Towards an Effective Science-Policy Interface for the Global Plastics Treaty

The challenge of plastic pollution can only be addressed by interventions throughout the full life cycle of plastics and in the context of regional heterogeneity. While the Global Plastics Treaty (GPT) has synergy with other Multilateral Environmental Agreements (MEAs), the complexity and specificity of plastic pollution necessitates a dedicated Science Policy Interface (SPI). This should be established as a subsidiary body that is complementary to, and shares information with SPI's or Science Policy Panels (SPPs) of other relevant MEAs.

The revised Zero Draft (rZD) contains over 60 references to the need for scientific input, either via an SPI (Part 1. 1); Science, Technology and Economics Panels (STEPs) (e.g. Part II. 2); or a scientific body (Part IV. 3). However, use of terminology varies, and the purpose and timing of implementation of the SPI are not yet defined. The hallmarks of an effective SPI are "credibility, relevance, legitimacy, transparency, iterativity and inclusiveness, as well as being policy relevant, but not policy prescriptive" [1, 2, 3]. While delivery varies across existing MEAs, a formalised dedicated SPI is widely recommended [4]. We also note the need for synergy of the proposed SPI for the GPT with the (to be established) Science Policy Panel on Chemicals, Waste and Pollution Prevention (SPP), as well as the SPIs of existing MEAs [1].

What would an effective SPI to the GPT look like?

An effective SPI would support the goals of the treaty by facilitating science-policy dialogue and delivering policy-relevant information, knowledge and advice on the full life cycle of plastics [1,3]. An effective SPI would also evaluate the efficacy of potential upstream to downstream interventions and implementation measures.

The SPI will need to be informed by independent and robust scientific knowledge [1, 3]. Key tasks, starting with agenda setting activity between INC 4 and 5 (see Timeline for implementation), could include assessment and design criteria, baselines and targets, and monitoring, and reporting on the progress and effectiveness of the instrument. It is the position of the Scientists' Coalition that an effective SPI to the GPT would regularly update the safety, sustainability, essentiality, and transparency criteria for plastics, chemicals, polymers, products, technologies, and systems and services. The SPI could also conduct regular horizon scanning [5] to minimise any unintended consequences associated with potential plastics substitutes and alternatives; and address the socio-economic implications of the GPT including financial, technical and capacity support to enable a just transition.

Avoiding Conflict of Interest

Majority representation within the SPI should be from independent scientists, other observers, and rights holders, including Indigenous scientists and knowledge holders. The remaining representation should have an equitable regional balance from member states. We advocate developing Terms of Reference that are inclusive, while ensuring majority representation by independent experts who are free of conflicts of interest [1,2], including with chemicals and plastics industries (Figure 1).

Therefore, among other potential conflicts of interest, we advocate recommendations from the International Panel on Chemical Pollution which considers "*past or present employment by or consulting for the chemical or plastics industry and related organizations constitutes a Conflict of Interest. [...] Experts with a Conflict of Interest should not participate in the core work of the inter-sessional working groups or the science-policy interface*" [6]. The same applies for experts who have received funding from such parties. Any potential conflicts must be declared. However, in order not to be overly restrictive the SPI could adopt the approach of the Stockholm Convention which considers four years after the declared interest as sufficient to be regarded as independent [7]. We recommend building on the lessons learned from science advisory bodies of existing MEAs by examining their strengths and weaknesses.
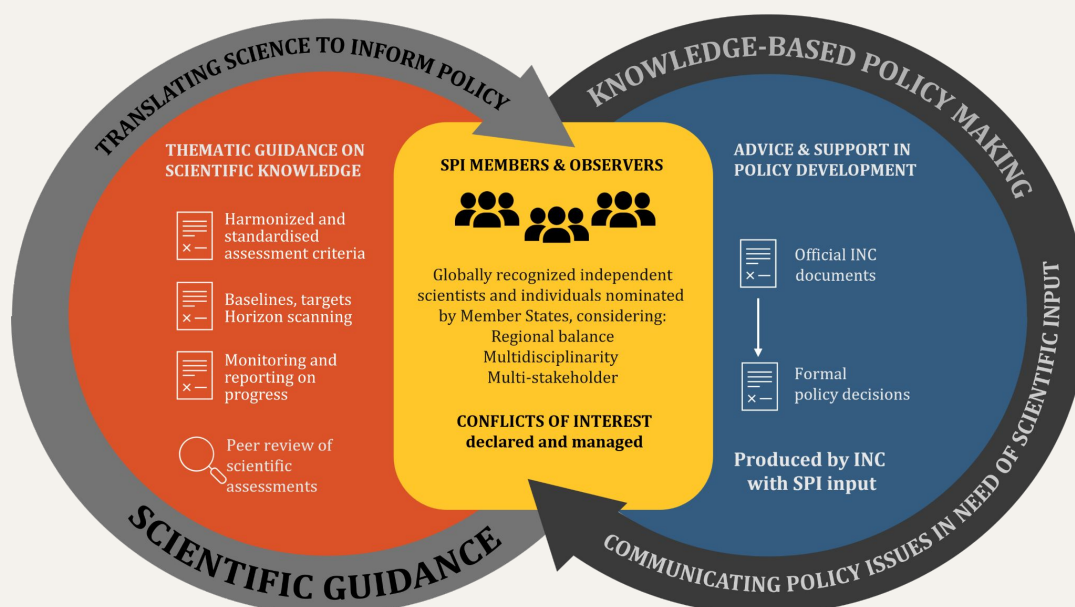

Figure 1. Proposed structure and activities of the Science-Policy Interface to the GPT. Adapted from [4]

Timeline for implementation of the proposed SPI to the GPT

Immediate	Transition Period	Established by 1st COP
BEFORE INC-5	**POST INC-5 - 2025**	**POST 2025**
a) Modification of the draft text to stipulate the need for a formalized SPI as part of the GPT and to consistently refer to an SPI as its science mechanism; **b)** Pursue a mandate at INC-4 for intersessional agenda setting activity between INC-4 and 5. This could take the form of dedicated working groups for Criteria and Annex lists.	Requests from INC Bureau to expert group(s) for work and guidance materials. Prepare for establishment of the SPI, including Terms of Reference and Rules of Procedure, in order to maximise complementarity with the work of the SPP, or the science bodies of other MEAs.	SPI is established to support policy implementation, and evaluation. SPI should host open-ended working groups, with specific mandates, including assessment and review of groups of chemicals, polymers, products, alternatives, substitutes, technologies and systems and services; updating GPT Annex lists; and horizon scanning.

References and notes

[1] GRID-Arendal (2023). Science-policy interface for plastic pollution. GRID-Arendal. Arendal. Karen Raubenheimer, Niko Urho.

[2] UNEP (2020) Assessment of options for strengthening the science-policy interface at the international level for the sound management of chemicals and waste. UNEP: Nairobi, Kenya. ISBN No: 978-92-807-3840-7.

[3] International Science Council, 2023. Policy Brief: Creating a strong interface between science, policy and society to tackle global plastic pollution.

[4] Akhtar-Schuster (2022) Assessing the Impact of Science in the Implementation of the United Nations Convention to Combat Desertification. https://doi.org/10.3390/land11040568.

[5] Systematic review to detect early/weak signs of potentially important developments, supporting policymakers in anticipating risks, pursuing opportunities, building resilience and reducing uncertainty. (European Environmental Agency, 2023)

[6] Schaeffer, A., *et al.* (2023). Policy Brief: CoI in the Assessment of Plastics - Addressing the industry's role in the ongoing Plastics Treaty negotiations and the forthcoming SPI for plastic pollution. https://www.ipcp.ch/wp-content/uploads/2023/11/IPCP_INC-3_Brief_231110.pdf .

[7] Wang (2022) Enhancing scientific support for the Stockholm Convention's implementation: An analysis of policy needs for scientific evidence. https://doi.org/10.1021/acs.est.1c06120

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