and d; further develop matrix of knowledge gaps in relation to national and international knowledge for ToR b; use information on network of experts to analyse and produce a network map for ToR c
Year 3	Finalise review papers ready for submission for ToRs a and d; finalise matrices and interpret output to address ToR b

Supporting information

Priority	The activities of the working group will lead ICES into issues related to upcoming large-scale ecosystem effects of renewable energy constructions on the marine benthic community (i.e. macroalgae, invertebrates and demersal fish). The objectives addressed here will be highly relevant in the context of future ecosystem-based management approaches, marine spatial planning and required monitoring schemes. Consequently, these activities are considered to have a very high priority.
Resource requirements	No specific resource requirements beyond the need for invited members to prepare for and resource their participation in the meeting.
Participants	These would include scientists working with the effects of marine renewable energy developments on the marine benthic community, including algae, infaunal invertebrates to benthic /demersal fish. Participation is sought from ICES countries and by scientists both from disciplines and scientific circles not normally represented at ICES. The Group is normally attended by some 15–20 members and guests.
Secretariat facilities	None.
Financial	No financial implications.
Linkages to ACOM and group under ACOM	There are no direct linkages with the ICES advisory services, although the expert group results will have potential here.
Linkages to other committees or groups	There is a very close working relationship with Benthos Ecology Working Group (BEWG) and the Working Group on Marine Renewable Energy (WGMRE) and hence SSGEPI and SSGEPD.
Linkages to other organization	