Intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment
Second session
Paris, 29 May–2 June 2023

Work and guidance under the Convention on Biological Diversity of relevance for the deliberations of the second session of intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment

Note by the secretariat

1. The secretariat of the Convention on Biological Diversity has submitted information that could be of relevance to the intergovernmental negotiating committee.

2. The information is presented in the annex to the present note as received and has not been edited by the secretariat.
Annex

Work and guidance under the Convention on Biological Diversity of relevance for the deliberations of the second session of intergovernmental negotiating committee to develop an international legally binding instrument on plastic pollution, including in the marine environment

Introduction
1. This note includes information on various relevant areas of work under the Convention on Biological Diversity (CBD) that may serve to inform the second session of Intergovernmental Negotiating Committee to develop an international legally binding instrument on plastic pollution, to be held from 29 May to 2 June, in Paris, France. The note provides information on (i) the relevant articles of the CBD, (ii) the newly adopted Kunming-Montreal Global Biodiversity Framework and its relevant targets, (iii) CBD decision 13/10 of the Conference of the Parties (COP) on marine debris, (iv) scientific and technical guidance on marine debris under the CBD, and (v) other relevant guidance under the CBD.

Relevant Articles of the Convention on Biological Diversity
2. The Convention on Biological Diversity, which entered into force on 29 December 1993 and has 196 Parties, has the objectives of (i) the conservation of biological diversity, (ii) the sustainable use of its components and (iii) the fair and equitable sharing of the benefits from the use of genetic resources. There are a number of articles of the Convention of central relevance to the issue of plastic pollution. Article 6, inter alia, obliges Parties to integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies. Article 7(c) calls for Parties to identify processes and activities which may have significant adverse effects on biodiversity, monitor such effects. Furthermore, Article 8(l) requires Parties to regulate or manage relevant processes and categories of activities where a significant adverse effect on biological diversity has been determined pursuant to Article 7. Article 14 addresses impact assessment and minimizing adverse impacts, including a provision on introducing appropriate procedures requiring environmental impact assessment of proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimizing such effects and, where appropriate, allow for public participation in such procedures.

Kunming-Montreal Global Biodiversity Framework
3. At its fifteenth meeting in December 2022, the CBD COP adopted the Kunming-Montreal Global Biodiversity Framework (decision 15/4). The Kunming-Montreal Global Biodiversity Framework (GBF) sets out a pathway to achieve its 2030 Mission to halt and reverse biodiversity loss to put nature on the path of recovery, while ensuring the fair and equitable sharing of benefits from the use of genetic resources, and providing means of implementation, in order to achieve the 2050 Vision whereby people live in harmony with nature. It includes 4 outcome-oriented goals to be achieved by 2050, 23 action-oriented targets to be achieved by 2030, and several sections providing guidance on the implementation of the framework (e.g., Section C noting the implementation of the GBF in accordance with relevant international obligations, and enhanced collaboration between the CBD and other relevant international processes).

4. Several targets of the GBF are highly relevant to the issue of plastic pollution, namely Targets 7, 15, 16, and 18. Target 7 directly addresses the reduction of pollution risks and the negative impact of pollution from all sources to levels that are not harmful to biodiversity and ecosystem functions and services, including preventing, reducing, and working towards eliminating plastic pollution. Additional relevant targets include Target 15 on reducing the negative impacts of business on biodiversity, Target 16 on sustainable consumption and reducing overconsumption and waste, and lastly, Target 18 on eliminating, phasing out or reforming incentives, including subsidies, harmful for biodiversity.

5. The CBD COP also adopted a monitoring framework for the Kunming-Montreal Global Biodiversity Framework, which contains indicators related to plastic pollution to facilitate monitoring of the implementation of Target 7.

CBD COP decision 13/10 on marine debris
6. At its thirteenth meeting in December 2016, the CBD COP adopted decision 13/10 which addresses the impacts of marine debris on marine and coastal biodiversity, and takes note of the Voluntary Practical Guidance on Preventing and Mitigating the Impacts of Marine Debris on Marine and Coastal Biodiversity and Habitats, as contained in the annex

---

1 Target 7 of the Kunming-Montreal Global Biodiversity Framework: Reduce pollution risks and the negative impact of pollution from all sources by 2030, to levels that are not harmful to biodiversity and ecosystem functions and services, considering cumulative effects, including: (a) by reducing excess nutrients lost to the environment by at least half, including through more efficient nutrient cycling and use; (b) by reducing the overall risk from pesticides and highly hazardous chemicals by at least half, including through integrated pest management, based on science, taking into account food security and livelihoods; and (c) by preventing, reducing, and working towards eliminating plastic pollution.
to the decision, and as appended to this note. The voluntary practical guidance contains information on (i) marine debris and its impacts on marine and coastal biodiversity and habitats, (ii) approaches for preventing and mitigating the impacts of marine debris on marine and coastal biodiversity and habitats, and (iii) priority actions for mitigating and preventing the impacts of marine debris on marine and coastal biodiversity and habitats. The full text of the guidance is appended to this note.

Scientific and technical guidance on marine debris under the CBD

7. In 2016, the CBD Secretariat published Technical Series No. 83: Marine Debris: Understanding, Preventing and Mitigating the Significant Adverse Impacts on Marine and Coastal Biodiversity, which built on a review of the impacts of marine debris that was previously undertaken by the Scientific and Technical Advisory Panel of the Global Environment Facility in collaboration with the CBD Secretariat, and published as CBD Technical Series No. 67 in 2012.

8. In 2021, the Technical Series No. 83 was updated in an information document CBD/SBSTTA/24/INF/4 providing new developments and information that emerged on this topic since its publication. This Technical Paper updating the CBD Technical Series No. 83 also incorporates information received in response to notification 2018-080 issued by the CBD Executive Secretary, requesting information on experiences in the implementation of the aforementioned Voluntary Practical Guidance on Preventing and Mitigating the Impacts of Marine Debris on Marine and Coastal Biodiversity and Habitats, or activities that are in line with these.

Other relevant guidance under the CBD

9. At its eighth meeting, the CBD COP endorsed the Voluntary Guidelines on Biodiversity-inclusive Environmental Impact Assessments and Strategic Environmental Assessments, as contained in the annex of COP decision 8/28. In response to COP decision 10/29 and the request to the Executive Secretary to facilitate the development of voluntary guidelines for the consideration of biodiversity in environmental impact assessments and strategic environmental assessments in marine and coastal areas, the voluntary guidelines were further revised and annotated specifically for biodiversity in marine and coastal areas, as contained in the annex to the note by the Executive Secretary (UNEP/CBD/COP/11/23). The revised guidelines provide additional considerations for marine and coastal areas, including marine areas beyond national jurisdiction.

10. At its twelfth meeting in October 2014, the CBD COP adopted the Priority Actions to Achieve Aichi Biodiversity Target 10 for Coral Reefs and Closely Associated Ecosystems, as contained in the annex of COP decision 12/23. The priority actions focus on, inter alia, helping to reduce the impacts of multiple stressors, including local stressors such as land-based and sea-based pollution, destructive fishing practices, coastal development, tourism, and recreational use. This includes, for example, strengthening existing sectoral and cross-sectoral management to address land- and sea-based pollution.

11. At its thirteenth meeting in December 2016, the CBD COP adopted the Voluntary Specific Workplan for Biodiversity in Cold-Water Areas Within the Jurisdictional Scope of the Convention (annex II of COP decision 13/11). The voluntary workplan aims to, inter alia, avoid, minimize and mitigate the impacts of global and local stressors, including pollution, and especially the combined and cumulative effects of multiple stressors, on biodiversity in cold-water areas in the deep and open ocean.
Appendix
Annex of COP Decision 13/10

Article I. VOLUNTARY Practical guidance on preventing and mitigating the impacts of marine debris on marine and coastal biodiversity and habitats

Section 1.01 Marine debris and its impacts on marine and coastal biodiversity and habitats

1. Marine debris is usually defined as any persistent, manufactured or processed solid material discarded, disposed of, lost or abandoned in the marine and coastal environment. This includes materials transported into the marine environment from land by rivers, drainage or sewage systems or winds. Marine debris originates from a range of sea- and land-based sources.

2. Marine debris incurs socioeconomic costs, threatens human health and safety, and impacts marine organisms. It is broadly documented that entanglement in, or ingestion of, marine debris can have negative consequences on the physical condition of marine animals and may lead to their death, and subsequent impacts at the population and ecosystem levels. Ingestion of plastics is also of concern as it may provide a pathway for the transport of harmful chemicals into the food web. Additionally, marine debris is known to damage, alter or degrade habitats (for example, by smothering) and to be a possible vector for the transfer of alien species.

3. Negative effects include alteration of the biological and ecological performance of individuals, external injuries or death. Determining the effect of ingesting marine debris on an individual organism can be difficult, and the consequences of ingestion are still not fully understood. Species that show a high incidence of debris ingestion or entanglement may be susceptible to population-level effects. This could have negative consequences for small populations, particularly those that are endangered and/or exposed to multiple stressors. Identifying the impacts of marine debris at the ecosystem level should include the evaluation of the loss of ecosystem services that can be attributed to this stressor.

4. Microplastics\(^2\) are likely to increase in abundance, and are persistent pollutants that are present in all marine habitats. The trophic transfer of microplastics through benthic and pelagic food webs may facilitate the transfer and accumulation of both plastics and toxic chemicals. There is evidence of transfer of chemical additives from ingested plastics into tissue, including human tissue. There is also concern that the ingestion of microplastics, as well as macro- and mesoplastics, can cause physical effects, such as internal abrasion, blockage and injury, and may also provide a pathway for the uptake of harmful chemicals (for example, additives contained in plastic products) by marine organisms.

5. Marine debris can also serve as a vector for the transport of invasive alien species and may facilitate the dispersal of pathogens. Debris in the sea can be rapidly colonized by microbes to form a biofilm on the surface, effectively becoming an artificial microbial substrate. Debris can also be transported via animals through ingestion and subsequent egestion.

6. The considerable gaps in knowledge of the sources, distribution and quantity of marine debris items, and their impacts on marine and coastal biodiversity and habitats, is limiting the ability to address the problem effectively. There is a lack of information on the amount of debris entering the marine environment and degradation or fragmentation rates for debris under a range of conditions. There is limited information available for the physical and chemical consequences of debris on marine species through ingestion/uptake.

Approaches for preventing and mitigating the impacts of marine debris on marine and coastal biodiversity and habitats

7. The following general approaches are suggested for preventing and mitigating the impacts of marine debris on marine and coastal biodiversity and habitats:

   (a) There should be a focus on preventing the discard, disposal, loss or abandonment of any persistent, manufactured or processed solid material in the upstream and marine and coastal environment;

   (b) Measures to prevent and mitigate the significant adverse impacts of marine debris, should, as appropriate, use existing platforms and tools for cooperation, which will enhance synergies and capitalize on the progress made in

---

\(^2\) Microplastic is defined as pieces or fragments of plastic that are smaller than 5 mm (JRC Scientific and Technical Reports. 2010. Marine Strategy Framework Directive Task Group 10 Report Marine Litter. EUR 24340 EN – 2010). The breakdown of these items results in numerous tiny plastic fragments, which are called secondary microplastics. Other microplastics that can be found in the marine environment are categorized as primary microplastics, due to the fact that they are produced either for direct use, such as for industrial abrasives or cosmetics, or for indirect use, such as pre-production pellets or nurdles (OSPAR Commission, Regional Action Plan for Prevention and Management of Marine Litter in the North-East Atlantic, OSPAR Agreement 2014-1).
these forums (such as the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities,\(^3\) the Global Partnership on Marine Litter and the regional seas conventions and action plans);

(c) A broad range of available instruments and policy responses, including economic incentives, market-based instruments and public-private partnerships, can be used to support action aimed at preventing and mitigating the impacts of marine debris.

**Priority actions for mitigating and preventing the impacts of marine debris on marine and coastal biodiversity and habitats**

8. For land-based sources of marine debris, the following actions are suggested:

(a) Identify baseline data on the main land-based sources, quantities and impacts of marine debris;

(b) Promote structural economic changes that would reduce the production and consumption of plastics, increase production of environmentally friendlier materials, and support the development of alternative materials, increase recycling and reuse and support an enabling environment for these changes through capacity-building, regulations and standards and cooperation among industry, governments and consumers;

(c) Support research aimed at developing, and encourage the transfer of, technology to better understand and reduce the environmental impacts of plastics on the marine environment, to design new or improved biodegradable products and to assess cost-effective production on a commercial scale;

(d) Promote and disseminate best practices in resource-efficient and closed product-to-waste cycles, taking into account the following:

(i) Supporting the design of products that are long-lasting and reusable, repairable, re-manufacturable and recyclable with the most effective use of resources;

(ii) Limiting superfluous consumption by enabling consumers to make responsible, well-informed decisions and discouraging inappropriate disposal behaviour;

(iii) Promoting adequate collection and separation of different types of waste to maximize return rates of high-quality materials;

(iv) Promoting reusing and recycling over incineration and landfilling;

(e) Promote best practices along the whole plastics manufacturing and value chain from production to transport, such as aiming for zero loss;

(f) Assess whether different sources of microplastics and different products and processes that include both primary and secondary microplastics are covered by legislation, and strengthen, as appropriate, the existing legal framework so that the necessary measures are applied, including through regulatory and/or incentive measures to eliminate the production of microplastics that have adverse impacts on marine biodiversity;

(g) Improve the waste management systems of countries through the sharing of best practices as well as identifying and addressing loopholes that contribute to the generation of marine debris, such as the introduction of marine debris into coastal areas from upstream sources.

9. For sea-based sources of pollution, the following actions are suggested, within the respective jurisdictions of Parties and other Governments and the mandates of intergovernmental organizations:

(a) Develop approaches, in collaboration with the International Maritime Organization, to optimize proper handling of waste on ships and waste delivery to port reception facilities and to ensure that waste is disposed of properly;

(b) Identify options to address key waste items from the fishing industry and aquaculture that could contribute to marine debris, and implement activities, including pilot projects, as appropriate, and good practices, such as deposit schemes, voluntary agreements and end-of-life recovery, in collaboration with the Food and Agriculture Organization of the United Nations and the United Nations Environment Programme;

(c) Promote and disseminate, in collaboration with Food and Agriculture Organization of the United Nations and the International Maritime Organization, best practices in relation to all relevant aspects of waste management within the fishing sector (including waste management on board, waste management at harbours, operational losses/net cuttings, deposit schemes and extended producer responsibility) and other relevant sectors;

(d) Apply guidelines on best practices, such as, inter alia, the 1995 FAO Code of Conduct for Responsible Fisheries the 2011 FAO International Guidelines for Bycatch Management and Reduction of Discards and the 2016 FAO

\(^3\) A/51/116, annex II.
Draft Guidelines for the Application of a System on the Marking of Fishing Gear,\textsuperscript{4} to reduce the input and impacts of abandoned, lost or discarded fishing gear from commercial and recreational fishing, as appropriate;

\begin{enumerate}
\item[(e)] Foster partnerships with international and regional organizations, port authorities and non-governmental organizations, to encourage the implementation of initiatives for containing, utilizing and/or processing marine litter, such as passive “fishing for litter” schemes, to collect litter caught in fishing nets during normal fishing activities;
\end{enumerate}

10. With regard to information exchange, knowledge-sharing, awareness-raising, capacity-building, and socioeconomic incentives, the following actions are suggested:

\begin{enumerate}
\item[(a)] Promote and undertake education activities on marine debris in partnership with civil society groups, including activities related to prevention and promotion of sustainable consumption and production;
\item[(b)] Promote outreach and education activities leading to individual behaviour change that can reduce the generated amount of debris entering the environment;
\item[(c)] Establish a collaborative platform for sharing experiences and exchange of information on good clean-up practice in beaches, coastal and marine environments, and, in cooperation with relevant local stakeholders, develop best practices on environmentally friendly clean-up technologies and methods, carry out capacity-building activities and promote the “adopt a beach” system;
\item[(d)] Identify and promote curricula for marine-related education, including both professional seafarers and the recreational sector (for example, diving and sailing schools), in order to increase awareness, understanding and respect for the marine environment and secure commitment to responsible behaviour at the personal, local, national and global levels;
\item[(e)] Develop and implement socioeconomic incentives to prevent the introduction of waste into the environment, such as levies for the sale of plastic bags and/or banning single-use plastic bags, in particular for coastal communities and coastal tourist resorts;
\item[(f)] Exchange information with international environmental certification schemes, including on eco-labelling as appropriate, for the prevention and reduction of marine debris, in accordance with the rules of the multilateral trading system;
\end{enumerate}

11. For integrated management and coordination, the following actions are suggested, within the respective jurisdictions of Parties and other Governments and the mandates of intergovernmental organizations:

\begin{enumerate}
\item[(a)] Support the development and implementation of national or regional action plans to prevent or mitigate the impacts of marine debris on coastal and marine biodiversity and habitats, also by drawing upon existing action plans and guidance in certain regions (such as the Caribbean, North-East Atlantic, Mediterranean and Baltic Sea regions) taking into account existing regional action plans of the respective regional seas conventions and the Honolulu Strategy: A Global Framework for Prevention and Management of Marine Debris;\textsuperscript{5}
\item[(b)] Mainstream marine debris considerations into regulatory frameworks and develop necessary legislative and institutional frameworks that will put sustainable waste management into practices, including through the promotion of extended producer responsibility and waste management infrastructure;
\item[(c)] Mainstream legislation to integrate marine debris issues and targets, in line with existing packaging and waste regulations as well as legislation pertaining to maritime transport;
\item[(d)] Set in place quantifiable and operational targets for avoiding or minimizing marine debris and for preventing and mitigating their impacts on marine and coastal biodiversity and habitats;
\item[(e)] Define the role of marine debris prevention strategies within the context of cross-sectoral and area-based management tools, based on the ecosystem approach.
\end{enumerate}

12. For addressing knowledge gaps and research needs, the following actions are suggested:

\begin{enumerate}
\item[(a)] Support and promote, as appropriate, harmonized approaches to monitoring, analysis and reporting based on standardized methodologies, taking into account existing monitoring guidance for marine litter, such as the European Union Monitoring Guidance for Marine Litter in European Seas;
\item[(b)] Ensure access to, sharing and utilization of technology to support marine debris management and monitoring, particularly in developing countries, in particular the least developed countries and small island developing States and the most environmentally vulnerable countries, as well as countries with economies in transition;
\end{enumerate}

\textsuperscript{4} The 2016 FAO Draft Guidelines for the Application of a System on the Marking of Fishing Gear are contained in appendix E of the Report of the FAO Expert Consultation on the Marking of Fishing Gear.

\textsuperscript{5} \url{http://unep.org/gpa/documents/publications/honolulustrategy.pdf}
(c) Develop and promote means to identify sources, pathways and distribution of marine debris to understand individual and population-level effects of marine debris on marine species;

(d) Investigate and promote the best available techniques as well as research and develop additional techniques in wastewater treatment plants to prevent microparticles entering the marine environment;

(e) Promote research on the potential trophic transfer of marine microdebris in food webs to determine whether there is a bioaccumulation effect for plastics and harmful chemicals;

(f) Develop and strengthen the use of citizen science schemes that address the monitoring and enforcement of environmental standards on marine debris;

(g) Undertake socioeconomic research to better understand the social factors which may contribute to the production of marine debris, the impacts of marine debris on various coastal and maritime sectors and communities, and consumer preferences, perceptions and attitudes that can help to inform targeted outreach programmes designed according to local/cultural context;

(h) Develop a risk assessment of impact and implement a management plan for debris on marine and coastal species and ecosystems, and identify hotspots of gear loss and their associated biodiversity impacts;

(i) Develop monitoring and follow-up strategies, taking account the following needs:

(ii) To evaluate population-level impacts that consider, in a coordinated way, the migration routes and the distribution of species and populations;

(iii) To include species’ life stages and their specific vulnerability to marine debris (for example, monitoring of juveniles to quantify the burden on adults);

(iv) To address sublethal effects while taking into account that a broad range of interacting natural and human factors determines the survival and reproductive success of individual animals;

(j) Apply modelling as a useful tool for marine debris management and mitigation, which can be used with spatial mapping to estimate debris distribution, encounter rates between debris and species and support the production of global risk assessments, especially for threatened species.