
Western Europe and Others Group Regional Briefing of the second session of the Ad hoc open-ended working group on a science-policy panel to contribute further to the sound management of chemicals and waste and to prevent pollution

8 and 9 November 2023

13:00 – 16:00 (CET)

Online meeting

Draft relationships with relevant key stakeholders

Note by the secretariat

The annex to the present note contains draft relationships with relevant key stakeholders for the second ad hoc open-ended working group (OEWG 2) for the science-policy panel to contribute further to the sound management of chemicals and waste and to prevent pollution. The annex is an advance edited version.

Draft relationships with relevant key stakeholders

Note by the secretariat

I. Introduction

1. At its resumed fifth session, held in Nairobi from 28 February to 2 March 2022, the United Nations Environment Assembly decided, by its resolution 5/8 of 2 March 2022, to establish a science-policy panel to contribute further to the sound management of chemicals and waste and to prevent pollution, with details to be further specified according to the resolution.
2. In the same resolution, the Assembly decided that the ad hoc open-ended working group should prepare proposals for the science-policy panel to consider a number of issues, among which were the relationships of the panel with relevant key stakeholders, including governmental and non-governmental organizations and civil society (para. 5(d)).
3. The present document is based on a comprehensive, but not exhaustive, review of the relationships of other science-policy interfaces with stakeholders, complemented by further evaluations and relevant literature. It is accompanied by information document UNEP/SPP-CWP/OEWG.2/INF/5.
4. Section II discusses potential roles that stakeholders might have in a science-policy panel. Section III identifies approaches towards establishing relationships with stakeholders, building on lessons learned. Section IV sets out a proposal on the way forward.

II. Potential roles that stakeholders might have in the panel

5. Addressing issues related to chemicals, waste and the prevention of pollution is a complex and multifaceted matter. Chemicals, waste and pollutants can travel long distances and have long-term consequences for ecosystems and human health, including for future generations, thus extending the issue well beyond immediate concerns. Furthermore, of the tens of thousands of human-made chemicals on the market, many are traded globally by international companies that are not necessarily subject to national jurisdictions. Those impacted may therefore be far away from where chemicals are produced, used and managed. This dynamic interplay between biological, physical, socioeconomic, technological and political systems adds to the complexity of the science-policy interface. Addressing issues effectively requires an understanding of sources, state and trends, impacts, drivers and barriers, including how these are perceived, interacted with and managed. It also requires a good understanding of the conditions under which efforts achieve success and the transfer of such understanding into policymaking. Accordingly, there is a need for co-production of science and policy, building upon collaboration among scientists, policymakers, other relevant stakeholders and the public and in which practitioners participate in the process.¹
6. **Facilitating the uptake of “science in action” in non-scientific settings requires collaboration and cooperation among stakeholders.**^{2,3,4} A broad range of stakeholders may therefore play a role in a science-policy interface, combining actionable science with sustained stakeholder interaction and interdisciplinarity, in line with Environment Assembly resolution 5/8. This would entail the involvement of stakeholders – including in industry and civil society – across a variety of sectors and coming from a broad range of disciplines, working in a range of languages and knowledge systems, and operating at diverse scales ranging from local to international. Effectiveness

¹ Meadow, A.M., Ferguson, D.B., Guido, Z., Horangic, A., Owen, G. and Wall, T. Moving toward the deliberate coproduction of climate science knowledge. *Weather, Climate, and Society* 2015, 7(2), 179–191; Wall, T.U., Meadow, A.M., Horganic, A. Developing evaluation indicators to improve the process of coproducing usable climate science. *Weather, Climate, and Society* 2017, 9(1), 95–107; Bamzai-Dodson, A., Cravens, A.E., Wade, A.A., McPherson, R.A. Engaging with stakeholders to produce actionable science: a framework and guidance. *Weather, Climate, and Society* 2021, 13(4), 1027–1041.

² Goolsby, J.B., Cravens, A.E., Rozance, M.A. Becoming an actionable scientist: challenges, competency, and the development of expertise. *Environmental Management* 2023, DOI: 10.1007/s00267-023-01863-4.

³ Bamzai-Dodson, A., Cravens, A.E., Wade, A.A., McPherson, R.A. Engaging with stakeholders to produce actionable science: a framework and guidance. *Weather, Climate, and Society* 2021, 13(4), 1027–1041; Beier, P., Hansen, L.J., Helbrecht, L., Behar, D. A how-to guide for coproduction of actionable science. *Conservation Letters* 2017, 10(3), 288–296.

⁴ Pohl, C., Truffer, B., Hirsch-Hadorn, G. 23 Addressing wicked problems through transdisciplinary research. In *The Oxford Handbook of Interdisciplinarity (2nd edition)*, edited by Frodeman R. 2017.

reviews of existing science-policy interfaces echo this need to engage stakeholders from a wide range of areas and sectors.⁵

7. **As an effective science-policy interface involves many stakeholders, it is important to understand their roles and identify which relationships are key for the panel.** Close relationships with relevant key stakeholders can also help to ensure that the panel's work is complementary to and does not duplicate other work, in line with paragraphs 6(d) and 6(e) of resolution 5/8. The following interfaces were reviewed: the Intergovernmental Panel on Climate Change (IPCC), the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), the International Resource Panel (IRP), the Global Environment Outlook (GEO) process, the assessment panels of the Montreal Protocol on Substances that Deplete the Ozone Layer, the Arctic Monitoring and Assessment Programme (AMAP), the Science-Policy Interface of the United Nations Convention to Combat Desertification (UNCCD SPI), the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP) and the science-policy interfaces under the World Health Organization (WHO), the Organisation for Economic Co-operation and Development (OECD) and the Strategic Approach to International Chemicals Management (SAICM). The examples from the aforementioned interfaces are complemented by existing reviews of these processes, peer-reviewed literature and views that were expressed during a side event held on 2 May 2023⁶ in conjunction with the 2023 conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions.

8. **Stakeholders undertake many and varied roles in existing science-policy interfaces.** The two tables in annex I provide a detailed overview of the various roles that stakeholders undertake in existing science-policy interfaces. Two main relationships have been identified: (a) institutional engagement at the level of the panel, and (b) participation in work programme development and implementation.

9. **A panel's relationships with stakeholders could be considered according to the general roles the stakeholders have.** Based on the review, three key roles in relation to the panel could be considered: (a) contributors to the panel; (b) end users of the panel's deliverables (e.g. policymakers and decision makers, recipients of outputs); and (c) those that may be impacted – positively or negatively – by the science-policy panel's outputs and ensuing policy outcomes (including vulnerable and at-risk populations). A wide range of stakeholders may be relevant for the science-policy panel (see annex II), and they may fit into more than one category. Likewise, multiple stakeholders can contribute to a given role/relationship, and often do so from different angles. For example, in the scoping of an assessment, contributors can provide aspects in terms of what knowledge is available, whereas end users and those that may be impacted can provide aspects related to their needs.

10. **Through effective engagement and relationships, stakeholders may contribute to bolstering a science-policy interface's credibility, relevance, legitimacy, transparency, iterativity and inclusiveness.**⁷ Stakeholder engagement can contribute to expanding the pool of potential experts that engage in the panel's work. This could result in more interest in being nominated and prevent a situation in which the absence of experts could impact the panel's work.⁸ Stakeholders not only furnish the interface with knowledge and perspectives that contribute to its credibility, they can also enhance legitimacy and relevance by providing inputs, oversight and transparency. Engaging end users and those that may be impacted by the panel's work can further help to ensure legitimacy and enhance the relevance of the panel's work. For example, the 2019 IPBES effectiveness review highlighted the need for strong engagement of regional and national policymakers, policy practitioners, policy experts and decision makers from civil society organizations and business as from the development of the work programme, to ensure the policy relevance of the science-policy interface's outputs and thus foster subsequent uptake and impacts.⁹ Further experience gained in science-policy interfaces, notably

⁵ Finding 14 of the 2019 IPBES effectiveness review (IPBES/7/INF/18).

⁶ The webpage of the side event, including a summary and the video stream from the event, can be found at <https://www.genevaenvironmentnetwork.org/events/science-policy-panel-on-chemicals-waste-and-pollution-prevention-building-the-linkages-from-science-to-action-brs-cops-2023-side-event/>.

⁷ United Nations Environment Programme. 2020. *Assessment of options for strengthening the science-policy interface at the international level for the sound management of chemicals and waste*. Prepared for the fifth session of the United Nations Environment Assembly. Available at: <https://wedocs.unep.org/bitstream/handle/20.500.11822/33808/OSSP.pdf>.

⁸ IPCC-LVII/INF.12.

⁹ Finding 6 and recommendations 4 and 33 of the 2019 IPBES effectiveness review.

at IPBES, IPCC and GEO, highlights in particular the importance of engaging Indigenous Peoples and local communities.¹⁰

11. **Stakeholders may play a key role in the dissemination and uptake of outputs.** Some science-policy interfaces tend to view assessments as end products rather than as a part of a wider, more complex and longer-term process to influence policy.¹¹ The reviews and current practice indicate that leveraging various stakeholders to conduct follow-up at all levels (e.g. translation into local languages, dissemination, development of derivatives such as policy briefs, awareness-raising) could help to enhance the uptake of the panel's outputs by policymakers and decision makers.

12. **Stakeholders may be delegated to deliver some components of the interface's functions.** For example, the 2019 IPBES effectiveness review identified stakeholders as holding great potential to deliver capacity-building activities on the Platform's behalf.¹² There is similar potential for stakeholder contributions in delivering on functions related to knowledge management and information-sharing. For example, the OECD eChemPortal, which is an information-sharing portal on chemicals, benefits from key contributions from its stakeholders: it is hosted by the European Chemicals Agency, and the data sources accessed through eChemPortal are maintained by, and remain the responsibility of, the organizations that create them.¹³

III. Approaches towards establishing relationships with relevant key stakeholders

13. Extensive experience gained from existing science-policy interfaces has yielded key lessons that may inform the development of a proposal on the panel's relationships with relevant key stakeholders as mandated in resolution 5/8. The examples show that stakeholders contribute in various ways and point towards a combination of approaches, as is further discussed below.

A. Approach 1: Inclusion in the institutional arrangements, rules of procedure or work-related processes and procedures of provisions for certain roles that stakeholders may take

14. The relationships with relevant key stakeholders in existing science-policy interfaces that are incorporated in arrangements or procedures typically include:

- (a) Provisions in the rules of procedure for relevant key stakeholders' accreditation and participation in the meetings of the plenary and its subsidiary bodies,¹⁴ and
- (b) Work-related processes and procedures that enable stakeholders to provide inputs into work programme development, nominate experts, provide feedback during the scoping of assessments and other deliverables, and review drafts.¹⁵

B. Approach 2: Establishment of formal strategic partnerships

15. **Formal partnerships can encourage stakeholders' sustained engagement in the work of a science-policy interface.** IRP, for example, has formed partnerships with many stakeholders over the years. Among these, 19 are designated "strategic partners" with the aim of supporting the development and dissemination of IRP publications, enhancing impact and creating synergies with other relevant stakeholders.¹⁶ These strategic partners may include United Nations agencies, international, regional and national organizations, intergovernmental bodies, non-governmental organizations (NGOs),

¹⁰ See, for example, in the case of GEO:

https://wedocs.unep.org/bitstream/handle/20.500.11822/40473/GEO_Ind_know.pdf and https://wedocs.unep.org/bitstream/handle/20.500.11822/40474/GEO_Lit.pdf.

¹¹ IPBES/7/5 and IPBES/7/INF/18.

¹² Finding 27 of the 2019 IPBES effectiveness review.

¹³ <https://www.oecd.org/chemicalsafety/risk-assessment/echemportalglobalportaltoinformationonchemicalsubstances.htm>.

¹⁴ See information document UNEP/CWP-SPP/OEWG.2/INF/4 concerning rules of procedure of existing science-policy interfaces.

¹⁵ See document UNEP/CWP-SPP/OEWG.2/6 for more information on work-related processes and procedures of different existing science-policy interfaces.

¹⁶ Policies and Procedures of the International Resource Panel (IRP-PP-2016).

private and public institutions, business and industry associations, research centres, universities, foundations and science-policy platforms.¹⁷

16. **Formalizing partnerships may bring clarity on the roles and responsibilities of partners in an open and transparent manner.** This was noted as well in the perspectives on lessons learned as discussed in the sixth IPCC assessment report, which recommended that IPCC consider how to best coordinate and liaise with external organizations from the outset in the preparation of products and outreach related to IPCC.¹⁸ Similarly, the 2017 review of UNCCD SPI made an explicit recommendation that that interface's interaction with IPBES and IPCC should be formalized.¹⁹ The Convention on Biological Diversity, with its well-established partnership and cooperation with IPBES, was indeed found to stand out among the multilateral environmental agreements in its uptake of IPBES work.²⁰

17. **The sustained interaction enabled by formal partnerships can also contribute to a synergistic co-production of science and policy** and thus enhance the long-term sustainability and effectiveness of the panel.²¹ Relationships with relevant key stakeholders should not, however, compromise the independence of the interface, and conflict-of-interest policies need to be in place to protect the interface from vested interests.²²

18. Under IPBES,²³ strategic partnerships aim to support work programme implementation through one or more of the following means:

- (a) Increasing alignment of activities, including capacity-building;
- (b) Lending direct support for delivery of the work programme by, for example, providing technical support, contributing specific knowledge and experience, coordinating areas of work in which an organization has particular expertise, providing administrative support, engaging in outreach and communication, increasing access to data and analytical methods, and promoting and catalysing capacity-building;
- (c) Building and managing relationships; and
- (d) Facilitating stakeholder engagement.

19. IPBES provides guidance on the development of strategic partnerships and other collaborative arrangements, including criteria to be used in identifying whether a strategic partnership is appropriate and necessary.²⁴

20. IPBES differentiates formal partnerships by type of stakeholder:

- (a) *United Nations entities*: formal institutional links between IPBES and UNEP, the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Food and Agriculture Organization of the United Nations (FAO) and the United Nations Development Programme (UNDP) through collaborative partnership arrangements, particularly with regard to secretariat services/arrangements and implementation support;
- (b) *Multilateral environmental agreements*: partnerships between the IPBES secretariat and the secretariats of several multilateral environmental agreements based on memorandums of

¹⁷ The full list of partner organizations can be found at <https://www.resourcepanel.org/partners>.

¹⁸ IPCC-LVII/INF.12, Lesson 4.

¹⁹ https://www.unccd.int/sites/default/files/relevant-links/2017-05/FinalReportof%20the_SPI_Assessment.pdf.

²⁰ Finding 9 of the 2019 IPBES effectiveness review.

²¹ Lemos, M.C., Morehouse, B.J. 2005. The co-production of science and policy in integrated climate assessments. *Global Environmental Change* 15, 57–68.

²² More details on conflict-of-interest procedures can be found in document UNEP/SPP-CWP/OEWG.2/6.

²³ Decision IPBES/3/18, annex III.

²⁴ See IPBES/7/INF/18, annex, concerning guidance on the development of strategic partnerships and other collaborative arrangements, which includes the following criteria to be used in identifying whether a strategic partnership is appropriate and necessary: (a) necessity of using a formal partnership approach rather than other available mechanisms; (b) relevance of the potential partnership to delivery of the work programme agreed upon by the plenary, including consideration of any priorities agreed upon by the plenary; (c) opportunity to perform work programme activities more effectively, efficiently, economically and ethically; (d) experience and capacity of the potential strategic partner in fields relevant to the Platform and its willingness to collaborate in delivering the work programme; (e) achievement of a more appropriate regional or thematic balance in the delivery of the work programme.

cooperation, particularly with regard to promoting synergy, avoiding overlaps and unnecessary duplication, and ensuring effective cooperation; and

(c) *Other relevant key stakeholders:* partnerships with, among others, several international organizations through memorandums of understanding,²⁵ particularly with regard to supporting the work of task forces; thematic and global, regional and subregional assessments; policy support; communications; outreach; and stakeholder engagement.

21. To establish formal partnerships with relevant multilateral agreements, international instruments or intergovernmental bodies, approval from the governing bodies of each entity may be needed. Such approvals may require time and coordination as these entities have their own processes to manage and governing bodies that operate on different time frames. This requires careful alignment and planning.²⁶

22. **Relationships with various stakeholders may need to be further differentiated.** The effective implementation of partnerships under some science-policy interfaces has been hampered by having a single formal status of “observer” available for all non-members and non-State actors (partners or otherwise). In particular, the IPBES effectiveness review found that, while United Nations entities and the multilateral environmental agreements are well-defined in the Platform’s stakeholder engagement strategies, there was a very significant lack of clarity in IPBES regarding the various types of actors that are interested or involved in the Platform. The review recommended adopting a differentiated approach to relationships with stakeholders other than United Nations entities and the multilateral environmental agreements by creating additional categories of partners and stakeholders for more efficient and effective engagement.²⁷ Such differentiation might also enhance visibility and recognition of the role of other relevant key stakeholders, including those from civil society and the private sector.

23. **One way to differentiate stakeholders is to consider “major groups” as the GEO process does.** This grouping of stakeholders also applies to the ad hoc open-ended working group, as it has adopted the rules of procedure of the Environment Assembly.²⁸ It is however noted that the stakeholder landscape has become more diverse, and many non-governmental organizations do not necessarily consider themselves associated with one of the nine major groups, for example, some foundations, faith groups, informal workers associations, health organizations or academic institutions.²⁹ Further (innovative) approaches to differentiating stakeholders could therefore be considered.

24. **IPBES has also established a number of technical support units to assist in its work, many of which are hosted by stakeholders.** Technical support units could be provided by partner institutions outside UNEP to support specified time-bound, expert-driven tasks. GEO as well has recognized such units as a type of partnership and included them in the procedures adopted in 2022.³⁰

25. **Furthermore, GEO has a long history of working with collaborating centres that partner with the secretariat to support various enabling functions, such as capacity-building, knowledge**

²⁵ As at August 2023, such partnerships included Future Earth, the Global Biodiversity Information Facility, the Inter-American Institute for Global Change Research and the International Union for Conservation of Nature.

²⁶ Finding 9 of the 2019 IPBES effectiveness review.

²⁷ Recommendation 3 of the 2019 IPBES effectiveness review.

²⁸ The UNEP stakeholder engagement policy is grounded in rule 70 of the rules of procedure of the Environment Assembly, with the current practice described in the UNEP *Stakeholder Engagement Handbook* (https://wedocs.unep.org/bitstream/handle/20.500.11822/32831/stakeholder_handbook_EN.pdf). The nine major groups are: women; children and youth; Indigenous Peoples; non-governmental organizations; local authorities; workers and trade unions; business and industry; scientific and technological community; and farmers. In 2012, the outcome document of the United Nations Conference on Sustainable Development, entitled “The future we want”, contained in General Assembly resolution 66/288 of 27 July 2012, further acknowledged other stakeholders, including local communities, volunteer groups and foundations, migrants and families, as well as older persons and persons with disabilities, as relevant key stakeholders in United Nations processes related to sustainable development. Their participation is undertaken through close collaboration with the major groups (<https://sustainabledevelopment.un.org/aboutmajorgroups.html>).

²⁹ “Established practices for the participation of accredited representatives of Major Groups and Stakeholders in meetings of UNEA and its subsidiary bodies,” pre-session document for the meeting of the Bureau of the ad hoc open-ended working group on a science-policy panel to contribute further to the sound management of chemicals and waste and to prevent pollution. Available at: https://wedocs.unep.org/bitstream/handle/20.500.11822/42814/SPP_OEWG_MGS_modalities.pdf.

³⁰ Global Environment Outlook. Intergovernmental and Expert-led Scientific Assessment Procedures. https://wedocs.unep.org/bitstream/handle/20.500.11822/40633/GEO_procedures.pdf.

generation and support for policymaking.³¹ Such centres could also provide expert support needed that may not be available within the secretariat (e.g. for translation, identifying emerging issues, outreach, providing regionally relevant data, hosting meetings).

C. **Approach 3: Promotion of stakeholder involvement through informal arrangements, including in delivery of the work programme**

26. Such an approach creates opportunities to engage a broad array of stakeholders. Examples of informal arrangements to engage a wide range of interested organizations from existing science-policy interfaces, notably IPBES, include:

- (a) Guidance to stakeholders on their engagement as collaborative supporters for successful implementation of the work programme;^{32,33}
- (b) Self-organized stakeholder networks;³⁴
- (c) Open-to-all stakeholder days in advance of a plenary session;³⁵ and
- (d) A secretariat-maintained stakeholder registry containing updated contact information, which can assist stakeholders in networking with each other as well as enable the secretariat to directly share announcements, news, calls and other important information with stakeholders.³⁶

27. **Strong two-way communication supports effective relationships with relevant key stakeholders.** Stakeholder engagement strategies, road maps and activities may need to be closely aligned with, and connected to, the panel's communication strategies, as different stakeholders have different communication needs (e.g. languages, formats, channels). Communication with the media can start during the initial development of an assessment or while the assessment is being produced – not just at its release or during the post-production phase. Furthermore, active participation by OECD in business, trade union and environmental NGO meetings and workshops has contributed to mutual trust and a better flow of information and ideas.³⁷ These may be useful models to consider for the panel in order to ensure active communication and engagement with stakeholders.

28. **Ongoing dialogue and processes of engagement on the part of the secretariat with national focal points may also help to ensure that knowledge, data and views of national experts and stakeholders are captured in the panel's work.** Under IPBES, stakeholder engagement by national focal points has led to a broadening of stakeholder involvement and raised awareness and understanding of what the Platform does and how it operates. Furthermore, national focal points can bring critical feedback from national stakeholders at an early stage – for example, during work programme development or the scoping of assessments – to enhance the policy relevance of the panel's work.

29. **In-kind contributions should be recognized and incentivized in such informal arrangements.** The lessons-learned paper prepared by the IPCC working group co-chairs³⁸ and the 2019 IPBES effectiveness review both highlighted that, because the work of science-policy interfaces relies heavily on in-kind contributions from the scientific community, partners and other stakeholders, this can cause fatigue and demotivation among experts over time. The IPBES review further

³¹ A list of past GEO collaborating centres and other contributing institutions listed in GEO reports can be found at <https://www.degruyter.com/document/doi/10.1515/9789633864326-020/html>.

³² The IPBES capacity-building rolling plan, for instance, identifies the principles, strategic directions, modalities and actions for building and further developing the capacities of individuals and institutions based on the priority needs established by the IPBES plenary, including with in-kind support from partners and the task force on capacity-building and its technical support unit, as well as support from other sources, including through the capacity-building forum with conventional and potential sources of funding. <https://www.ipbes.net/resource-file/19145>.

³³ <https://www.ipbes.net/sites/default/files/inline-files/National%20platforms%20and%20networks%20-%20opportunities%20to%20engage%20with%20and%20contribute%20to%20the%20work%20of%20IPBES.pdf>.

³⁴ For example, the Open-Ended Network of IPBES Stakeholders (ONet; <https://onet.ipbes.net/about>), which aims to facilitate and maximize the effective engagement of stakeholders and knowledge holders in the IPBES process, and the International Indigenous Forum on Biodiversity and Ecosystem Services (IIFBES; <https://www.ipbes.net/IIFBES>), which aims to facilitate and enhance the effective participation of Indigenous Peoples and local communities in IPBES processes.

³⁵ <https://www.ipbes.net/stakeholder-events>.

³⁶ <https://www.ipbes.net/stakeholder-registry>.

³⁷ <https://www.oecd.org/env/theoecdspartnerpartners.htm>.

³⁸ IPCC-LVII/INF.12.

recommended that an incentive system for in-kind contributions should be put in place (e.g. visibility, recognition). One way of doing this could be to align the panel's work and outputs with the "currency" of relevant key stakeholders.³⁹ For example, the scientific members of GESAMP can produce peer-reviewed publications as part of the Group's work. This has been done by experts under other science-policy interfaces as well.⁴⁰

IV. Proposal on the way forward

30. **Sustained engagement and collaboration with key stakeholders can improve the strength of the panel and increase the likelihood of uptake of its deliverables.** Strong two-way communication can support effective relationships with relevant key stakeholders. Engagement with national focal points has been shown to assist as well in ensuring that knowledge, data and views of experts and stakeholders are captured in the panel's work.

31. **A key lesson is the need to engage more and diverse stakeholders and to differentiate relationships other than with United Nations entities and the multilateral environmental agreements by developing additional categories of partners and stakeholders.** Such differentiation may result in more efficient and effective engagement and enhanced visibility and recognition of the role of other key stakeholders. The review has shown that inclusive participation of stakeholders through co-production of science and policy is now a common practice in many settings and is important to strengthen the attributes of an effective science-policy interface, such as relevance, credibility and legitimacy. Further consideration of the identification of specific relevant key stakeholders or stakeholder groups to engage with may be required, along with practical approaches to bring them together.

32. **In establishing effective relationships with stakeholders, the panel can build upon formal and informal approaches, which complement each other.** Regardless of the approach or combination of approaches chosen, the relationships need to be clearly communicated in a transparent manner, particularly with regard to the relevance and role of different stakeholders in the panel's work.

33. **The open-ended working group may therefore wish to consider the following:**

(a) A description of stakeholders in the context of the panel, for which purpose the open-ended working group may wish to use the following text:

In the context of the science-policy panel, stakeholders are institutions and individuals that belong to one or more of the following categories: (1) contributors to the panel, (2) end users of the panel's deliverables, and (3) those that may be impacted by the science-policy panel's outputs and ensuing policy outcomes;

(b) Approaches to be pursued in establishing relationships with relevant key stakeholders, building on good practices and lessons learned;

(c) Providing guidance to the secretariat on further work to inform the finalization of a proposal on the panel's relationships with relevant key stakeholders, if necessary.

³⁹ Hering, J.G. 2016. Do we need "more research" or better implementation through knowledge brokering? *Sustain. Sci.* 11, 363–369.

⁴⁰ <https://www.ipbes.net/news/new-article-science-ipbes-global-assessment-authors>.

Annex I

Roles that stakeholders undertake in existing science-policy interfaces

Table 1

Roles that stakeholders undertake in existing science-policy interfaces related to institutional engagement at the level of the panel

<i>Role</i>	<i>Examples of interfaces that include the role (non-exhaustive listing)</i>	<i>Contribution to science-policy interface</i>
<i>I. Roles commonly addressed under institutional arrangements / rules of procedure</i>		
Attend meetings of the governing body (and subsidiary bodies), and actively participate as permitted by the rules of procedure	AMAP, GEO, IPCC, IPBES, IRP, OECD, UNCCD SPI, WHO, assessment panels of the Montreal Protocol	Enhancing policy relevance and legitimacy; ensuring that the interface is regularly and fully apprised of relevant developments in the science-policy domain;
Participate in focal point networks	GEO, IPCC, IPBES, SAICM, assessment panels of the Montreal Protocol	enhancing cooperation and avoiding duplication of work
<i>II. Roles not commonly addressed under institutional arrangements / rules of procedure</i>		
Provide secretariat services	GEO, IPCC, IPBES	Strengthening the panel's capacity to execute the work programme; tapping existing networks and sectoral expertise; enhancing cooperation and avoiding duplication of work
Provide support to fund-raising and resource mobilization	IPCC	Contributing to long-term sustainability of the panel;
Provide financial and/or in-kind support, including hosting of expert workshops or meetings	AMAP, GEO, IPBES, SAICM, WHO, IRP	enhancing interdisciplinarity and developing country representation of the panel; enhancing cooperation and avoiding duplication of work;
Contribute to expanding the pool of potential experts for the panel's work	GEO, IPBES, IPCC, UNCCD SPI, IRP	strengthening the panel's capacity to execute the work programme
Contribute to stakeholder engagement, for instance, by building up of stakeholder networks	IPBES, IRP, UNCCD SPI	
Provide feedback on the process as part of effectiveness evaluation	IPBES, SAICM	Enhancing relevance

Table 2

Roles that stakeholders undertake in existing science-policy interfaces related to the development and execution of work programmes, including horizon scanning, assessment, capacity-building, knowledge management and information-sharing⁴¹

<i>Role</i>	<i>Examples of interfaces that include the role (non-exhaustive listing)</i>	<i>Contribution to science-policy interface</i>
<i>I. Roles commonly addressed under work-related processes and procedures</i>		
Propose possible activities for a new work programme	AMAP, GEO, IPBES, IPCC, IRP, WHO	Enhancing policy relevance; enhancing cooperation and avoiding duplication of work
Express views on proposals for a new work programme under development, including their prioritization	AMAP, GEO, IPBES, IRP	
Express views on scoping	GEO, IPBES, IPCC, IRP, WHO	Enhancing policy relevance, credibility, legitimacy and transparency; enhancing interdisciplinarity, geographical distribution and gender balance; enhancing buy-in and ownership; enhancing cooperation and avoiding duplication of work
Nominate experts and express views on selected experts	GEO, IPBES, IPCC, WHO	
Provide data and knowledge	GEO, IPBES, IPCC, the UNEP Technology and Assessment Panel (TEAP), WHO, IRP	
Review drafts of the panel’s deliverables	GEO, IPBES, IPCC, IRP, UNCCD SPI, WHO, assessment panels of the Montreal Protocol	
<i>II. Roles not commonly addressed under work-related processes and procedures</i>		
Conduct/foster research and generate/publish relevant data and knowledge for the assessments	IPCC	Contributing to the comprehensiveness of assessments and to interdisciplinarity
Provide data, knowledge and advice related to specific knowledge-management and information-sharing activities	OECD, IPBES	Enhancing relevance
Advise on the identification of knowledge gaps	GEO, IPBES	Enhancing relevance, legitimacy and inclusiveness
Undertake delegated work related to knowledge management and information-sharing	OECD, IPBES	Strengthening the panel’s capacity to execute the work programme
Undertake work to fill identified knowledge gaps	GEO, UNCCD SPI	Enhancing impact of the interface’s work
Oversee the scientific integrity of the entire process	GEO	Enhancing credibility and legitimacy
Provide validation of the assessment outputs through specific institutional mechanisms	GEO, IRP	Enhancing legitimacy and policy impact
Disseminate the assessment outputs at the international, regional, national and local levels, including in languages other than the six official languages of the United Nations	IPBES, IPCC, IRP, UNCCD SPI, WHO	Enhancing outreach and policy impacts; strengthening the panel’s capacity to execute the work programme
Foster uptake by policymakers and decision makers	IPBES, UNCCD SPI, WHO, IRP	Enhancing policy impacts

⁴¹ The knowledge-management and information-sharing functions here refer to the following two principal functions agreed on by the open-ended working group at its first session: (a) providing up-to-date and relevant information, identifying key gaps in scientific research, encouraging and supporting communication between scientists and policymakers, explaining and disseminating findings for different audiences, and raising public awareness; (b) facilitating information-sharing with countries, in particular developing countries seeking relevant scientific information.

<i>Role</i>	<i>Examples of interfaces that include the role (non-exhaustive listing)</i>	<i>Contribution to science-policy interface</i>
Conduct joint assessments	IPBES, IPCC, WHO, TEAP, IRP	Enhancing policy relevance, interdisciplinarity of the panel, and cooperation
Advise on the identification of needs and terms for capacity-building	GEO	Enhancing relevance, legitimacy and inclusiveness
Conduct capacity-building activities at the regional and national levels, based on the interface's outputs	IPBES, GEO	Strengthening the panel's capacity to execute the work programme
Address identified capacity-building needs that are beyond the scope and functions of the interface	GEO, IPBES, SAICM	Enhancing the impact of the interface's work

Annex II

Overview of the range of relevant stakeholders, by type of entity, whose engagement may be key to the successful functioning of the panel

National and local governments, and their networks	Including legislatures and legislators (e.g. the Inter-Parliamentary Union), executive offices (i.e. different ministries, municipal authorities, development agencies), judiciary branches (at different levels) and regional economic integration organizations
The scientific community	Including academic societies, research institutions, universities, (national) science foundations, publishers, and individual scientists and scholars working in and across fields and disciplines (e.g. medicine, law, engineering, social sciences, humanities and natural sciences)
Civil society organizations	Including those advocating specific interests (e.g. protecting the environment, health, human rights), representing a specific group (e.g. women, youth, workers, farmers, Indigenous Peoples and local communities, consumers, disabled persons) or bringing forward the voice of specific types of actors (e.g. philanthropic bodies)
Private sector	Including chemical and product manufacturers, distributors, brands and retailers, waste managers, and banking and financial institutions
Media	Including journalists, newspapers, social media platforms and Internet media
The public	Including vulnerable and at-risk populations, and local and Indigenous communities
United Nations entities	Including FAO, ILO, UNDP, UNEP, the United Nations Industrial Development Organization (UNIDO), the United Nations Institute for Training and Research (UNITAR), WHO, the World Bank, the World Trade Organization, the United Nations Children's Fund (UNICEF), International Maritime Organization, UNESCO and UN-Habitat
Global multilateral environmental agreements	Including the Basel, Rotterdam, Stockholm and Minamata Conventions; the Vienna Convention for the Protection of the Ozone Layer and its Montreal Protocol; the Convention on Biological Diversity; the United Nations Framework Convention on Climate Change; the United Nations Convention to Combat Desertification; and the United Nations Convention on the Law of the Sea and Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction
Regional agreements	Including the Bamako Convention; the Convention on Long-range Transboundary Air Pollution; the United Nations Economic Commission for Europe Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention); the Regional Agreement on Access to Information, Public Participation and Justice in Environmental Matters in Latin America and the Caribbean (Escazú Agreement); and the Regional Seas Conventions and Action Plans
Other international science-policy interfaces	Including IPCC and IPBES (which are specifically noted in Environment Assembly resolution 5/8,) IRP, GEO, assessment panels of the Montreal Protocol and AMAP
Other international instruments and intergovernmental bodies	Including SAICM and the beyond 2020 framework on chemicals and waste, OECD, and various international development finance institutions ⁴²

⁴² <https://www.oecd.org/development/development-finance-institutions-private-sector-development.htm>.