



**United Nations
Environment Assembly of the
United Nations Environment
Programme**

**Ad hoc open-ended expert group
on marine litter and microplastics**

Fourth meeting

Online, 9-13 November 2020

Item 3 of the provisional agenda¹

**Progress in relevant work pursuant to United Nations Environment
Assembly resolution 4/6 on marine plastic litter and microplastics.**

**Progress on the draft assessment on sources, pathways, and
hazards of litter including plastic litter and microplastics
pollution**

Note by the Secretariat

Introduction

1. The United Nations Environment Assembly, at its fourth session in March 2019, requested the Executive Director of the United Nations Environment Programme (UNEP), in resolution UNEP/EA.4/Res. 6 paragraph 2, to:

“...immediately strengthen scientific and technological knowledge with regard to marine litter including marine plastic litter and microplastics, through the following activities:

(b) Compiling available scientific and other relevant data and information to prepare an assessment on sources, pathways and hazards of litter, including plastic litter and microplastics pollution, and its presence in rivers and oceans; scientific knowledge about adverse effects on ecosystems and potential adverse effects on human health; and environmentally sound technological innovations;

This shall hereinafter be referred to as the “Assessment”.

2. In response to this request, the Executive Director of UNEP convened a Scientific Advisory Committee to guide and inform the implementation of paragraph 2, including the development of the Assessment as requested in subparagraph 2(b).

3. In preparing the Assessment, UNEP developed the conceptual approach, established parameters for identifying gaps and areas in need of more research, and generally built on the UNEP 2016 report, “Marine plastic debris and microplastics – Global lessons and research to inspire action and guide policy

¹ UNEP/AHEG/4/1

change”² developed in response to resolution UNEP/EA.1/Res.6 paragraph 14. Based on the Assessment, UNEP will also recommend indicators as per the request in subparagraph 2(c).

4. This document aims to provide an overview of progress made on the Assessment, its preparation and review process.

The Scientific Advisory Committee

5. In response to UNEP/EA.4/Res.6 paragraph 2, the Secretariat issued an invitation letter (Committee Note No. 0193 (2019)) to Members States, Members of Specialized Agencies and accredited Major Groups and Stakeholders on 19 August 2019 informing them of the decision made by UNEP’s Executive Director to constitute a Scientific Advisory Committee and inviting them to nominate experts to the Scientific Advisory Committee.

6. The 67 members of the Scientific Advisory Committee have been invited to support the development of the Assessment through the provision of scientific information, data, experiences, reviews and advice. Details about the Scientific Advisory Committee’s composition, role and specific tasks are outlined in the information document UNEP/AHEG/2019/3/INF/6³.

Approach and second order draft of the Assessment

7. Two online meetings of the Scientific Advisory Committee took place on 17 October 2019, and 10 December 2019. The Scientific Advisory Committee provided feedback and guidance -on progress towards production of the draft Assessment and the way forward. All comments were shared with the authors for their consideration in the next draft version.

8. The first order draft Assessment was shared on 17 January 2020 with the Scientific Advisory Committee, the Environmental Management Group Task Team, the Regional Seas and with external reviewers, for their consideration. A first review process took place from 17 January to 10 February 2020; 48 reviewers submitted comments which were shared with the authors for their consideration.

9. An in-person meeting of the Scientific Advisory Committee and several Lead Authors took place in Nairobi from 25-27 February 2020. At this meeting the Scientific Advisory Committee reviewed and discussed how to address feedback received during the first order draft Assessment review, to assure a clear flow of scientific information, access to the latest data and information sources and potential key messages.

10. The Scientific Advisory Committee proposed a revision to the Assessment structure, additional areas to be included, reference materials, topics to be presented in boxes, and the content and type of graphs and figures that should be developed. Follow up activities to develop specific parts of the Assessment were also identified and agreed. A draft list of emerging findings was identified, discussed and feedback provided to lead authors to guide their further development.

11. Following the in-person meeting, online working groups were set up to progress the development of different components; these included impacts, research and development activities and business solutions. An update on the revised outline of the draft Assessment, the outcomes of the online working groups and an outline of proposed graphics was shared with the Scientific Advisory Committee on 12 June 2020. To further support the development of graphics for the Assessment, online meetings were set up with the Scientific Advisory Committee to review the proposed graphics. The comments and feedback received were considered, and the updated graphics were shared for the second review in the second order draft Assessment (Outline in Annex 1).

12. The second order draft Assessment was undertaken drawing on expertise in the broader review group including the Scientific Advisory Committee. The review process is now concluded, and comments and feedback received are being considered for preparation of the final Assessment.

² UNEP (2016). Marine plastic debris and microplastics – Global lessons and research to inspire action and guide policy change. United Nations Environment Programme, Nairobi.

³ UNEP/AHEG/2019/3/INF/6

Preliminary emerging findings are being finalized and will be presented during the fourth meeting of the AHEG following an additional review of the Scientific Advisory Committee. The Assessment will be made available to the fifth session of the UN Environment Assembly.

ANNEX 1

REVISED STRUCTURE OF THE ASSESSMENT FORWARD

INTRODUCTION

SECTION 1. EVIDENCE OF IMPACTS AND POTENTIAL EFFECTS

- 1.1 Evidence of biological and ecological impacts
- 1.2 Potential risks and effects on human health
- 1.3 Economic costs of marine litter and plastic pollution
- 1.4 Social impacts of marine litter and plastic pollution
- 1.5 Risk assessment of marine litter and plastic pollution

Boxes:

- Box 1: Nanoplastics
- Box 2: Microfibres
- Box 3: Chemicals associated with marine litter and plastics
- Box 4: Biological and ecological impacts of biodegradable plastics

SECTION 2. PATHWAYS AND SOURCES

- 2.1 Major pathways of litter and plastics
- 2.2 Major sources of marine litter and plastics

Boxes:

- Box 5: Properties and processes affecting the transport and degradation of plastics

SECTION 3. MONITORING METHODS, INDICATORS, STANDARDS AND PROGRAMMES

- 3.1 Methodological developments
- 3.2 Monitoring programmes and surveys, indicators and baselines
- 3.3 Data platforms and data sharing
- 3.4 Citizen science
- 3.5 Standards and traceability

SECTION 4 RESPONSES AND ACTIONS

- 4.1 Challenges and responses
- 4.2 Governance, legislation and social action
- 4.3 Business solutions
- 4.4 Research and development

**SECTION 5. REFERENCES, ACRONYMS, GLOSSARY,
ACKNOWLEDGEMENTS**