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“Young MLAANZ” Comment – Julia Styrylska

Governance of Marine Plastic Pollution – Towards a Global Treaty

Plastic pollution poses significant environmental challenges, leading to extensive harm to ecosystems and the wellbeing of humanity.¹ The International Union for Conservation of Nature estimates that 14 million tonnes of plastic eventually end up in the ocean annually, accounting for 80% of all marine debris.² At the same time, global plastic usage is projected to nearly triple by 2060, due to the combined forces of economic expansion and population growth.³

The presence of plastic in the marine environment was observed by scientists for the first time in the 1960s when seabirds and marine animals were reported to ingest plastic items and were found caught in plastic debris.⁴ It was not long after, in the early 1970s, that scientists started to record plastic particles known as pellets being found at the surface of the sea.⁵ It has been estimated that 80% of all plastic debris found in the ocean originates from land-based sources, such as recreational activities along the coast, general public waste, industrial activities, harbours, as well as unprotected landfills and dumps neighbouring sea. Sewage overflows, accidental loss, and severe incidents also contribute to the introduction of marine litter. River transport additionally plays a role in carrying marine debris to the sea.

Ocean-based plastic pollution includes commercial shipping, ferries, liners, both commercial and recreational fishing vessels, military and research fleets and pleasure boats as well as offshore installations like platforms, rigs and aquaculture sites. Various factors, including ocean current patterns, climate, tides, closeness to urban, industrial and recreational areas, shipping lanes and fishing grounds, play a role in influencing the types and quantities of debris present in the open ocean or along coastlines.⁶

The numerous pathways through which plastic can enter the marine environment combined with the diversity of polluting plastic products, is the reason why plastic pollution in the ocean is so difficult to eradicate.⁷ In addition, plastic debris poses a significant challenge due to its remarkably persistent nature. According to scientific estimates, plastic, including microplastic can persist for hundreds, or even thousands of years before fully decomposing.⁸



Biography

Julia is a foreign-qualified lawyer currently working at Sparke Helmore Lawyers in the maritime and transport team where she is assisting with foreign and national maritime claims.

She holds a master's degree in Maritime Law from the University of Oslo and a law degree from the Jagiellonian University in Cracow.

Julia is passionate about environmental protection and Ocean Governance, having focused her academic research on decarbonisation of the maritime industry.

Prior to moving to Australia, Julia has worked in law firms in Poland and Norway. She has also experience working in the European Commission in the Maritime Transport and Logistics Unit where she was assisting with a proposal for the regulation of electronic freight transport information.

Outside of work, Julia is a yoga teacher who can be seen practicing on her mat at the beaches of the Gold Coast.

International Legal Regime on Plastic Pollution

There are a number of international regulations which touch upon the issue of marine plastic pollution, however, none of them deal with it as the primary subject. To a broader extent, activities in the oceans are governed by the United Nations Convention on the Law of the Sea (UNCLOS)⁹ with Article 192 imposing a general obligation to “protect and preserve the marine environment” and Article 194 requiring states to take all measures necessary to prevent, reduce and control pollution of the marine environment “from any source”. UNCLOS also includes provisions related specifically to pollution from land-based sources (Article 207), as well as pollution from seabed activities (Article 208), dumping (Article 210) and pollution from vessels (Article 211). However, none of UNCLOS provisions relate to plastic pollution specifically.

Another relevant international instrument is the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention)¹⁰ and its 1996 Protocol¹¹ which, like its name suggests, has the key purpose of preventing intentional dumping into the sea.¹² While the London Convention forbids dumping of persistent plastics and other persistent synthetic materials, such as netting and ropes, it does not deal with plastic pollution from other causes.¹³

The regulation of ocean pollution resulting from accidental or operational causes primarily falls under the purview of the International Convention for the Prevention of Pollution from Ships (MARPOL)¹⁴ with Annex V prohibiting release of any waste into the ocean, including all plastics (inclusive of synthetic ropes, synthetic fishing nets and plastic garbage bags). However, MARPOL Annex V does not deal with plastic pollution emanating from cargo.

Yet another applicable, international measure addressing plastic pollution is the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel Convention)¹⁵ which sets out guidelines and procedures for the transboundary shipment of hazardous waste, including requirements for proper packaging, labelling and documentation. Notably, in 2019 the Conference of the Parties (COP) to the Basel Convention extended the scope of hazardous waste to include most of the plastic wastes. The Basel Convention does not, however, impose national targets for the reduction of plastic waste and lacks enforcement mechanisms.¹⁶

In 2001, the Stockholm Convention on Persistent Organic Pollutants (Stockholm Convention)¹⁷ came into force with the aim of protecting human health and the environment from the effects of persistent

organic pollutants (POPs). The Stockholm Convention regulates POPs which can build up in plastic materials found in marine plastic debris.¹⁸

The Stockholm Convention currently names 29 POPs which should either be eliminated or their production should be restricted. These chemicals are recognised for their toxic nature, long-lasting presence and tendency to accumulate in living organisms.¹⁹ Despite containing mandatory provisions to mitigate the potential harm of plastic throughout its life cycle, the Stockholm Convention applies only to products containing listed POPs and in consequence it does not cover a vast number of plastic products.

Certain flame retardants utilised in the production of plastic have been included in the Stockholm Convention. It is estimated that as much as 40% of plastic is produced for packaging purposes.²⁰ It is unlikely that packaging contains flame retardants, especially packaging of food products (due to its strict regulations). Consequently, the application of the Stockholm Convention and its global impact is limited as it only applies to plastic containing the enlisted POPs.²¹

Transport of Plastic Pellets

One of great challenges of marine plastic pollution is pollution by plastic pellets, sometimes referred to as microplastics. The devastating consequences of such pollution were demonstrated by the 2021 X-Press Pearl Maritime Disaster on the coast of Sri Lanka, when a fire onboard the vessel and subsequent explosions resulted in a spill of approximately 1700 tonnes of plastic pellets which had been carried onboard.²²

This incident highlighted an important issue requiring attention from policy makers when it comes to marine plastic pollution. In response to this need, the International Maritime Organization (IMO) Pollution Prevention and Response Sub-Committee (PPR) commenced work on recommendations for maritime transport of plastic pellets. From 24 to 28 April 2023, the PPR held its meeting in London (PPR 10) whereby a working group on marine plastic litter led by an Australian delegation²³ developed a circular on maritime transport of plastic pellets on freight containers to minimise the potential loss of these pellets in marine environments. The circular is to be put forward to the Sub-Committee on Carriage of Cargoes and Containers (CCC) which will hold its meeting from 20 to 29 September later this year.²⁴

The PPR recommended that plastic pellets should be placed in high-quality packaging that is sufficiently sturdy to endure the usual shocks and pressures experienced during transportation. The packaging should be designed and sealed in a way that prevents any potential loss of contents resulting from vibrations or acceleration forces that typically occur during transport under normal conditions.²⁵

The PPR also agreed that it should be a requirement for transport information to explicitly indicate the presence of plastic pellets in freight containers. Furthermore, the shipper should provide a special stowage request along with the cargo details. The objective is to ensure that freight containers carrying plastic pellets are appropriately arranged and secured to reduce potential risks to the marine environment while maintaining the safety of the ship and its crew. Specifically, these containers should be stowed either below deck whenever possible or in secure areas on exposed decks.²⁶

Additionally, the PPR has agreed that plastic pellets should not be transported in bulk. Consequently, the PPR has invited member states and international organisations to put forward any relevant data on packaging for the CCC to consider at its next meeting. Any proposals on possible obligatory measures are also welcomed, including possible regulatory amendments as to prohibition of bulk shipment of plastic pellets.²⁷ What is also significant is that the PPR has accepted terms of reference to prepare draft guidelines on the clean up of plastic pellets from ship-source spills.²⁸

Obstacles in Tackling Marine Plastic Pollution and a Way Forward

Whilst the IMO's recommendations serve as important references for its member states and may become a stimulus for states to develop their own national regulations and practices in line with the international standards, they are not legally binding.

This paper has highlighted the gaps in the regulation of ship-sourced plastic pollution, however, it is also important to focus on land-based sources, because the vast majority of marine plastic pollution originates from land.

A possible solution to this challenge has been addressed by the United Nations Environment Assembly (UNEA). In 2013 the UNEA took over the role of international policymaking in the area of environment from the United Nations Environment Program Governing (UNEP) Council.²⁹

On 2 March 2022 the UNEA adopted Resolution 5/14³⁰ which provides that an intergovernmental negotiating committee (INC) shall formulate an international legally-binding agreement on plastic pollution, including marine environments referred to as the Plastic Treaty. This instrument may include obligatory and voluntary measures, built upon a comprehensive approach that encompasses the entire life cycle of plastics. Negotiations on The Plastic Treaty are to be completed by the end of 2024. The INC is scheduled for its second session from 29 May to 2 June 2023.

Leading marine scientist, Professor Richard Thompson OBE FRS, has called the result of the UNEA's assembly "an immense achievement" and observed that in order to deliver on it, "we urgently need independent, transdisciplinary and cross-sectoral evidence to indicate the most and least appropriate interventions".³¹

Insights from the High Seas Treaty

In searching for answers as to the potential scope of the Plastic Treaty, it may be useful to consider the Draft agreement under UNCLOS on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction³² referred to as the High Seas Treaty. The High Seas Treaty was agreed upon in March 2023 and provides a legal framework for protection of the marine life and for sustainable use of marine biological diversity. It seeks to restrict harmful activities in areas beyond national jurisdiction, provides mechanisms for creating high seas marine-protected areas and sets procedure for environmental impact assessments on activities that may affect marine life.

Despite the fact that the High Seas Treaty and the Plastic Treaty differ as to substance and scope, given that the High Seas Treaty could potentially be a globally-binding agreement, with the purpose of addressing the fragmented regulatory framework of marine plastic pollution, this instrument could provide useful guidance on the framing of the Plastic Treaty.

As regards the governance of the areas beyond national jurisdictions, the existing international legal frameworks regulating marine plastic pollution are governed with varying effectiveness by numerous frameworks, including regional measures such as regional seas conventions each having their own specific purpose and geographical scope.

When it comes to marine plastic pollution, as specified by the UNEA, the entire life cycle must be considered, which means that the Plastic Treaty will need to extend beyond the marine environment to include land-based sources of pollution. As a result, the Plastic Treaty will need to regulate areas both within and beyond the national jurisdiction. This leads to questions of how this instrument will be effective as a globally-binding agreement, given that it will need to interact with existing instruments and laws.³³

This problem was faced during the negotiations of the High Seas Treaty, and in order to address it, the drafters proposed Article 4 which states that nothing in the agreement "shall prejudice the rights, jurisdiction and duties of states under UNCLOS"³⁴ (including those within the exclusive economic zone

and the continental shelf within and beyond 200 nautical miles). In its second paragraph, Article 4 further provides that the “Agreement shall be interpreted and applied in a manner that does not undermine relevant legal instruments and frameworks and relevant global, regional, subregional and sectoral bodies and that promotes coherence and co-ordination with those instruments, frameworks and bodies”.³⁵

The use of the words “not undermine” is crucial, as it determines the institutional framework and its scope of authority. The organisational structure in the High Seas Treaty includes a COP, Secretariat and a Scientific and Technical Body (STB).³⁶

The UNEA’s Resolution 5/14 acknowledges the existing initiatives and instruments, including relevant multilateral agreements which address marine litter, and explicitly recognises the need for complementary measures. Resolution 5/14 further acknowledges that individual countries are best equipped to comprehend their own unique national circumstances.

Another facet which may be of interest is the approach towards a technical and scientific body. The UNEA’s Resolution 5/14 calls for strengthening scientific, technical and technological knowledge in relation to plastic pollution, inclusive of the marine environment, and emphasises the need for sharing of the available data. In this regard, the High Seas Treaty provides that the STB shall deliver scientific and technical advice to COP. In order to deliver its outcome, the Plastic Treaty will require well-defined criteria and guidelines informed by the most up-to-date scientific knowledge, all aimed at safeguarding the wellbeing of oceans.

Another noteworthy aspect of the High Seas Treaty which could be incorporated into the Plastic Treaty is the “one-stop-shop” approach providing access to information with respect to activities taking place pursuant to the provisions of the agreement. The High Seas Treaty refers to the clearing-house mechanism, which (in line with the Convention on Biological Diversity³⁷ which introduced this mechanism) serves three principal goals:

- (i) promote and facilitate technical and scientific co-operation within and between countries
- (ii) develop a global mechanism for exchanging and integrating information on biodiversity
- (iii) develop a human and technological network

Similar mechanisms for openly sharing information and constituting an expert body could be established for the purposes of the Plastic Treaty.

Lastly, the UNEA’s Resolution 5/14 recognises that in order to implement this instrument (including developing countries and economies in transition) financial assistance will be required. In this regard, the High Seas Treaty provides a mechanism which includes a voluntary trust fund and a special fund which will be supported through mandatory and voluntary contributions. The High Seas Treaty further allows additional contributions from parties and private entities.

Conclusion

Despite the increasing awareness of marine plastic pollution, the current international legal regimes regulating this problem lack co-ordination and consistent enforcement mechanisms, which in consequence, lead to a fragmented governance structure. It is not to say that the existing instruments are not valuable, however, there is a lacuna of legislation, especially in relation to ship-sourced pollution from cargo and the land-based sources of marine plastic pollution. It is for these reasons that the global Plastic Treaty with its aim of regulating the entire life cycle of plastic is greatly anticipated. The experience of negotiating the High Seas Treaty demonstrates that the process of formulating an effective global treaty can take several years (possibly decades) due to the involvement of numerous stakeholders, the intended binding nature of the agreement, the complexity of the issues at hand and the need for consensus-based negotiations. It does not come without challenges, but again, as shown by the High Seas Treaty example, it more important than ever to take action.

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- ² International Union for Conservation of Nature, Marine plastic pollution, Issues Brief, November 2021, <https://www.iucn.org/resources/issues-brief/marine-plastic-pollution>.
- ³ Global Plastic Outlook, 1.
- ⁴ Peter G. Ryan, "A Brief History of Marine Litter Research" in Melanie Bergman, Lars Gutow, Michael Klages, (ed) Marine Anthropogenic Litter, (Springer Open, 2015), 3 (A Brief History of Marine Litter Research); and Richard Thompson, "A journey on plastic seas" (2017) Vol.547 (7663), Nature, 278-279.
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- ⁶ François Galgani, Georg Hanke and Thomas Maes "Global Distribution, Composition and Abundance of Marine Litter" in Melanie Bergman, Lars Gutow, Michael Klages, (ed) Marine Anthropogenic Litter, (Springer Open, 2015), 31.
- ⁷ A Brief History of Marine Litter Research, 14.
- ⁸ National Geographic, Education, "Marine Pollution", available at <https://education.nationalgeographic.org/resource/marine-pollution/>, accessed on 25 May 2023; and Richard Thompson, "Are microplastics a big problem?", available at <https://www.plymouth.ac.uk/discover/are-microplastics-a-big-problem>, accessed on 25 May 2023; see also Imogen Ellen Napper, Richard Thompson, "Plastic Debris in the Marine Environment: History and Future Challenges" (2020) Vol.4 (6), p.1900081, Global Challenges.
- ⁹ Montego Bay, 10 December 1982, in force 16 November 1994, 1833 UNTS 397.
- ¹⁰ Washington/Moscow/London/Mexico City, adopted 29 December 1972, in force 30 August 1975, 1046 UNTS 120.
- ¹¹ 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (as amended in 2006).
- ¹² Jyothi Thomas, "Ocean pollution from plastics" in Simone Borg, Felicity Attard and Patricia Vella de Fremaux (ed) in Research Handbook on Ocean Governance Law, (Elgar 2023), 131 (Ocean pollution from plastics ...).
- ¹³ London Convention, Annex I, Article 4.
- ¹⁴ International Convention for the Prevention of Pollution from Ships, London, 2 November 1973, 1340 UNTS 184, as Amended by the Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships of 1973, 17 February 1978, 1340 UNTS 61.
- ¹⁵ Basel, 22 March 1987, in force 5 May 1993, 1673 UNTS 57.
- ¹⁶ Dawoon Jung, "An International Legal Framework for Marine Plastic Pollution" in Froukje Maria Platjouw, Alla Pozdnakova (ed), (Cambridge University press, 2023) Time for a Change to Regulate the Lifecycle of Plastics, Designing Legal Solutions, 46-57 (An International Legal Framework ...).
- ¹⁷ Stockholm, 22 May 2001, in force 17 May 2004, 2256 UNTS 119.
- ¹⁸ Ocean pollution from plastics, 133.
- ¹⁹ Kren Raubenheimer, Alistair McIlgorm, Can the Basel and Stockholm Convention provide a global framework to reduce the impact of marine plastic litter?, (2018) 96 "Marine Policy" , 285-290 (Can the Basel and Stockholm Convention provide a global framework to reduce the impact of marine plastic litter?).
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- ²² "X-Press Pearl Maritime Disaster Sri Lanka", Report of the UN Environmental Advisory Mission, July 2021.

- ²³ Australia has been a chair of this working group since 2018; Australian Maritime Safety Authority, “Preventing marine plastic litter” available at <https://www.amsa.gov.au/news-community/news-and-media-releases/preventing-marine-plastic-litter>, accessed on 25 May 2023.
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- ²⁶ Ibidem.
- ²⁷ Ibidem.
- ²⁸ Ibidem.
- ²⁹ Giulia Carlini, Konstantin Kleine, “Advancing the international regulation of plastic pollution beyond the United Nations Environment Assembly resolution on marine litter and microplastics” (2018) vol. 27, no.3, Review of the European, Comparative & International Environmental Law, 234-244.
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- ³² New York, 20 February – 3 March 2023, Advanced, unedited, pending paragraph renumbering. Draft text available at <https://www.un.org/bbnj/> accessed on 25 May 2023.
- ³³ Hiroko Muraki Gottlieb, “Filling the Gaps in the Global Governance of Marine Plastic Pollution” (2021) Vol.35 (4), Natural resources & environment, 2021, 4-8 (Filling the Gaps ...).
- ³⁴ Draft High Seas Treaty, Art.4 (1).
- ³⁵ Ibidem, Art. 4(2).
- ³⁶ Filling the Gaps.
- ³⁷ Rio de Janeiro, 5 June 1992, in force 29 December 1993, 1760 UNTS 69.

