#### Working Group on Marine Sediment (WGMS)

# **2014/MA2/SSGEPI02** The **Working Group on Marine Sediment** (WGMS), chaired by Craig Robinson, UK, and Celine Tixier, France, will work on ToRs and generate deliverables as listed in the Table below.

	MEETING DATES	VENUE	<b>R</b> EPORTING DETAILS	Comments (change in Chair, etc.)
Year 2015	2–6 March	Koblenz, Germany	Interim report by 30 April to SSGEPI	
Year 2016	14–18 March	Ostend, Belgium	Interim report by 1 May to SSGEPI	
Year 2017	6–10 March	Ancona, Italy	Final report by 1 May to SCICOM	

### **ToR descriptors**

ToR	DESCRIPTION	Background	SCIENCE Plan topics addressed	DURATION	Expected Deliverables
1	Respond to requests for advice from Regional Seas Conventions (e.g. OSPAR, EU) as required.			3 years	Requested advice
2	<b>Passive sampling (PS) in sediment</b> 2a - Review of existing methods dealing with PS in sediment	Follow-up on the work of WKPSPD		Year 1	Recommendation based on current status
	2b – Complete Guidelines for monitoring with PS in sediments for hydrophobic organic contaminants / produce guidelines for PS of metals 2c - Improve the understanding of the	Guidelines required for technique to be acceptable for monitoring purposes.		3 years	Working with MCWG experts, produce TIMES paper(s) on the use of PS in sediments
	relation between data obtained by passive sampling in sediment and environmental quality (biota data, toxicity data, EACs) 2d- Review on on-going or future projects with PS	Assessment criteria suitable to assess GES in sediments are lacking / require improvement. WGMS will work with WGBEC to attempt to close this knowledge gap		3 years	Dataset and advice to OSPAR on progress as passive sampling, which ICES WKPSPD have recommended the approach go on the pre-CEMP.
				Each year	Report to ICES
3	Explore the suitability / possibility of modelling to explain spatial distribution patterns of contaminants in sediment and inform on sources and hence possible MSFD measures			3 years	Report to OSPAR via ACOM

4	<b>Deep sea sediment monitoring</b> To provide advice on sediment monitoring in the wider oceans as required for MSFD	Monitoring of the deep sea is requried for the MSFD. Tehcnically this is more difficult than for shallow seas and advice should be developed	3 years	Advice to OSPAR via ACOM on deep sea sediment monitoring
5	Impact of renewable energy devices (e.g. wind mill,) To explore the potential risk impact in terms of release of contaminants (corrosion, anti-corrosion agents)	Many hundreds of renewable energy devices are being placed in the marine environment. Resultant changes in hydrodynamics may release sediment-bound contaminants, there may be inputs of contaminants from their installation, operation and decommissioning.	3 years	Report to ICES (with recommendations, as appropriate)
6	Emerging issues: To assess the relevance and the potential risk impact of these isuues and follow up of outcomes of other expert groups - Microplastics in sediment - Deep sea mining - "new" priority substances to be considered under the MSFD - Emerging contaminants (flame retardants, pharmaceuticals, etc.)	Microplastics are of emerging concern and may be a vector for contaminant transfer to sediments, or from sediments to biota Mineral mining is a likely future source of anthropogenic disturbance to the deep sea and could result in the release of contaminants into otherwise relatively pristine environments	3 years	Report to ICES Develop links up to relevent expert groups on marine litter Link-up with WGEXT who have a ToR to report to produce a summary paper concerning deep sea mining (What is being mined, where this is occurring, techniques being developed etc).
7	<ul> <li>OSPAR request: WGMS and MCWG are requested to report on the selection and de-selection of hazardous substances of concern to coastal and marine waters in the OSPAR maritime area.</li> <li>Reporting should: <ol> <li>Identify and collate information on projects, activities and sources of information for new and emerging substances; as well as</li> <li>Review the information to identify new and emerging substances, identify information gaps and recommend what further work is needed.</li> </ol> </li> </ul>	Reporting should be done to ensure that in the new and emerging hazardous substances in the marine environment (of the OSPAR maritime area) that are of general concern to coastal and marine waters are identified, so that appropriate action can be taken by OSPAR. The work by MCWG and WGMS should build on and be coordinated with the already established EU WFD Watch List process and the relevant OSPAR List. Reporting should also take into account other research programmes that screen substances in the marine environment, e.g. through passive sampling, tissue analysis, sediment sampling etc.		WGMS and MCWG are requested to provide an interme- diate report on progress of work by 10 March 2017 for the attention of ACOM. Based on feedback to the ICES Secretariat from OSPAR HASEC, update and finalize their work by 12 October 2017 and report to ACOM.

## Summary of the Work Plan

Year 1	Respond to requests under ToR 1	
	Complete review of techniques for passive sampling of marine sedments (ToR $2a$ )	
Progress work towards completion of the remaining ToRs		
Year 2	REPOND TO REQUESTS UNDER TOR 1	
	Progress work towards completion of the remaining ToRs	
Year 3	REPOND TO REQUESTS UNDER TOR 1	
	Report on ToRs 2-6	

### Supporting information

Priority	This Group handles key issues regarding monitoring and assessment of contaminants in sediments. The current activities of this Group will lead ICES into issues related to the understanding of the relationship between human activities and marine ecosystems (estimation of pressure and impact,). Consequently, these activities are considered to have a high priority.
Justification of venue 2017 (in a non-ICES member country)	On invitation by Federico Spagnoli, who has been a very valued participant throughout the current terms of reference, travelling to attend the group from his own budget and making particularly significant contributions to WGMS ToRs on modelling contaminant distributions and on the deep sea. With this being the last year of WGMS current ToRs, the presence of key contributors is to be encouraged.
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 is normally attended by some 15-20 members and guests.
Secretariat facilities	None.
Financial	No financial implications.
Linkages to ACOM and group under ACOM	ACOM.
Linkages to other committees of groups	There are close working relationships with Marine Chemistry Working Group (MCWG) and Working Group on Biological Effects of Contaminants (WGBEC); some members of WGMS are also members of these. The work of WGMS is also relevant to the Working Group on the Effects of Extraction of Marine Sediments on the Marine Ecosystem (WGEXT).
Linkages to other organization	OSPAR, HELCOM, MEDPOL, EU/JRC Expert Network on Contaminants