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?**

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**Proposed scope:**
Radiation technology is an innovative means to sustainably address plastic pollution. The International Atomic Energy Agency (IAEA) supports Member States to use of nuclear science and technology in their efforts to achieve the UN Sustainable Development Goals (SDGs) life on land (SDG 15) and life below water (SDG 14), for which plastic pollution poses a huge threat, and industry, innovation and infrastructure (SDG 9), as radiation technology is a green-technology that can be applied to enhance the use of sustainable alternatives for producing bio-based (single use) plastic products and to innovate plastic waste upcycling and recycling to promote establishing a circular plastic economy.

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**Explanatory Text:**
The IAEA’s flagship initiative “NUclear TEChnologies for Controlling Plastic Pollution” (NUTEC Plastics) builds on the IAEA’s efforts to assist Member States to deal with plastic pollution through a two-pronged approach (1) a downstream approach which aims to monitor and quantify marine microplastics and understand their environmental and economic impact using nuclear and nuclear derived techniques and (2) an upstream approach targeting the reduction of plastic waste volumes via innovating recycling, increasing reuse and developing biodegradable plastics using radiation technologies.

Ionizing radiation can modify the structure and properties of materials under moderate conditions, catalyzing reactions without the need for additional chemicals and saving energy by avoiding the use of extreme temperatures. Thus, in the NUTEC upstream approach, radiation offers the potential to generate upcycled products from plastic waste, to render advanced recycling more cost effective and to enable high fidelity sorting.
2. **Principles**

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

Proposed principles:
Intrinsic synergies exist between the IAEA NUTEC Plastics initiative to reduce plastic pollution and many of the core obligations, control measures and voluntary approaches as well as their means of implementation outlined in Sections B and C of the document **UNEP/PP/INC.2/4** prepared by the Secretariat. These lie within the Rio Principle 9 in particular, but also Principles 2-4, and 8.

Explanatory Text:

The IAEA upstream initiative involves a staged approach to support Member States in addressing the reduction of plastic waste via innovating recycling and upcycling technology and increasing reuse capacity. This staged approach spans from capacity building to upscaling and dissemination. These activities are in line with the document **UNEP/PP/INC.2/4** in the following sections:

II, Section B.5, strengthening waste management:
Radiation technology can be harnessed to convert plastic waste in valuable products more efficiently in different ways:
- modifying the surface characteristics of different plastics to help them blend more easily or to bind with other, unalike materials to generate composite material products.
- generating electric charges on the surface of plastics, for accurately sorting plastic waste and extend the amount and number of times that the waste can be recycled,
- enhancing advanced recycling process such as pyrolysis, to transform hard-to-recycle plastics into fuel, feedstocks or additives.

II, Section B.8 promoting the use of safe, sustainable alternatives and substitutes:
Utilizing radiation technology on plant-based sources for the production of biodegradable plastics or bio-fuels/-feedstocks.

II, Section C. IAEA upstream initiative leverages existing IAEA mechanisms, such as Coordinated Research Projects, elaboration of guideline documents, expert missions, Workshops, Training Courses, National Stakeholder meetings, etc. to support Member states in implementing radiation technology for upcycling of plastic waste in general as well as in establishing pilot scale plants. These activities are funded through the Agency’s regular budget, the Technical Cooperation Fund and extra-budgetary funding.

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:
Aspects of the following should be accentuated:
- Plastic pollution is a transboundary challenge that requires concerted global effort to solve
- There is an obvious need to establish a circular plastic economy as part of the solution
- For adherence and success monitoring of the instrument as a whole, key indicators must be agreed upon and an indicator baseline must be established from the onset.

Explanatory Text:
- Plastic pollution is a transboundary challenge that requires concerted global effort to solve
  The IAEA NUTEC plastic is a global initiative that coordinates strategies and activities in Member States from Asia-Pacific, Latin America, Europe and Africa. This global initiative enables the cooperation among Member states and synergize efforts.

- There is an obvious need to establish a circular plastic economy as part of the solution
  The IAEA NUTEC plastic aims to develop cost-benefit innovative radiation technology, able to generate plastic products with circular criteria encouraging value recovery processes; Guideline documents and Excel based tools are being shared with Member States to enable the preparation of feasibility studies for application of said technologies

- For adherence and success monitoring of the instrument as a whole, key indicators must be agreed upon and an indicator baseline must be established from the onset.

The downstream part of IAEA NUTEC Plastics is developing harmonized sampling protocols and analytical techniques required to generate irrefutable marine microplastics data and establishing a network of laboratories worldwide needed to monitor the impacts of the measures taken under the international legally binding instrument on plastic pollution, including in the marine environment.