

The Royal Society of Chemistry's Written Statement to OEWG3.2, as it relates to the establishment of a science-policy panel for chemicals, waste and the prevention of pollution (SPP-CWP).

About the RSC

With about 50,000 members in over 100 countries and a knowledge provider that spans the globe, the Royal Society of Chemistry is an international not-for-profit professional body for chemical scientists, supporting and representing our members and bringing together chemical scientists from all over the world. Our members include those working in academia, large multinational companies and small to medium enterprises (SMEs), students, teachers, retirees, NGOs and government scientists and regulators. Surplus generated from membership fees and publishing revenues are used for the RSC's charitable purpose activities.

Contact

The Royal Society of Chemistry would be happy to discuss any of the issues raised in our statement in more detail. Any questions should be directed to the RSC Policy & Evidence Team at policy@rsc.org. This document was prepared by Dr Camilla Alexander-White FRSC CChem ERT (Lead Policy Adviser – International Chemicals Policy, RSC) and Professor Tom Welton OBE (the RSC's ambassador for Sustainable Chemicals Policy, Emeritus Professor of Sustainable Chemistry at Imperial College, London). Our positions are developed from focus group discussions, events such as the Burlington Consensus series and perspectives from the RSC Engagement Group. The RSC SPP Engagement Group comprises of approximately 60 senior level scientists from the RSC membership and representatives from other global national chemical societies. It is led by Dr Alexander-White and Professor Welton.

This document presents the RSC positions on the following themes:

1. The **General status** of the Foundational Document, Decision Document, Draft Rules of Procedure.
2. **Stakeholder participation**: a focus on the Foundational Document
3. **A call for Openness and Transparency** in all of the work of the SPP
4. **Conflict of Interest (COI) procedures** - General points on managing COI
5. What '**Capacity Building**' can realistically include in the SPP

1. General Status of the Foundational Document, Decision Document, and Draft Rules of Procedure

The Royal Society of Chemistry is a UNEP accredited member of the science and technology community, and as such, primarily looks at the negotiations from a science community perspective. The current status of the legal text is encouraging. There is still much work to be done to finalise the documents in relation to establishing the panel. It is clear however that, if the political will is there from member states, agreed text can realistically be achieved in Uruguay, based on the status of the current proposed text.

Upon analysing the current texts in the pre-session documentation, there are two areas where choices of wording and intent could impact on the quality and credibility of the science that would be performed by the panel, namely:

- i) **Civil society science and technology participation in all aspects of the work of the panel** – to ensure adequate input and coverage from multidisciplinary civil society scientists – that those with the technical knowledge have access to meaningfully contribute - enabling governments to be aware of all potential scientific solutions and technologies and thus enabling successful policy development.
- ii) **A call for openness and transparency** as it relates to all of the work of the SPP, and the effective implementation of a conflict-of-interest policy.

2. Stakeholder participation: a focus on the Foundational Document

Referring to pre-sessional paper UNEP/SPP-CWP/OEWG.3/6 - Foundational document and related draft decision for consideration by the intergovernmental meeting to establish a science policy panel.

The Royal Society of Chemistry welcomes the text in

B. Operating principles and approaches of the panel' point

(b) Taking an interdisciplinary and multidisciplinary approach that incorporates a broad range of relevant disciplines and sources, including appropriate sectoral expertise, and relevant forms of knowledge, including Indigenous knowledge.'

We strongly suggest retaining this as an Operating Principle for this panel.

Examples of the many types of scientific and technological disciplines that are likely to be called upon in the work of the panel are highlighted in the Royal Society of Chemistry's poster '**Evidence and Insights From Cross-disciplinarians on the New Multi-disciplinary Science Skills and Expertise Needed for the UN Science-Policy Panel on Chemicals, Waste and Pollution Prevention**' presented at the recent SETAC Europe conference in Vienna 11-15 May 2025 – see Appendix 1 at the end of this document.

C. Institutional arrangements for the panel

UNEP accredited stakeholder organisations, such as the Royal Society of Chemistry, have to date had appropriate access to provide constructive input to inform the OEWG process, and been active and effective observer participants. Scientists from accredited organisations have worked well together, as part of the S&T Major Group in the OEWG process for the SPP. We call for this positive way of working to be able to continue in all aspects of the SPP.

The Royal Society of Chemistry advocates for the continued involvement of UNEP accredited Science & Technology Major Group community representatives in all aspects of the SPP when it is established, to strengthen the science-policy interface and connect governments to the best evidence and scientific opinion that is available through a 'network of networks' approach.

Governing Body/Plenary: the RSC fully respects the decision-making powers of governments and member states and the role that the Governing Body/Plenary will perform in the SPP-CWP, in deciding its structure, composition and work programme.

III. Committees and subsidiary bodies. Interdisciplinary Expert Committee (IEC):

the RSC would like to see members nominated for the IEC who are cross-disciplinarians; individuals that are sufficiently connected to 'networks of networks' in the scientific community. IEC members need to be able to have access to a broad knowledgebase to ensure decisions are based on sound science, the latest solutions and technical achievability.

Paragraphs 14 and 17, and their alternative texts, in the Institutional Arrangements, are expected to be a particular focus of negotiation relating to stakeholder participation. From the science and technology community perspective, we urge governments to keep doors open to civil society scientist participation in the IEC, and that mechanisms are sought for the inclusion of the widest range of technical expertise in its deliberations.

We understand governments will nominate scientists for delivering the work of the SPP, but we advocate for professional bodies such as the Royal Society of Chemistry, as a UNEP accredited stakeholder organisation, to also be able to nominate expert scientists for the IEC and Assessment Groups of the SPP. It would be an ideal outcome if the IEC were to include an equal number of member scientific representatives drawn from civil society (i.e. the same number as there is expected to be for each of the UN regions). Such a group may bring effective non-political objectivity and impartiality to IEC discussions.

Working Groups/Assessment Groups: when it comes to the technical work of the SPP, the RSC stands ready to assist national and regional governments in connecting the panel to relevant expert scientists. The RSC has a great deal of experience in developing mechanisms of science advice and offers its support to the IEC at the appropriate time.

3. A call for Openness and Transparency in all of the work of the SPP

The RSC calls for the Panel, when established, to promote a culture of objectivity, openness and transparency from all involved and across the whole SPP process. Transparency, accountability and impartiality as demonstrated through an effective conflict-of-interest process are practical tools that can help ensure the credibility and legitimacy of scientific advice in a politically complex landscape.

It is proposed that words such as *objective, transparent, open, verifiable* may be useful in certain contexts to reflect the expectation that all involved in the work of the panel will be truthful, transparent and act with dignity and integrity, independent of political processes and/or personal or organisational commercial gain. It is expected that scientists will present an honest appraisal of the scientific evidence in front of them, working towards the aim of reducing pollution and its associated harms, from mismanaged chemicals and wastes, for the wider benefit of humanity, wildlife and the environment.

It is unlikely that any scientist would be truly independent of every aspect of the Panel's work, with all participants having some form of employer or commitment. Yet, scientists with relevant working knowledge on the issue in hand need to be able to share that knowledge with the Panel. Here, rather than invoking the concept of only '*independent scientists*' being allowed to be involved, it is suggested to focus on behaviour, with words such as *transparency, openness, impartiality, objectivity, and acting in good faith*.

In the document UNEP/SPP-CWP/OEWG.3/6

Section II. Draft Decision

Establishment of the [insert full name of panel]

2. [page 2] *Confirms* that the [insert full name of panel] is an **independent** intergovernmental body with a programme of work approved by its [members] [Governing Body] to deliver policy-relevant scientific evidence without being policy prescriptive;

Here, the use of the word independent is referring to a level of political independence (e.g. from other UN Conventions) rather than a comment on the nature of the science. This use of the word 'independent' has precedent in IPBES and is understood well and should be retained here.

Annex I to the draft decision

Section B. [page 3] Operating principles and approaches of the panel.

2(a) In carrying out its work, the science-policy Panel will be guided by the following operating principles and approaches: (a) [**Being scientifically independent**, and] ensuring credibility and legitimacy including through peer review of its work. (a) bis Ensuring impartiality and transparency. (a) ter [Ensuring][Finding] consensus in its decision-making process on matters of substance.

The RSC supports the language in (a)...., and would be equally content with (a) bis....

However (a) ter is really about how decisions are made and reached by consensus. This is a different and separate issue about consensus in decision-making. Scientific consensus on an issue may not be possible, but instead an output of the Panel could reflect where there is scientific agreement and scientific differences of opinion on the evidence.

PROPOSED TEXT here, regarding an operating principle, combining (a) and (a)bis may more simply read:

*a) **Ensuring credibility, impartiality, transparency and legitimacy of its work, including through peer review***

4. General Points on Managing Conflicts of Interest

We refer the reader to our pre-session and in-session submissions to OEWG2, Nairobi and OEWG3 Geneva on the subject of conflicts of interest procedures.

The Royal Society of Chemistry takes conflicts of interest very seriously. All participants in the SPP must be asked to record and declare their interests and those of close family members or connected individuals who could benefit from the work of the SPP.

It should be noted that the RSC encourages using the COI process as a tool for *enabling* contribution and reducing risks of bias, rather than creating barriers. To support this, it is suggested that anonymous examples of potential conflicts be made available to help participants, especially those in politically sensitive environments, to recognise what might constitute a conflict. Also, guidance is needed on the level of detail that needs to be shared. It is usually only necessary to go back for a period of 4 or 5 years in declaring historic interests.

All interests must be declared, not just interests that individuals themselves may view as a potential or real conflict of interest. A COI committee should review whether interests present a conflict of interest with the work being performed. **A procedure for COI management can reasonably be developed later by the Governing Body but before the IEC is established.**

5. What 'Capacity Building' can realistically include in the SPP

The RSC have identified three main types of science-policy capacity that need to be developed:

- **Individual capacity** – equipping scientists with the skills to participate in and influence policy, and equipping policy-makers to understand the relevant science as relevant to policy.
- **Institutional capacity** – building the strength and longevity of national institutions that can train, support, and retain skilled individuals.
- **System capacity** – enabling politicians and national structures to understand, trust, and apply scientific evidence in their decision-making.

The SPP should:

- i) **Fund science-policy networks and events to develop skills and competencies in science-policy interface work.** Core funding from the SPP for 'capacity building' should be focused on improving the science-policy interface in nations and regions, through the establishment of new networks, events and training sessions. These should be for the sharing of knowledge and connecting people together, such that opportunities for further projects and training can be fostered.
- ii) **Collate a 'capacity building' database** of the identified capacity building needs/gaps for different nations, which are expected to be different in different parts of the world. The SPP can highlight areas that require capacity building and work with developing nations to define the needs.
- iii) **Seek to connect nations and experts together;** if organisations/governments have experience to share and similar ambitions, new funded projects could meet the needs of capacity building, through research institute funding, government funding or industry funded projects. It is considered unlikely that budgets from governments alone will be available from the SPP to deliver capital infrastructure, equipment, paid internships/placements, data sharing, in person training courses etc. The role of the SPP could be to highlight the needs while industry, professional organisations, entrepreneurs, national governments etc. can seek to fund and develop new project ideas where there are shared interests, possibly via a blind trust fund.

Evidence and Insights From Cross-disciplinarians on the New Multi-disciplinary Science Skills and Expertise Needed for the UN Science-Policy Panel on Chemicals, Waste and Pollution Prevention

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- **Advanced materials**
- **Adverse outcome pathways (AOPs)**
- Air Quality sciences, aerosols and metrology
- Allergy - clinical
- Analytical chemistry techniques
- **Artificial intelligence and machine learning**
- Behavioural and psychological sciences
- **Bioinformatics**
- **Biological monitoring** – in humans, plants and animals
- **Cheminformatics**
- Chemical Engineering
- Chemical Metrology
- Chemistry
- **Circular Economy**
- **Citizen science data**
- **Computational exposure estimation**
- **Computational toxicology/QSAR**
- Data Sciences
- Ecology
- Econometrics and socioeconomics
- Ecotoxicology
- **Engineering Biology**
- Environmental monitoring – air, soil, water, waste, chemicals in products
- Epidemiology.
- Exposure sciences (modelling estimation and measurement)
- Geological sciences
- **Gene editing and CRISPR technology**
- **Green chemistry**
- Human Clinical studies
- Human Health Toxicology -new approach methods (NAMs) – Toxicity in the 21st century
- **Informatics**

On 14-18 June 2025, United Nations member state governments and civil society stakeholders will be meeting in Punta del Este, Uruguay. The goal is to finalise the Foundational, Decision and Rules of Procedure documents, to establish a new science-policy panel for chemicals, waste and pollution prevention (SPP-CWP). An intergovernmental meeting 19-20 June will be held in Uruguay to consider and, if the political will is there, adopt the documents, legally.

Here we share insights and perspectives on establishing the SPP-CWP from science-policy engagement activities, such as RSC Burlington Consensus 3 (Sept 2024 – see QR codes for videos), a panel discussion at the Pan Africa Chemistry Congress (PACN)(Oct 2024) and ongoing focus discussion groups and stakeholder interviews. Involvement of hundreds of scientists in our work shows they are ready and engaged.



Fig. 1 RSC Burlington Consensus 3, London, UK.

Appropriate mechanisms need to be factored into the operations of the SPP-CWP to enable future access to multidisciplinary advice from scientists, particularly on state-of-the-art science, as and when needed. These include natural, computational, social, behavioural, socio-economic and political sciences (see banners left/right for a more detailed but non-exhaustive list of science disciplines).

It is envisaged that the SPP-CWP will comprise a) a governing/plenary body taking decisions, b) an interdisciplinary expert committee (IEC) recommending the work programme and selection of experts, and c) assessment groups working on producing evidence reports (involving many scientists). The individuals selected by governments for the IEC roles ideally need to be cross-disciplinarians connected into 'networks of networks' of civil society scientists. The rapid pace of science innovation, in academia and the private sector, means civil society holds the majority science knowledge and solutions.



Key recommendations

- The scientific community urges member state governments to establish the SPP-CWP in Uruguay with a sense of urgency, as global pollution issues grow and cause harm to the environment and human health.
- The IEC should comprise cross-disciplinarians who are connected to networks of scientists.
- A Supplementary Science Advisory Group of experts, drawn from civil society, may be useful and could act as a 'consultative' bridge between IEC and science networks to advise, as requested, during work programme development to check for technical achievability of solutions and policy recommendations.
- A 'Roster of Specialists' or group of 'Special Technical Representatives' could also be created, as overseen by the IEC, to ensure agile flexible access to the breadth of many different areas of expertise.
- The RSC advocates for developing a rigorous conflicts of interest (COI) process, such that the knowledge and expertise from all civil society scientists, including those from the private sector can be accessed. In the public interest, **ALL prospective expert participants in the panel must declare transparently all their financial and non-financial interests**, for a dedicated COI committee to review and determine whether interests present conflicts, before any work on the panel is performed by the expert. This will build trust and value in the outputs of the SPP-CWP.

- **Indigenous science and evidence**
- **Life Cycle Assessment (LCA)**
- Marine sciences
- **Materials science**
- Mathematical Modelling
- Microbiological sciences
- **Nanoscience**
- **Next generation risk assessment (NGRA)**
- Nutritional Sciences
- Occupational Hygiene
- **Omics technologies - Transcriptomics, Proteomics, Metabolomics**
- Paediatric endocrinology and toxicology
- **Physiologically-based kinetic (PBK) modelling**
- Political sciences
- **Probabilistic exposure modelling**
- Psychological sciences
- Radiological sciences
- **Novel Recycling technologies**
- **Novel Remediation technologies**
- Risk assessment methods
- Social Sciences
- Soil sciences
- Statistics
- **Sustainable Chemistry & Sustainability**
- **Systematic Review techniques**
- **Systems biology**
- Waste analysis technology
- Water sciences
- Veterinary sciences

Classical (black) and newer (blue) science disciplines that will be important for the new UN SPP CWP. This is not an exhaustive list but illustrative of the breadth of new skills and expertise that will need to be accessible to the panel.

You may also be interested in the public recorded webinar below:

Strengthening Scientists Engagement: Shaping the Future of Chemicals, Waste, and Pollution Prevention | Road to OEWG 3.2 |



<https://www.genevaenvironmentnetwork.org/events/strengthening-scientists-engagement-shaping-the-future-of-chemicals-waste-and-pollution-prevention-road-to-oewg-3-2-gen-25/>



Watch the Burlington Consensus and find out more

You can find further information and watch highlights or the event in full on our YouTube channel – use these QR codes:

For the morning sessions: youtube.com/live/8QK9FcOpXj8

For the afternoon sessions: youtube.com/live/0038ZCLN3k

A short Highlights video can be viewed at: youtu.be/vLmY757yDI

UNEP official site unep.org/oewg-spp-chemicals-waste-pollution



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