



PLANNING OF GESAMP ACTIVITIES

Sources, fate and effects of marine plastics and microplastics

Report of the Chair of Working Group 40

1 Working Group 40 (WG 40) is currently co-sponsored by IOC-UNESCO and UNEP. It was formed in 2012, with a remit to produce a first global assessment of the sources, fate and effects of microplastics on the marine environment. Following the publication of two global assessments of microplastics, its scope was expanded to include all forms of plastic litter, and this was reflected in the publication of 'Guidelines for the monitoring and assessment of marine litter and microplastics' in 2019. Collectively, these reports continue to have a wide readership and have been cited over 550 times in the scientific literature (ResearchGate). Part of the rationale for continuing WG 40 activities is to support the Sponsoring Organizations and Member States in the implementation of the 'Global Plastics Treaty', currently under negotiation.

2 The current Terms of Reference (ToRs) were presented at the 50th session of GESAMP and further endorsed at the 51st session in Monaco. They are focussed on developing a framework for risk assessment, to encompass social, economic and environmental risks resulting from marine plastic litter and microplastics. Implementation plans include convening a workshop, to include expertise represented by WGs 38, 40, 43 and 44, based on a proposal presented at the 51st session (Annex). The main challenge with progress towards meeting the ToRs has been the lack of funding, either from UN agencies or elsewhere. Hopes were raised, in the intersessional period, of the prospect of the funds being made available, by a single Member State, to cover the cost of the workshop in total, in Q1 or Q2 of 2025. To date, this funding has not materialised, leaving the feasibility of this funding pathway uncertain.

Action requested by GESAMP

- 3 GESAMP is requested to
- .1 re-consider the proposal for a joint risk assessment workshop with WG 43 and 44 (including one representative from WG 38), and the implications in terms of financial support; and
 - .2 discuss WG 40's future objectives, ensuring alignment with all GESAMP sponsoring agencies' priorities.

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ANNEX

PROPOSAL FOR A JOINT GESAMP WG 38, 40, 43 AND 44 WORKSHOP ON DEVELOPING A MARINE LITTER RISK ASSESSMENT FRAMEWORK

Revised draft, April 2024

Purpose

To develop a risk-assessment framework for marine plastic litter and microplastics, for publication in an open-access, peer-reviewed journal(s).

Rationale

- .1 There is a growing need for more effective tools to assess the varied social, economic and environmental risks due to marine plastic litter;
- .2 The outcomes will fulfil an objective under Action Track 1 on Science-Policy of the Global Partnership on Plastic Pollution Marine Litter (GPML): 'Objective ii) Develop risk frameworks to identify priorities for mitigating economic, ecological and social impacts, including human health, from marine litter and plastic pollution;'
- .3 It will support the development and aid the implementation of measures under the proposed international legally binding instrument on plastic pollution, including in the marine environment, that is currently in negotiation;
- .4 It will make use of and further develop work already carried by GESAMP Working Groups:
 - .1 WG 38 : outcomes of the on-line workshop on the atmospheric transport of microplastics (Allen et al. 2022);
 - .2 WG 40: outcomes of the workshop on risk assessment held in Busan September 2022;
 - .3 WG 43: risks due to sea-based sources on marine litter, especially Abandoned Lost or otherwise Discarded Fishing Gear (ALDFG); and
 - .4 WG 44: risks due to biofouling and species transfer on marine litter.

Scope

- .1 Review and select appropriate risk assessment tools applicable to a range of scenarios, covering the full range of marine plastic litter size categories;
- .2 Include previous work carried out by GESAMP Working Groups 38, 40, 43 and 44, as well as published material;
- .3 Apply selected risk assessment approaches to representative case studies, that could include, for example:

- .1 Nano-/micro-plastics in aquatic food chains - socio-economic risk to human health;
 - .2 Nano-/micro-plastics in marine biota - environmental risk to ecosystem health;
 - .3 Abandoned Lost or otherwise Discarded Fishing Gear (ALDFG) - environmental risk to biodiversity;
 - .4 ADLFG - socio-economic risk to livelihoods and food security;
 - .5 Macro-litter - environmental risk to biodiversity (keystone species, biodiversity);
 - .6 Macro-litter - socio-economic risk to livelihoods and human well-being; and
 - .7 Transfer of biota by bio-fouling and rafting - Socio-economic and environmental risk.
- .4 Case studies to cover regionally representative socio-economic and environmental settings.

Outputs

- .1 Publication of one or more papers in an open-access, peer-reviewed journal(s); and
- .2 Publication of a workshop report in the GESAMP Report and Studies Series.

Potential support

- .1 Financial and/or in-kind support from including existing GESAMP sponsoring agencies of the four working groups (FAO, IMO, IOC-UNESCO, UNEP, WMO) as well as others with an interest in the topic, such as IAEA, ISA, and UNDP;
- .2 Financial and/or in-kind support from other IGOs with an interest in the topic, for example: OECD, WHO; and
- .3 Financial and/or in-kind support from national bodies, for example: NOAA.

Organization

- .1 Organizing Committee to include the current chairs of WGs 40, 43 and 44; and
- .2 Local organization - dependent of host.

Potential participation

- .1 3-5 experts from each of WGs 40, 43 and 44, with one representative from WG 38;
- .2 Observers from Sponsoring Organizations; and
- .3 Observers from other relevant organizations.

Proposed location

Europe - potentially Geneva (WMO, UNEP), London (IMO) or Rome (FAO)

Cost

12 - 20 experts (depending on level of ambition and funding availability)

Timing

Workshop: Q4 2024

Outputs: Q1 2025, to feed into discussions on the implementation of the proposed international legally binding instrument on plastic pollution and the 2025 Ocean Conference (Nice, June 2025).
