Proposed response template on written submissions prior to INC-3 (part a)

At its second session, the intergovernmental negotiating committee (INC) requested the secretariat to invite written submissions on:

- Elements not discussed at INC-2, such as principles and scope of the instrument

INC-2 further requested the secretariat to post any submissions received on the INC website and to prepare a synthesis report of the submissions.

The template below was prepared by the secretariat, in consultation with the Chair, and is meant as a guide to assist Members and Observers in preparing their written submissions.

A number of documents prepared by the secretariat for INC-1 and INC-2 are of relevance to this submission, including:

UNEA resolution 5/14 on ‘End plastic pollution: towards an international legally binding instrument’

UNEP/PP/INC.1/5 on ‘Potential elements, based on provisions in paragraphs 3 and 4 of United Nations Environment Assembly resolution 5/14, including key concepts, procedures and mechanisms of legally binding multilateral agreements that may be relevant to furthering implementation and compliance under the future international legally binding instrument on plastic pollution, including in the marine environment’

UNEP/PP/INC.1/6 on ‘Glossary of key terms’

UNEP/PP/INC.1/8 on ‘Description of standard articles on final provisions that are typically included in multilateral environmental agreements’

UNEP/PP/INC.2/4 on ‘Potential options for elements towards an international legally binding instrument, based on a comprehensive approach that addresses the full life cycle of plastics as called for by United Nations Environment Assembly resolution 5/14’

UNEP/PP/INC.2/INF/4 on ‘Additional information linked to the options for the potential elements towards an international legally binding instrument’

UNEP/PP/INC.2/INF/7/REV.1 on ‘Information submitted by the Secretariat of the Basel, Rotterdam and Stockholm conventions’

All written submissions must be sent to unep-incplastic.secretariat@un.org. As detailed in the mandate, the submissions received will be made available on the INC webpage, a synthesis report of the submissions will also be developed in advance of INC-3.

Please note that not all fields in the template need to be answered in the submission.

Deadline for submissions:

I. By 15 August 2023 for written submissions from observer organizations.
II. By 15 September 2023 for written submissions from Members of the Committee.
Elements not discussed at INC-2

1. Scope

*What is the proposed scope for the future instrument?*

*Which types of substances, materials, products and behaviors should be covered by the future instrument?*

**Proposed scope:**

*Stimulate the development of a tailored to plastic pollution environmental risk assessment procedure enabling cost effective actions toward plastic pollution remediation*

**Explanatory Text:**

In developing countries, plastic pollution is a very grave problem, and its urgency has been recognized only for the last few decades. Besides debris, enrichment of plastic additives in the environment via leaching is also an area of great concern and cannot be overlooked. However, continued accumulation of plastic pollution contamination in the environment causes adverse effects on the ecosystem and ultimately to humans.

Example targeting microplastics (MP): To assess the ecological risk associated with exposure to MP, there is a need to develop robust toxicological dose–response relationships, which can effectively relate environmentally relevant exposures with effects. Because of the heterogeneous presence of MP in the environment of varying concentrations of shapes, sizes, and polymer composition, there is a need to better understand effect mechanisms and the key factors triggering them. Effects observed following exposure to MP on an organism can either be initiated due to sorption of the particles on the external surface of the organism or due to other mechanisms of action being triggered following their ingestion. Effects following exposure to MP, both external and internal, have been assessed in laboratory studies for a wide range of species. The ingestion and/or adsorption of MPs has been suggested to cause adverse effects on toxicological end points at various levels of biological organization, generally observed in laboratory test systems at relatively high exposure concentrations. Besides, experimental work has suggested that effects of MPs can occur at the community level hampering the biodiversity at species composition, population level, individual level or sub-organismal level, while other studies have
assigned effects of MP to the leaching of chemical additives and plasticizers or other hydrophobic organic pollutants. A limitation identified for studies testing ecotoxicological effects, however, is a lack of consistency and standardization of test methods necessary to characterize dose–response relationships for specific end points. Particularly problematic is the need for standard methods in relation to the dosing of particulates, such as MP, an issue that can result in ambiguous results and considerable speculation regarding the proposed mechanisms of action representative of ecologically relevant exposures.

Consequently, the weight of the evidence supportive of a quantitative risk assessment for MP remains unclear.

To structure an effective and reliable environmental risk assessment procedure some key aspects need to be considered like:

A) Identify any hazards, i.e., possible sources of harm,
B) Describe the harm they might cause,
C) Evaluate the risk of occurrence and identify precautions,
D) Record the results of the assessment and implement precautions,
E) Review the assessment at regular intervals,

2. Principles

What principles could be set out in the future instrument to guide its implementation?

Proposed principles:

Promote the development of support decision-making tools tailored to plastic contaminated sites. Such instrument may be promoted to the state members helping to address the ecosystem restoration in a cost-effective manner.

Explanatory Text:

Baseline knowledge about the environmental risk associated to plastic pollution in aquatic and terrestrial environments as well as promoting the establishment of criteria for handling plastic litter floating or buried in soil in heavily contaminated terrestrial environments is needed to estimate correctly all associated costs and environmental impact implications. A multidisciplinary approach which combines chemical and biological measurements, represent the added value to management protocols, and recent European Directives recommend the use of different quality indicators to evaluate the environmental status of the aquatic and terrestrial ecosystems. Such decision-making tool may be relied on a quantitative weight of evidence WOE model developed in science to integrate and differently weight data from various lines of evidence, which include chemical characterization, assessment of bioavailability, ecotoxicological bioassays to organism level and sublethal responses, benthic communities. Based on a solid mathematical geometry, different typologies of data can be evaluated within single modules by standardized logical flowcharts which provide specific hazard indices for each of considered line of evidence, before their differential weighting and integration in a quantitative WOE evaluation. The set of recommended indicators will be
integrated in algorithms considering their specific features and their statistical, biological or economic significance of the observed variations. Independent elaborations for different LOEs allow to consider different criteria which better apply to various typologies of data.

The assessment of all lines of evidence should be characterized by a marked flexibility which make the overall system easy to include new normative (or national and even regional) guidelines, new species, biological endpoints or indicators of ecological functioning. An additional calculation may consider the previously introduced lines of evidence with economic values according to the general approach of WOE, thus giving different weights and thresholds to the main indicators of ecosystems goods and services.

3. Additional considerations

Provide any other relevant inputs, proposals or priorities here that have not been discussed at INC-2 (e.g. preamble; institutional arrangements, including governing body, subsidiary bodies, scientific and technical cooperation and coordination, and secretariat; final provisions including dispute settlements; and if appropriate annexes).

Proposed inputs:

Explanatory Text: