A treaty on plastic waste

Discussion paper

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Content

1 Introduction

This discussion paper presents the rationale for a **new treaty on tackling plastic waste** and highlights its possible added value. The objective would be to reduce marine plastic litter through a comprehensive approach that also includes land-based sources, a life cycle approach to plastic and is open to future developments.

2 State of play - proposals for a new plastics treaty

There are several recent **proposals for a new treaty** put forward in academic literature and by civil society. There has also been a political push in UNEA, which has addressed marine plastic litter in several resolutions and at UNEA3 convened an open-ended ad hoc expert group to further examine the barriers to and options for combating marine plastic litter. A new treaty was one of the options discussed by the group between UNEA3 and UNEA4, although ultimately there was no consensus for a resolution to explicitly pursue this option.

The proposals in literature show **broad consensus with regard to important gaps** in the existing governance framework and its ability to address marine plastic. The most important gaps in the existing binding rules of international law are:

- Pollution from land-based sources is hardly addressed;
- Existing rules mainly address waste but not the whole lifecycle;
- There is no central forum or coordinating mechanism for addressing this issue and its cross-cutting aspects;
- There are knowledge gaps for instance with regard to entry paths, monitoring volumes etc.

3 Added value of a new treaty on plastic waste

Generally, a new treaty on plastic waste would have added value because it can address the gaps in existing governance and because of its legally binding form. Specifically, a new treaty would have advantages over implementing or merely amending existing treaties, notably the Basel Convention and the Convention on the Law of the Sea (UNCLOS). The existing treaties would not allow for an overarching and comprehensive approach because they have limitations such as a narrow mandate or there may be political reluctance to widen their scope. These arguments are set out in more detail below.

3.1. Addressing gaps in current governance

Generally speaking, the added value of the new treaty is the **opportunity to address the gaps** in the current governance. In terms of substance, a treaty could address pollution at its source, in particular from **land-based sources**.

Pollution from land-based sources "suffers from regulatory neglect" and non-binding approaches have not been effective.[1] A new treaty would allow for addressing not just waste but also **the complete life cycle** of plastics and issues such as **extended producer responsibility** (EPR). It should be noted that a treaty can "address" its issues more or less prescriptively and precisely, and leave flexibility for parties in order to ensure buy-in and implementation over time.

It would also be **future-oriented.** It would anchor the issue on the agenda and establish a permanent forum to progressively address it, even if its legal obligations as such were initially more of a "framework" nature. A treaty could include mandates for further work and permanent institutions such as a Conference of Parties (COP) which adopts decisions to specify and guide parties' implementation over time.

This would also **add value to the multitude of regional approaches**[2] without diminishing their role.[3] A treaty structure could also generate and focus new research and knowledge.

3.2. Legally binding form

While binding rules are not an end in itself, a binding treaty ideally shows a high level of **long-term commitment** both at the international as well as at the national level. It has the backing of national Parliaments. It is likely to have more weight in the eyes of the public and it can be important for political discourse. A new treaty is also an opportunity to get major players on board - from the start or over time.

In order to provide added value, even a legally binding treaty does not necessarily have to be equally "strict" across all its provisions. Again, it should be noted that a treaty can address its issues more or less prescriptively and precisely and **provide flexibility**. For instance, the strength of the Paris Agreement's political narrative goes way beyond its actual legal text.[4] The 1.5 and 2 °C temperature goals in the Paris Agreement are quite weak in strictly legal terms, but they have set the benchmark for public and political discussion.

Binding options include not just a new treaty, but also implementing or amending existing treaties such as the Basel Convention. However, it would be difficult to establish overarching and comprehensive concepts such as a life cycle approach under existing instruments. They all have limitations such as their scope or mandate, or there may be potential political reluctance to widen their scope (on the Basel Convention and UNCLOS see below). In addition, amending a treaty often requires legal procedures and political buy-in similar to a new treaty. Against this background, no existing treaty appears to be clearly suitable for addressing plastic waste comprehensively.

[1] Schmalenbach (2019), 2-3.
[2] Schmalenbach (2019), 21.
[3] Carlini (2019), 239-240.
[4] Bodle et al (2016), 5.

Besides amending existing treaties, another binding option is to include marine plastic pollution as a topic in on-going negotiations on treaties on other environmental issues. The only process that might at least in theory be suitable is the negotiations on a treaty under UNCLOS on biodiversity of areas beyond national jurisdiction (BBNJ).[5] However, the negotiation process does not appear to have included this issue. The draft treaty text for the negotiating session in August 2019 did not address mariner litter or plastics.[6]

3.3. Limitations of the Basel Convention

A new treaty on plastic waste would provide added value to the Basel Convention in two ways:

From a **waste perspective**, it could address issues that are not covered by the Basel Convention and which might be difficult to address within it. The Basel Convention is regarded as one of the more successful international regimes and its 2019 amendments of Annexes with regard to plastic wastes are a major step forward. However, it is not a comprehensive waste regime. Its main focus is controlling transboundary movements of hazardous wastes and other wastes[7] and to ensure their environmentally sound management.

More generally, and more importantly, a new treaty would allow for taking **a broader perspective than waste**. Although the Basel Convention has a legal provision for addressing waste prevention and minimisation, it seems insufficient for addressing the whole life cycle of plastics. A new treaty could start afresh with this broader perspective without disrupting the long-established Basel Convention.

A new treaty would have to at least implicitly address its **relation to the Basel Convention** in order to ensure coherence and complementarity.

3.4. Limitations of UNCLOS

UNCLOS has general provisions on pollution, which are generally regarded as being subject to further international agreements in order to be operative. Article 207 UNCLOS requires parties to take measures against pollution from land-based sources, including measures designed to minimize the release of harmful substances. However, unlike many global environmental treaties, UNCLOS does not have reporting, monitoring and compliance systems to follow up. It also does not have an institutional structure that provides guidance on implementation and assistance.[8] Its dispute settlement mechanism is adversarial and provides little incentive to use it in environmental matters.[9] Advisory opinions have a very limited potential to provide guidance on plastics.[10] The “global rules” envisaged in Article 207 UNCLOS have not been established and UNCLOS rules do not appear to have much value on their own.

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[5] Tiller and Nyman (2018); Schmalenbach (2019).
[6] See the draft text by the President, UN Doc. A/CONF.232/2019/6. Delegations apparently did not raise the issue in this session.
[7] The scope of the Convention covers hazardous wastes and other wastes (i.e. wastes listed in Annex II of the Convention) which are subject to a procedure of prior informed consent (PIC). Non-hazardous plastic waste not listed in Annex II is outside the scope of the Convention.
[8] Schmalenbach (2019), 11.
[9] Notwithstanding the dispute between Ireland and the UK in the *MOX plant* case.
[10] Schmalenbach (2019), 11.

4 Initial ideas for a new treaty

It is important to distinguish between the legal form and structure of a new treaty and its individual provisions and elements. Formally speaking, the whole of a treaty is binding on its parties under international law. But its individual provisions can draw on a broad range of specific language including qualifiers, which would give parties more or less flexibility or discretion regarding what they have to do to implement and fulfil their obligations.[11] For instance, obligations can require a certain conduct or result, provisions can be programmatic, declaratory, or nudging. It is of course too early to discuss specific wording, but it should be kept in mind that this range of options can help securing political buy-in.

Several of the papers that propose a new treaty contain similar ideas with regard to the content of a new treaty. There is considerable consensus that marine plastic litter and microplastics need to be tackled at source.[12]

There are some structural elements of a new plastics treaty that would probably be considered to be "standard" for an environmental treaty, such as reporting and a conference of the parties that meets regularly. In this paper we focus on a few key issues:

- General treaty design and future development
- Objectives, goals and targets
- Core obligations such as national action plans and transparency on implementation
- How to address industry - EPR
- How to address microplastics
- Institutions, means of implementation

General treaty design and future development: The treaty would start with general obligations while there are still knowledge gaps, but it is designed to elaborate details over time that guide implementation, without formally changing the treaty. Classic tools include tasks and mandates for further work and permanent institutions such as a Conference of Parties (COP) which adopts decisions to specify and guide parties' implementation over time. The treaty could also envisage future additional agreements in annexes or protocols.

It might be useful to distinguish two general approaches that are regarded as successful and juxtaposed here in a simplified way: For example, the 1987 Montreal Protocol contained quite precise and prescriptive individual obligations for each party on the phasing out of ozone-depleting substances. In contrast, the 2015 Paris Agreement has a more procedural approach with collective goals and few precise individual obligations to prepare and implement action plans towards these goals, and a core transparency framework.

[11] Bodle and Oberthür (2017), 97 and 103.
[12] Simon et al (2018); Schmalenbach (2019), 5; Greenpeace at https://www.dw.com/en/g7-minus-two-leaders-agree-to-ocean-plastics-charter/a-44107774

One argument put forward for the Paris approach is that it was successful in bringing on board parties that were reluctant to accept individual obligations similar to the Montreal Protocol or the Kyoto Protocol. On the other hand, the Paris Agreement's approach is an experiment that relies on the parties to determine at national level which efforts they intend to make, combined with the persuasive impact of the transparency framework.[13]

Goals - targets: In recent literature, binding measurable targets are often proposed, although the precise nature of these targets is not always clear. Goals and targets can be formulated as quantitative or qualitative. In addition, they can be formulated as collective or individual. A treaty can combine all options.

Targets - examples	**Collective**	**Individual on each party**
Quantitative	*Parties* aim at reducing plastic marine litter pollution *by half* by 2025	*Each party* has to reduce marine litter pollution from its territory by half by 2025.
Qualitative	*Parties* aim at *significantly reducing* plastic marine litter pollution by 2025.	*Each party* has to undertake efforts to significantly reduce marine litter pollution from its territory by 2025.

A collective target could be useful in guiding the implementation of the treaty as a whole. It could also become a reference point for public debate, similar to the temperature goals of the Paris Agreement. However, it does not make individual parties responsible for being on track or achieving the collective goal.

Targets for individual parties might be politically more difficult to agree on, depending on what they actually require and how much flexibility they provide. The G7 Oceans Charter contains several quantified targets that could be a starting point. However, it would need to be discussed to what extent the G7 targets are suitable for a binding commitment in a treaty and for a broader range of countries.

As an alternative to individual targets being set in the actual treaty text, the treaty could require each individual party to set itself a target e.g. in a national action plan. In any event, the treaty design should not provide an incentive to set low targets.

Quantitative targets could provide clarity and credibility about what the treaty and the parties intend to achieve. They would be more precise than qualitative targets and better allow for measuring progress, provided that it is measurable at least to some extent. Methodologies and other technical issues would not have to be fully developed and written into the treaty, but the treaty would have to indicate how to address them. For collective targets, a body such as UNEP could regularly write a report that becomes a reference point. For individual targets, the treaty could envisage that parties negotiate and agree on technical guidance by a certain date.

[13] Bodle and Oberthür (2017), 103.

Qualitative targets could be easier to agree on than quantitate targets and provide more flexibility, but also raise the issue of tracking progress and accountability.

Core obligations: Parties should have individual obligations to periodically prepare and implement **national action plans**. The binding elements should not only include the obligation for parties to the treaty to periodically prepare and submit these (updated) plans. They should also include a mechanism by which the NAPs are reviewed and in some form discussed, both at the *international* level.

Overarching provisions and core obligations should address the full **life cycle** of plastics. In particular, it should focus on prevention and not just on waste management.

Transparency: individual binding obligations to report on implementation, plus a review and discussion of these reports. This is standard, but crucial. Provisions on transparency and accountability are obligations in their own right, and they also add to the credibility of the whole treaty.[14]**Extended producer responsibility (EPR**) - obligations on industry? Some suggest that the treaty should lay down the responsibility of industry.[15] The treaty could for instance address EPR, which is considered to be "one of the most promising policy options to reduce future plastic waste".[16] It may be defined as "an environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle."[17]

In practice, this mainly includes collecting products that have become waste and sorting them before treatment according to the waste hierarchy. The producer´s responsibility may for instance include organising and operating such processes, or merely financing them.[18] But it has to be clear that a treaty addresses states, not industry directly. In order to introduce EPR at the national level, the treaty would need to formulate obligations or guidance for *states* to put certain obligations on industry with regard to EPR. This could be based on and linked to the polluter pays principle.[19] One rationale is to reduce the burden of waste management on municipalities and tax payers and to create incentives to design products that generate less waste or waste that can be better recycled.

The EPR concept encompasses a broad range of mandatory and voluntary policies and instruments, such as product take-back requirements, performance standards, market-based instruments or information instruments.[20] There is no best practice amongst the vast number of existing EPR systems across the globe with their diverse circumstances.[21] In addition, the EPR concept should be able to evolve, e.g. in order to integrate informal waste workers in emerging economies and developing countries.[22] The treaty should take this into account and could e.g. include general obligations on parties to promote or establish EPR, or require specific measures such as imposing transparency obligations on producers. There is also a broad range of options for providing flexibility for parties in implementing these obligations at their respective national levels. The treaty could mandate further work on assisting and guiding states in establishing

[14] Bodle and Oberthür (2017), 101.
[15] Simon et al (2018), 47.
[16] Schmalenbach (2019), 18.
[17] OECD (2016 highlights), 4
[18] OECD (2016 highlights), 4.
[19] A link recognised by e.g.the G20 in the 2017 Action Plan on Marine Litter.
[20] See OECD (2016), 21-22 and passim.
[21] OECD (2016), 98.
[22] OECD (2016 highlights), 6.

and designing EPR at their national level, and in particular in cooperating and coordinating their respective EPR approaches.

Microplastics are an issue that is frequently mentioned together with tackling plastics generally. It should be considered to what extent microplastics are special in relation to "normal" plastic waste and should be specifically addressed in a treaty. We suggest that microplastics create specific and different problems: Cleaning up is more difficult than with normal plastic waste. There are also different and only partly understood impacts, for instance on health. The G7 and G20 have set qualitative targets for microbeads, but microplastics are not addressed in existing treaties. In the literature on a new treaty there are virtually no specific provisions on microplastics except for research. Since it appears to be highly difficult to tackle microplastic once it has entered the oceans, we suggest it might be useful to distinguish three main issues before that stage:

Primary microplastics that are intentionally included in a product, e.g. microbeads in cosmetics. Several countries have adopted regulatory measures in this regard.[23] The intentional use of microplastics can be addressed as part of avoiding waste, in particular through phasing-out or product design, which makes EPR especially important for this issue.

Microplastics that are not intentionally included in products, but created by product use, e.g. through tyre abrasion and from fabrics. Similar to the above, product design might be able to help in avoiding this.

For microplastics that cannot be avoided, the traditional approach to waste, such as collecting, does not work. Instead, waste water treatment becomes important as it appears to be quite effective. However, this requires high-grade waste water systems and treatment facilities, which can be a challenge for many countries. Capacity building and other types of support would be important.

In any event, the treaty should foster research specifically on microplastics.

Institutions - a special body on plastics? It is standard in modern treaties to establish a structure with permanent treaty bodies such as a COP supported by a Secretariat through which parties regularly meet and agree on guidance and details on its implementation. Subsidiary bodies or further institutions with mandates for specific issues could be considered. These bodies could also establish mechanisms for addressing emerging issues and policy approaches. However, it might be premature to consider creating a new scientific body similar to the IPCC.

Means of implementation and finance. A regular issue in international environmental treaties is the capacity of developing countries to implement their international commitments. The treaty would need to address support, which usually comprises capacity building,[24] technology development and transfer, and financial support. With regard to finance, there are existing financing channels at the international level, such as bilateral development assistance and funding from multilateral institutions. The Global Environment Facility (GEF), for instance, addresses marine litter within its programming specifically through circular economy initiatives.
Implementation and compliance: Some proposals for a new treaty call for a compliance system, with adversarial procedures and sanctions. For better or worse, recent treaties and practice have moved away from strict compliance mechanisms in the style of the Montreal

[23] See Kentin (2018).
[24] See Borelle et al (2017), 9996.

Protocol or Kyoto Protocol. “Compliance” should be considered more broadly as part of parties’ accountability for fulfilling and implementing their commitments. The focus should be on provisions on transparency and accountability. They have a double function as obligations in their own right, as well as supporting the legal force of the overall regime.[25] The treaty could still provide the mandate and basic parameters for parties to elaborate and adopt an additional mechanism after entry into force.

5 Conclusions

The objective of a new treaty on plastic waste would be to reduce marine plastic litter through a comprehensive **life-cycle approach** that is open to future developments. The purpose would not be to prohibit plastics as such.

A new treaty on plastic waste would have **added value** because it can address the gaps in and limitations of existing governance: These include in particular addressing pollution at its source, especially from land-based sources, addressing not just waste but the whole life cycle of plastics and microplastics, taking into account the approach of extended producer responsibility.

A new treaty would provide added value also because of its legal form: A binding treaty ideally shows a high level of long-term commitment both at the international as well as at the national level.

Existing treaties such as the Basel Convention and the Convention on the Law of the Sea (UNCLOS) would not allow for an overarching and comprehensive approach because they have limitations such as a narrow mandate or political reluctance to widen their scope.

Apart from “standard” features, **essential elements** of a new treaty would include:

- Goals and targets, which can be formulated and combined as quantitative or qualitative, collective or individual;
- Core obligations such as periodically submitting national action plans, transparency on implementation and review at the international level.
- Addressing the full life cycle of plastics with a focus on prevention and not just waste management.
- While a treaty addresses states, it could anchor the concept of extended producer responsibility (EPR), taking into account the broad range of available instruments and different circumstances and the need for international coordination;
- Addressing issues specific to microplastics, since cleaning up is more difficult than with normal plastic waste and there are also different and only partly understood impacts, for instance on health.
- Institutions, capacity building and other means of implementation.

For all elements, a treaty can address each issue more or less prescriptively and precisely, and leave **flexibility** for parties in order to ensure buy-in and implementation over time. It would also be future-oriented and include mandates for further work and permanent institutions, even if its legal obligations as such were initially more of a "framework" nature.

[25] Bodle and Oberthür (2017), 103.

5 References

Bodle, Ralph, Lena Donat, and Matthias Duwe. 'The Paris Agreement: Analysis, Assessment and Outlook'. Carbon & Climate Law Review 10, no. 1 (2016): 5–22.

Bodle, Ralph, and Sebastian Oberthuer. 'Legal Form of the Paris Agreement and Nature of Obligations'. In The Paris Agreement on Climate Change: Analysis and Commentary, edited by Daniel Klein, María Pía Carazo, Meinhard Doelle, Jane Bulmer, and Andrew Higham. Oxford, New York: Oxford University Press, 2017.

Borrelle, Stephanie B., Chelsea M. Rochman, Max Liboiron, Alexander L. Bond, Amy Lusher, Hillary Bradshaw, and Jennifer F. Provencher. 'Opinion: Why We Need an International Agreement on Marine Plastic Pollution'. Proceedings of the National Academy of Sciences 114, no. 38 (19 September 2017): 9994–97. https://doi.org/10.1073/pnas.1714450114.

Carlini, Giulia, and Konstantin Kleine. 'Advancing the International Regulation of Plastic Pollution beyond the United Nations Environment Assembly Resolution on Marine Litter and Microplastics'. Review of European, Comparative & International Environmental Law 27, no. 3 (2018): 234–44. https://doi.org/10.1111/reel.12258.

Hamilton, Lisa Anne, Steven Feit, Carroll Muffett, Matt Kelso, Samantha Malone Rubright, Courtney Bernhardt, Eric Schaeffer, Doun Moon, Jeffrey Morris, and Rachel Labbé-Bellas. 'Plastic & Climate: The Hidden Costs of a Plastic Planet'. Center for International Environmental Law (CIEL), 2019. https://www.ciel.org/plasticandclimate/.

Kentin, Esther, and Heidi Kaarto. 'An EU Ban on Microplastics in Cosmetic Products and the Right to Regulate'. *Review of European, Comparative & International Environmental Law* 27, no. 3 (2018): 254–66. https://doi.org/10.1111/reel.12269.

OECD. *Extended Producer Responsibility: Updated Guidance for Efficient Waste Management*. Paris: OECD Publishing, 2016. https://www.oecd-ilibrary.org/content/publication/9789264256385-en.

Sands, Philippe, Jacqueline Peel, Adriana Fabra, and Ruth MacKenzie. *Principles of International Environmental Law*. 4th ed. Cambridge University Press, 2018. https://doi.org/10.1017/9781108355728.

Schmalenbach, Kirsten. 'An Ocean of Plastic'. Archiv des Völkerrechts (AVR) 57, no. 1 (2019): 1–25. https://doi.org/10.1628/avr-2019-0002.

Simon, Nils, Doris Knoblauch, Linda Mederake, Katriona McGlade, Maro Luisa Schulte, and Supriya Masali. No More Plastics in the Ocean. Gaps in Global Plastic Governance and Options for a Legally Binding Agreement to Eliminate Marine Plastic Pollution. adelphi, 2018. www.adelphi.de/en.