

Written Submission from the Royal Society of Chemistry – June 2023

Regarding the United Nations Environment Programme consultation on the Operating Principles of the Science Policy Panel on Chemicals, Waste and the Prevention of Pollution

Operating Principles Governing the Work of the Panel

Request for Written Submissions from Member States and Relevant Stakeholders

Member states, during the resumed first session of the Open-ended Working Group (OEWG1.2), requested the Secretariat of the OEWG to solicit written submissions from Member States and relevant stakeholders regarding the operating principles governing the work of the panel.

In support of this request, the Secretariat conducted a webinar (on 26 April 2023) dedicated to the issue of operating principles. In advance of the webinar, the Secretariat released a background document which provides a comparative overview of operating principles of relevant, existing science-policy panels (IPCC, IPBES, IRP and GEO). The recording of the webinar can be found on [this website](#), when available, and the background document is available at [this link](#).

A variety of potential operating principles are presented below, based on the analysis performed for this [background document](#). The following questions in no way attempt to rank or preclude consideration of the operating principles of the future SPP, rather, they draw from the agreed text of Resolution 5/8 and other existing, relevant science-policy bodies, as well as the discussions at the OEWG. You may also suggest relevant potential operating principles that have not been identified yet.

Member States are invited to provide submissions through their respective national focal points (list of focal points available [at this link](#)). Non-government stakeholders are invited to submit their submissions on behalf of their organization or group. You are invited to respond to all or some of the questions below. Once complete, please submit this filled document to SPP-CWP@un.org. All submissions will be uploaded online and will inform a working document to be considered at OEWG 2.

Contact information

What is your name/surname?

Dr Camilla Alexander-White

What is your country?

United Kingdom

What is your title?

Lead Policy Advisor – Sustainable Chemicals Policy

What is your email address?

alexanderwhitec@rsc.org

Who are you submitting on behalf of?

Royal Society of Chemistry (following engagement with international members of the RSC Engagement Group on the SPP)

The following elements are included in Resolution 5/8. Please indicate by clicking on the box(es) where you believe these elements should be included (i.e., operating principles, rules of procedure, guidelines, or other relevant documents, or if they are not relevant). Some key terms have been grouped together for the purpose of this tabular analysis, there is inevitably some overlap across principles.

	Operating Principle	Rules of Procedure	Guidelines	Other	Not relevant
CREDIBILITY					
Robustness/Rigour	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Integrity/Objectivity / Independence/Impartiality/ Lack of Bias (avoiding conflicts of interest)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interdisciplinary / Multidisciplinary / Balance of disciplines	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RELEVANCE/SALIENCE					
Policy-relevant (and not policy prescriptive)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEGITIMACY					
Inclusivity/Balance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-- indigenous inclusivity	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-- geographic balance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-- regional balance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-- gender balance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-- balance of disciplines (see also Credibility/Interdisciplinary...)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CROSS-CUTTING THEMES					
Transparency	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flexibility	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Coordination (without duplication) / Complementarity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cost-Effectiveness	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide any relevant comments on your choices above:

The Royal Society of Chemistry (RSC) is responding to this consultation following its engagement with members of the 'RSC Engagement Group', a group that comprises international and independent experts from all continents.

In responding to this consultation, the RSC has taken the view that anything that is an 'Operating Principle' would stand the test of time and would be unlikely to change over the long term; anything that is a 'procedure' may change and be subject to review every 2-3 years, and anything that is 'guidance' would allow frequent review and flexibility to the accommodation of new ideas, innovation in science and policy evolution.

CREDIBILITY

Integrity – has to be an operating principle. All members of the new SPP would need to operate with a high degree of personal integrity and this would never change. Members should sign up to a defined code of conduct. A procedure would then need to be in place to assure members abided by the code of conduct.

Independence (from political processes) - has to be an operating principle – no one is truly 'independent' of funding sources or from influential organisations they are employed by, even their own personal political biases, not even those who may claim to be an independent academic. Funding for research and review work comes from somewhere be it government, charities, NGOs or industry and all of these can have influence on messaging, tone and evidence selection by individuals and organisations. The point is, those panel members who are reviewing scientific evidence and illustrating options based on that evidence need to be independent of political processes and biases – this should be a fundamental principle and all the work performed and individual's interests should be transparent.

Objectivity/impartiality – has to be an operating principle - the SPP should provide evidence that it is operating impartially and reviewing evidence completely without 'cherry picking' data. All data interpretation should be performed in a true, comprehensive, objective and scientific manner, impartial to any 'outcomes' that politicians or policymakers wish to achieve. The scientific evidence must be presented in a truthful and honest way, being objectively assessed without bias. Where the same evidence can lead to different interpretations (and this is possible in chemical and toxicological risk assessment due to differences in global technical guidance) this should be discussed and presented in an open and transparent way. How evidence is presented objectively, how risk and impact assessments are done and how conflicts of interest are managed for individuals participating in the SPP may then become procedures or guidance documents.

Conflicts of interest is mentioned under the theme of 'Credibility'

Declaring Interests and deciding on whether they present a conflict in any given review or scenario – is a procedure. This is extremely important in the field of chemicals policy where many lobby interests are at play. To assure the principles of objectivity and impartiality are in operation, one must assure the SPP has a **rigorous rule of procedure for declaring ALL interests**, and then determining whether there is a conflict, usually handled by the Chair(s) and the Secretariat.

Rigour and robustness – a matter of procedure. If the above principles are in place, scientists that work with integrity would work in a robust and rigorous manner that could be defined in procedures and guidance. Under this theme, there could be an expectation of the technical use of ‘systematic review’ of evidence on chemical data and environmental data by the SPP; this would bring resource implications if this approach was used, but this is the most rigorous analysis of evidence. A suggestion would be for the panel to consider rigorous and robust approaches for identifying and reviewing evidence, so as to be appropriately comprehensive for the question being asked.

Interdisciplinarity/Multi-disciplinarity – mainly procedural and context specific – in each activity of a work programme one can imagine different disciplines will be needed and identified as per the type of activity. In general however, there are also some points of principle that can be captured about making sure all relevant voices and stakeholders are in the discussions. This will include natural scientists, socio economic scientists, industry scientists, consultants, academia, government scientists, indigenous community leaders...etc. The participation of relevant stakeholders can be captured in a rule of procedure.

RELEVANCE/SALIENCE

Policy relevant (but not policy prescriptive) – has to be an operating principle. And an important one. It is not the role of scientists to decide upon policy directions. It is likely that there will be regional specifics in the area of chemicals policy and National governments are expected to consider the nature of policy required as relevant to their circumstances. However, scientific evidence should be collated using an appropriate procedure for the question being asked and presented without then making recommendations for policy action. The interface is about communicating what the scientific and socio-economic evidence tells us about possible impacts and risks to individuals or populations. The panel could perform risk assessments and impact assessments that are region specific, as a matter of output based on evidence and present options as to what the risk and impacts mean for a population or community for example, but not prescribe the policy action that would follow. The political decisions would be multifactorial and may not be based on science alone. The SPP would need to respect that. The panel should be able to provide some interpretation about the kinds of options that could be available in terms of mitigating risks and impacts. Also, there may be a role in reviewing technological innovations/solutions that could be used; the SPP could illustrate what these might be. In the process of horizon scanning, the SPP may raise issues that are not currently on policy agendas – it would be a useful function of the panel to have a foresight role.

LEGITIMACY

Inclusivity/balance – to seek to achieve this has to be an operating principle. The specifics of inclusivity and attracting people to be part of the SPP can be defined in rules of procedure. The panel should always be inclusive of all stakeholders and be diverse in terms of regional representation and relevant protected characteristics. Balance should be sought in the representation of key characteristics in populations that are relevant to the subject being discussed. The SPP must also make sure the best experts covering the technical content are involved. What diverse representation means can change over time, can evolve and be defined per activity. Ten years ago we didn’t look at certain characteristics that we consider today and new fields of science emerge such as artificial intelligence, we couldn’t necessarily have predicted would be relevant. There would be an impact in terms of ways of working if

the SPP were to always proactively ensure balance of representation in all meetings that would need to be considered in terms of practicalities.

CROSS-CUTTING THEMES

Transparency – has to be an operating principle. This should be a must in terms of the way the SPP will work. All meetings should be open. It is recognised however, that industry holds confidential data on chemicals assessment that may need to be discussed in 'Reserved business'. A procedure for handling confidential industry owned data must be developed to ensure that all data relevant to an evidence review are included, in the most transparent way possible e.g. through the provision of study summaries that can be put into the public domain.

Flexibility – has to be an operating principle. The pace of scientific innovation in the field of chemicals safety assessment is rapid, particularly with the development of new approach methods (NAMs) and next generation risk assessment (NGRA) in toxicology. The work programme, procedures and guidance must maintain an aspect of flexibility to allow for innovation. In terms of capacity building, it would need to be discussed as to whether developing nations should be upskilled in classical toxicological risk evaluation or modern NAMs and NGRA, for example. Flexibility in terms of the experts on the panel, the nature of how chemicals are prioritised, application of innovative ideas and technologies will require some degree of flexibility in how the panel brings in new people and ideas etc.

Co-ordination, complementarity and cost-effectiveness could all be covered in guidance as the chemicals landscape will evolve over time, possibly annually. There are many conventions and work programmes that the work of the SPP will connect into, that ideally should be complementary. Chemicals policy is a complex landscape and care should be taken that not too large a resource is given to making sure duplication is avoided. It is unlikely there will be exact duplication and work would be of a more complementary and globally holistic nature than other bodies. Guidance should be produced on how to make the work of the SPP value for money. Principles and rules on cost has links to inclusivity. The work cannot be done too cheaply, else quality will suffer; neither should meetings be extravagant. **The principle should be about accountability and demonstrating value for money and how the funding and costs enable all to attend.**

The following table includes other elements that may be considered. Please indicate by clicking on the box(es) where you believe these elements should be included (i.e., operating principles, rules of procedure, guidelines, or other relevant documents, or if they are not relevant). It is also possible to add additional potential operating principles to be considered.

OTHER	Operating Principle	Rules of Procedure	Guidelines	Other	Not relevant
Promotion of innovation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comprehensive, holistic, or integrative approach	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consensus based approach	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Providing accessible outputs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Others [please add]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please provide any relevant comments on your choices above:

Promotion of Innovation - Guidelines could be written for the panel as to what this term means for member states in the context of the work of the SPP. RSC does not consider this to mean the promotion of commercial innovation and specific technologies, but it is more about innovative thinking, innovative ideas, reviews of general technical solutions to problems. The SPP can promote innovative ways of doing things. This being said, it might be expected that analyses by the SPP are likely to lead to scientific and technological innovation when current technologies are unable to provide solutions to identified problems.

Comprehensive, holistic and integrative approaches are captured by procedures. Funding, scope, the question being asked all have a bearing on how comprehensive a piece of work needs to be. The scale of the available science is enormous in some areas, and therefore procedures of performing ‘systematic review’ may need to be implemented.

Consensus based approach – to be included in guidance and the inclusion of minority opinion. There is rarely a global consensus on a scientific evaluation. It is in the very nature of the scientific method that there will be disagreements, differences of opinion, differences in analysing the data, differences in interpretation. In forming scientific opinions that can best be implemented in policy, the usual way is to express when there is a minority opinion, explain what that is and the reasons why. Full consensus on what the data and evidence means may be very challenging to achieve. The job of the panel will be to explain the differences, similarities, variances and uncertainties in the interpretation of evidence a policy relevant way.

If consensus is to be desired, then the ISO (International Organization for Standardization – an independent, non-governmental international organization with a membership of 168 national standards bodies) definition of ‘consensus’ may be a useful one to refer to:

‘General agreement, characterized by the absence of sustained opposition to substantial issues by any important part of the concerned interests and by a process that involves seeking to take into account the views of all parties concerned and to reconcile any conflicting arguments’. ISO/IEC Directives, Part 1, cl 2.5.6. Acceptance criteria is approval by two thirds of the members and not more than 25% negative votes overall. [ISO - About us](#)

Provision of accessible outputs is a procedural matter. Every attempt should be made to do this as costs will allow. In this sense, we assume it means outputs in different languages, accessible to those who have sight or hearing issues, dyslexia etc. And also documents using language that a non-scientist can understand.

Please provide your written submission in the space below:

The RSC has identified **Seven Operating Principles** for the new SPP for chemicals, waste and the prevention of pollution (SPP CWP). Members in the RSC Engagement Group on the SPP felt that there was precedent from the work of other panels for some aspects that could be transposed and made relevant for high level operating principles of this new SPP, i.e. using similar wording that has been used for IPBES, IRP and GEO as starter text. Operating principles should be high level, pragmatic, practical and not change over time.

Integrity

Based on IRP – ‘Panel members maintain the integrity of the scientific process and avert any conflicts of interest [[as per the specific guidance developed for \[SPP CWP\] panel members in declaring conflicts of interest](#)].’

[There will need to be specific procedures and guidance developed for this panel in terms of members declaring interests, and procedures in place for the Chair/Steering Committee/Secretariat for deciding when there is a conflict and action that follow e.g. exclusion from particular parts of meetings/writing or reviewing documents.]

Independence (from political processes)

Based on IRP – ‘Panel members carry out their research with impartiality; Steering Committee members provide input to [\[SPP CWP\]](#) scientists so as to enhance policy relevance without compromising the independent nature of the research.’

[Assuming a Steering Committee would work here to connect science to policy]

Objectivity/impartiality

Based on IRP – ‘The [\[SPP CWP\]](#) undertakes critical, unbiased studies and assessments of best available science, follows robust methodologies and peer review processes, and ensures open and transparent ~~decision-making processes~~ [\[development of risk & impact assessments and risk management options\]](#).’

Policy relevance

Based on both IRP and IPBES – ‘The [\[SPP for CWP\]](#) provides scientific knowledge and assessments, including providing science-based policy options, in a nonprescriptive manner, responding to requests from its Steering Committee as well as from intergovernmental bodies including the United Nations Environment Assembly being mindful of the respective mandates of the multilateral [\[chemicals\]](#) agreements’.

Inclusivity/Balance

Based on IRP and IPBES – ‘The [*SPP on CWP*] aims at striking and maintaining a balanced and diverse composition of the Panel, Steering Committee and Working Groups in terms of expertise, gender, and regional representation, recognising and respecting the contribution of indigenous and local knowledge.

Transparency

Based on IPBES – ‘Use clear, transparent and scientifically credible processes for the exchange, sharing and use of data, information and technologies from all relevant sources, including non-peer-reviewed literature [*and (where possible) commercially available data, the confidentiality of which will be respected under the procedures of ‘reserved business’*].

[A procedure and guidance will need to be developed for ‘reserved business’ the handling and inclusion of relevant industry data that would impact on an outcome if it was omitted from review]

Flexibility

In terms of policy relevance, the RSC particularly advocates for a degree of agility and flexibility in how the SPP operates and responds to relevant issues in a timely way with evidence to support member states and the multilateral agreements/conventions:

From GEO - ‘The relevance (or salience) of [*the SPP for CWP*] in terms of responding flexibly to the needs of Member States and stakeholders, for example for improving the effectiveness of ~~environmental~~ [*chemicals*] policy’