**2017/MA2/HAPISG08** The **Working Group on Marine Litter** (WGML), chaired by Thomas Maes, UK; Francois Galgani, France; and Andy Booth, Norway, will work on ToRs and generate deliverables as listed in the Table below.

Remark: 5-day meeting =  $2 \times 2.5$  days split between seafloor litter and microplastic ToRs

	MEETING DATES	Venue	REPORTING DETAILS	COMMENTS (CHANGE IN CHAIR, ETC.)
Year 2018	23–27 April	ICES HQ, Copenhagen, Denmark	Interim report by 31 May 2018 to HAPISG	Collaboration with OSPAR & HELCOM
Year 2019	DATE	PICES HQ, Vancouver, Canada	Interim report by 31 May 2019 to HAPISG	Collaboration with PICES
Year 2020	DATE	CIESM HQ, Monaco	Final report by 31 May 2020 to SCICOM	Collaboration with CIESM

## **ToR** descriptors

ToR	DESCRIPTION	Background	SCIENCE PLAN TOPICS ADDRESSED	Duration	Expected Deliverables
a	Respond to requests for external and internal ad- vice (e.g. EU, Regional Seas Conventions, ICES Data Centre/Secretariat) as re- quired	Science or advisory requirements.	1,2,9,11, 12, 13, 25, 26, 27, 28, 31	Y1-3	Advice and review document as required
b	Review and report on developments in MSFD, other EU directives and international frameworks regarding marine litter	Follow-up on future needs is key to constructively guiding and supporting the development process for monitoring, threshold development and impact assessment.	1,2,9,11, 12, 13, 25, 26, 27, 28, 31	Y1-3	Annual reporting
c	Review and propose guid- ance for seafloor litter and microplastic monitoring and assessment to support expected ICES data needs based on the review in ToR a	The aim is to provide guidance in solving problems for sampling, data comparability and ICES data submissions.	1,2,9,11, 12, 13, 25, 26, 27, 28, 31	Y1-3	Annual reporting consisting of guidelines and review of Standard Operating Procedures (SOP), scientific publication
d	Propose a possible strategy or road map for ICES to follow with respect to seafloor litter and microplastic research and monitoring	Required for standardisation of monitoring and subsequent assessments	1,2,9,11, 12, 13, 25, 26, 27, 28, 31	Y3	Seafloor litter monitoring and research strategy for attention of SCICOM, scientific publication
е	Interact with exisiting bodies, projects and organisations e.g. OSPAR, HELCOM,	To avoid duplication of effort and improve international coordination and	1,2,9,11, 12, 13, 25, 26, 27, 28, 31	Y1-3	Annual reporting

	GESAMP, JPI Oceans to develop and report on international developments in marine litter research and monitoring	communication			
f	Report new develop- ments in quality assur- ance in marine litter monitoring in Europe, and provide information on other proficiency testing schemes with relevance to WGML.	Availability of high quality proficiency testing is vital to produce reliable results.	1,2,9,11, 12, 13, 25, 26, 27, 28, 31	Y1-3	Annual reporting, guidance for proficiency testing, ICES Cooperative Research Report (CRR) or Techniques in Marine Environmental Sciences (TIMES)

## Summary of the Work Plan

Year 1	Respond to requests under ToR a, e & f
	Begin review paper to start to address ToRs c & d;
	Gather information on network of experts for topic to address ToR b, c & e
	Develop and set out matrix of knowledge gaps for remaining ToRs;
	Progress work towards completion of the remaining ToRs
	It will be important to revise current practices and activities in relation to seafloor litter and microplastic monitoring and assessment to take stock of different approaches in the light of international requirements and to make future recommendations for ICES e.g. sampling methods, protocol updates, monitoring programme guidelines, analytical methods, assessment methods, gear comparisons, data statistical power of monitoring programmes and QA/QC
	Produce Interim Report
Year 2	Respond to requests under ToR a
	Progress work towards completion of the remaining ToRs
	Continue review paper activity to address ToRs c & d
	Further develop matrix of knowledge gaps in relation to national and international knowledge and produce network map and advise documents as required
	Produce Interim Report
Year 3	Respond to requests under ToR a
	Finalise review papers ready for submission for ToRs c and d; finalise matrices and interpret output to address other ToRs
	Produce Final Report

## **Supporting information**

Priority	The current activities of multiple WGs and external representatives will lead ICES into issues related to monitoring and fundamental research of marine litter. Consequently, such monitoring and research activities are considered to have a very high priority with respect to the issue of seafloor litter and MPs.
Resource requirements	The research programmes which provide the main input to this group are already underway (e.g. CleanAtlantic, Baseman, WeatherMIC,) and national/EU resources are already committed. The ICES Data Centre has already invested in the setup of a database for seafloor litter (DATRAS) and microplastics (DOME). The additional resource required

	to undertake additional activities in the framework of this group is negligible.
Participants	The group is predicted to attract 20–25 members and guests.
	The group will focus on two main topics (seafloor litter/microplastics) and a 5 day meeting could be split equally to allow participants to attend all or half of the meeting depending on their interests and expertise.
Secretariat facilities	ICES Data Centre – data extractions
Financial	No financial implications.
Linkages to ACOM and group under ACOM	There are currently no linkages with ACOM, but the EG will be ready to address advisory requests if these are forthcoming.
Linkages to other committees of groups	There will be close working relationships with HAPISG EG. The planned work is especially relevant to MCWG, WGMS, WGBEC and WGIBTS.
Linkages to other organization	PICES, CIESM, EU, JPI Oceans, GESAMP, UN, RSC, G7, G20,