



45th session
Agenda item 4

PLANNING OF GESAMP ACTIVITIES:

SOURCES, FATE AND EFFECTS OF PLASTICS AND MICROPLASTICS IN THE MARINE ENVIRONMENT

Report of the Chair of Working Group 40

1 This has been a busy and productive year for WG40 as it entered the third phase of its activities. WG40 has three Terms of Reference (ToRs) that were approved at G44 in Geneva. The 2017/18 period is dedicated to completing ToR 1: *to produce guidelines for the monitoring and assessment of marine plastic litter, to encourage a more harmonised approach*. The membership of WG40 has been refreshed to reflect the specific needs for undertaking ToR 1. It was considered essential to achieve good regional coverage and have access to expertise on the practicalities of marine litter monitoring. The WG consists of sixteen members representing 13 countries on 6 continents. It proved difficult to create an even gender balance, with just five of the members being female. In part this was a reflection of the nominations of experts by sponsoring organisations and in part by a need to have people with close ties to national or regional marine litter monitoring activities. There is one (female) young career scientist.

2 The WG40 Chair is supported by two co-chairs, to cover the macro- and micro-plastic elements in the development of the Guidelines adequately. The Chair wishes to express his gratitude to staff working for the two lead agencies, IOC and UN Environment for their help and support during the year, especially for the organisation of the workshops. Additional financial support is provided by NOWPAP (Northwest Pacific Action Plan), NOAA, the Ministry of Oceans and Fisheries of the Republic of Korea, the Ministry of Environment of Japan, the State Oceanic Administration of the P.R China, and from residual industry funds administered by IMO, with additional in-kind support from FAO, particularly in relation to Abandoned Lost or otherwise Discarded Fishing Gear (ALDFG). The WG benefits from using the Basecamp file-sharing platform administered by IMO.

3 Phase 3 was initiated by a 4-day workshop of most of the membership in September 2017, in the week following the 44th session. It was hosted by IOC in Paris. By the end of the workshop a draft manuscript had been created and responsibilities agreed for further work. Progress was discussed at a 1.5 day workshop in San Diego in March 2018, at the conclusion of the 6th International Marine Debris Conference (6IMDC). This took advantage of the presence of many of the WG members at this conference, minimising the cost for the sponsoring organisations.

4 A second 4-day workshop took place in June 2018, hosted by UN Environment at the UN Offices in Bangkok. This resulted in the completion of a full revised draft (Table 1). A regional consultation meeting on marine litter was held immediately after the workshop, organised by UN Environment, with representatives of WESTPAC (IOC Sub-Commission for the West Pacific), COBSEA (Coordinating Body of the Seas of East Asia), Thailand, Cambodia, Vietnam and the Philippines, and several members of WG40 with an interest in the region. This was well received and of mutual benefit.

5 After editing by the co-chairs, the draft was sent to eight regional bodies that had agreed to provide an initial consultation on the scope, style and content of the report. These included Regional Seas (HELCOM, OSPAR, SPREP (Secretariat of the Pacific Regional Environment Programme), NOWPAP, Abidjan Convention, Caribbean Environment Programme), WESTPAC and the North Atlantic fisheries RFMO, together with a key institute in China closely associated with WESTPAC. The individual report chapters are due to be revised by the end of August to allow final compilation, followed by a GESAMP review by early October. It is intended to have the digital version of the report ready for presentation at the 2nd workshop of the Ad Hoc Open-Ended Expert Group on Marine Litter and Microplastics, meeting 26th – 30th November in Nairobi, with a printed version ready by the end of December.

Table 1. Guidelines for monitoring & assessment of marine litter – draft contents table

Chapter	Title	Contents	Page
1	Background	Purpose & objectives, plastic litter as a global issue, role of monitoring & assessment, how to use the report	6
2	Plastic litter - definitions & terminology	Composition, size, shape, colour, type, fragmentation, quantifying abundance	9
3	Designing monitoring & assessment programmes	Indicators, baselines, case study, role of citizen science	16
4	Monitoring methods for shorelines	Brief description of compartment, dynamics & variability; baselines, accumulation surveys, types of shoreline; selection of methods, macro/micro	30
5	Monitoring methods for sea surface and water column	Brief description of compartment, dynamics & variability; selection of methods, macro/micro	44
6	Monitoring methods for seafloor	Brief description of compartment, dynamics & variability; selection of methods, macro/micro	61
7	Monitoring methods for biota	Marine litter biota interactions, biota as indicators, ecosystem level monitoring (habitats); selection of methods, macro/micro	76
8	Sample processing	Density separation, filtration, digestion	88
9	Methods of physical, chemical & biological characterisation	selection of methods, macro/micro	93
10	Recommendations	i) summary of recommended sampling methods ii) recommended methods for marine litter characterisation iii) policy-relevant recommendations	111 - 120

6 Initial discussions have been initiated about undertaking ToRs 2 and 3, in particular exploring the interest of potential sponsoring organisations:

2. To assess the occurrence and effects of nano-sized plastics on marine organisms, and make research and policy-relevant recommendations
3. To assess the significance of plastics and microplastics as a vector for indigenous and non-indigenous organisms, and make research and policy-relevant recommendations.

No firm proposals for addressing ToRs 2 and 3 have been made at this stage.
