GUIDANCE

Guidance on Strengthening National Science-Policy Interface

GGKP, 2023

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1. Global Context

1.1. Introduction

In 2019, the United Nations Environment Assembly (UNEA) adopted a resolution on sound management of chemicals and waste which, *inter alia*, notes that "the production and use of chemicals globally is expected to increase threefold and that the global use of materials will more than double by 2050" and emphasizes "the importance of strengthening the science-policy interface (SPI) and the global evidence base for chemicals" (UNEP/EA.4/Res.8). Furthermore, in 2019, the Conferences of the Parties to the Basel, Rotterdam and Stockholm (BRS) Conventions requested the Secretariat to undertake capacity-building and training activities to support Parties in science-based decision-making and action in the implementation of the BRS conventions (United Nations Environment Programme [UNEP] 2022).

The resolution adopted at the fifth session of the United Nations Environment Assembly (UNEA-5) held in March 2022 to establish a **science-policy panel** (SPP) to support action on chemicals, waste and pollution (UNEP/EA.5/Res.8) reflects global concerns about the impact of pollution on human health and the environment. These concerns are shared by the BRS Conventions, which share the common objective of protecting human health and the environment from hazardous chemicals and waste.

The BRS Conferences of the Parties emphasized the importance of and the need to enhance the interaction among scientists, policymakers and other actors in the policy process to promote the exchange, development and joint construction of knowledge with the aim of achieving more informed decision-making for reaching the objectives of the conventions.[1]

The BRS Conventions are science-based, legally binding global treaties. Policy decisions taken by their governing bodies, the Conferences of the Parties, are underpinned by various scientific assessments. Since 2015, the conventions have included in their Programme of Work activities to enhance science-based decision-making through enhanced science-policy interactions.

The BRS Conferences of the Parties, in their decisions BC-13/22, RC-8/15 and SC-8/25, emphasized that, through its subsidiary bodies, expert groups and other related mechanisms, including with other partners, the necessary processes are in place to ensure science-based work and decision-making under the BRS Conventions.[2]

At their meetings in 2022, the Conferences of the Parties to the BRS Conventions took note of the information on progress in the action by Parties and others to promote the implementation of the road map for further engaging Parties and other stakeholders in informed dialogue for enhanced science-based action in the implementation of the BRS Conventions as provided in their joint working document on "From science to action"[3] and encouraged Parties and others to continue to undertake action that promotes the implementation of the road map.

In their decisions BC-15/28, RC-10/17 and SC-10/24, the Conferences of the Parties requested the Secretariat, among other things, to continue to cooperate and coordinate with the United Nations Environment Programme (UNEP) and, as appropriate, other relevant organizations, scientific bodies and stakeholders towards strengthening the science-policy interface, including in the context of the implementation of United Nations Environment Assembly resolution 5/8 on a science-policy panel to contribute further to the sound management of chemicals and waste and to prevent pollution.

1.2. Road map on science to action

By decisions BC-12/22, RC-7/12 and SC-7/30, the Conferences of the Parties requested the Secretariat, taking into account the roles of the scientific bodies of the conventions, to develop and present to the Conferences of the Parties at their meetings in 2017 a road map for further engaging Parties and other stakeholders in informed dialogue for enhanced science-based action in the

[1] UNEP/CHW.14/INF/40–UNEP/FAO/RC/COP.9/INF/35–UNEP/POPS/COP.9/INF/44
[2] UNEP-PP-INC.1 INF 5 Information from the BRS as requested by the COP. 2022
[3] UNEP/CHW.15/25; UNEP/FAO/RC/COP.10/21; UNEP/POPS/COP.10/25 - https://www.brsmeas.org/Decisionmaking/COPsandExCOPs/20212022COPs/Overview/tabid/8395/language/en-US/Default.aspx

implementation of the conventions at the regional and national levels, noting that the road map should consider:[4]

(a) Exploring new activities within the mandates of the BRS Conventions to enhance science-based action to implement the conventions;
(b) Addressing the gaps in access to scientific information and knowledge, the lack of capacity to provide scientific inputs to the various processes under the conventions and the need for scientific and technical advice in relation to the implementation of the conventions;
(c) Facilitating the exchange of scientific and technical information among Parties and other stakeholders and promoting the understanding of the scientific and technical aspects of the three conventions; and
(d) Possibilities for cooperating and coordinating with UNEP and other relevant organizations, scientific bodies and stakeholders.

The Secretariat was further requested to prepare a final draft, with a focus on enhancing science-based action at the national and regional levels, for consideration by the conferences of the Parties to the three conventions at their meetings in 2019.[5]

At their meetings in 2019, the Conferences of Parties to the BRS Conventions, through their decisions UNEP/CHW.14/24, UNEP/FAO/RC/COP.9/20 and SC-9/23:

- Took note of the road map for further engaging Parties and other stakeholders in informed dialogue for enhanced science-based action in the implementation of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the Stockholm Convention on Persistent Organic Pollutants.
- Encouraged Parties and others to initiate action that promotes the implementation of
- the road map.
- Requested the Secretariat, subject to the availability of resources, to undertake capacity-building and training activities to support Parties in taking science-based action in the implementation of the BRS Conventions.
- Invited Parties and observers to submit to the Secretariat information on action being undertaken to promote the implementation of the road map.
- Requested the Secretariat to continue to cooperate and coordinate with the UNEP and, as appropriate, other relevant organizations, scientific bodies and stakeholders with the aim of strengthening the science-policy interface.
- Requested the Secretariat to cooperate and coordinate, as appropriate, with UNEP in the preparation of the assessment of options for strengthening the science-policy interface at the international level for the sound management of chemicals and waste, which was requested of the Executive Director of UNEP by the UNEA in its resolution 4/8, particularly with regard to possible synergies and opportunities between the existing mechanisms under the BRS Conventions and the science-policy interface for the wider sound management of chemicals and waste.
- Further requested the Secretariat to report to the Conference of the Parties at its next meeting on the implementation of the decision.

At their meetings in 2023, the Conferences of Parties to the BRS Conventions:

- Noted the priority areas for action on effectiveness evaluation, as they relate to strengthening science-policy-industry interactions.

[4] Idem.
[5] Idem.

- Took note of the information on action to implement the road map[6] for further engaging Parties and other stakeholders in informed dialogue for enhanced science-based action in the implementation of the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade and the Stockholm Convention on Persistent Organic Pollutants;
- Encouraged Parties and others to continue to undertake action that promotes the implementation of the road map.
- Requested the Secretariat, subject to the availability of resources, to undertake capacity-building and training activities to support Parties in taking science-based action for the implementation of the BRS Conventions.
- Also requested the Secretariat to continue to cooperate and coordinate with the UNEP and, as appropriate, other relevant organizations, scientific bodies and stakeholders towards strengthening the science-policy interface, including in the context of the implementation of United Nations Environment Assembly resolution 5/8 on a science-policy panel to contribute further to the sound management of chemicals and waste and to prevent pollution, and to report on the implementation of the present decision to the Conference of the Parties at its next meeting.

1.3. Elements of the road map

The road map was developed based on the situation and stakeholder analysis set out in Appendix 1 to the document UNEP/CHW.14/INF/40–UNEP/FAO/RC/COP.9/INF/35–UNEP/POPS/COP.9/INF/44, as well as the comments provided by Parties, observers and experts nominated by Parties in accordance with decisions BC-13/22, RC-8/15, SC-8/25.

Recognizing that each of the BRS Conventions has its distinct legal mandate, the goal of this road map is to further engage Parties and other stakeholders in informed dialogue for enhanced science-based action in the implementation of the conventions at the national and regional levels[7].

The possible activities to address the **three areas of needs, challenges and opportunities** identified by Parties to the BRS Conventions through the situation and stakeholder analysis are the following (Basel, Rotterdam and Stockholm Conventions Secretariat 2019):

(a) Improving access to scientific and technical information relevant to the BRS Conventions in particular in developing countries and countries with economies in transition;
(b) Increasing the availability of scientific and technical information relevant to the BRS conventions in particular in developing countries and countries with economies in transition; and
(c) Strengthening the national capacity to use scientific and technical information for the implementation of the BRS conventions.

Parties and observers recommended the following to enhance science-based action at the national and regional levels:

(a) Continuing to look for ways to encourage greater cooperation between experts of the BRS Conventions and existing partnerships and networks;
(b) Exploring the feasibility of voluntary partnerships between Parties to enhance information exchange and in particular capacity-building and training; and
(c) Utilizing existing pathways, where appropriate, including through the technical assistance plan of the Secretariat and with the regional centres, to facilitate capacity-building and training that takes into consideration regional and local circumstances.

[6] UNEP/CHW.16/INF/44–UNEP/FAO/RC/COP.11/INF/28–UNEP/POPS/COP.11/INF/49.
[7] Idem.

The table on **possible activities to address the needs, challenges and opportunities** identified by Parties to the BRS Conventions in relation to the science-policy interface can be found in **Annex I**.

1.4. From science to action under the Stockholm Convention

Science is a core component of each of the BRS Conventions, informing technical experts', policymakers' and other stakeholders' evaluation of problems, formulation of recommendations and policy responses, and supporting implementation by Parties and other stakeholders at the regional and national levels (UNEP 2022).

The BRS Conventions have been working at the interface of science and policy since their establishment, meeting new challenges and emerging trends in their respective areas of responsibility for the management of chemicals and waste.

With distinct mandates to address different causes and consequences of chemical pollution, the BRS Conventions tackle the full life-cycle of toxic chemicals, including the production, use and disposal of persistent organic pollutants, international trade in hazardous pesticides and industrial chemicals, and the transboundary movements and disposal of hazardous wastes.

As the understanding of these issues has developed, thanks to growing experience, advancing research, and improvements in data collection, interconnections among the three conventions have become increasingly obvious, and Parties have worked to enhance cooperation and coordination of these three multilateral environmental agreements. In parallel and with close coordination where needed, the BRS conventions facilitate evidence-based policymaking, ensuring that policy actions are based on scientific data and analysis of risks posed by chemicals and waste (UNEP 2022).

Each of the conventions is structured to ensure that science plays a significant role in policymaking; as such, stakeholders can draw lessons from the successes and challenges that Parties, technical experts and diverse stakeholders have dealt with as they have worked to fulfil the conventions' objectives.

1.5. Science and the Stockholm Convention

The Stockholm Convention on Persistent Organic Pollutants (POPs) entered into force in 2004. POPs are carbon-based chemicals that are toxic to humans and wildlife. Because they can be carried long distances on air and water currents, they are found in areas of the world far from the source of their release into the environment. Thus, global cooperation is necessary to understand the impact of POPs and to effectively address this transboundary pollution problem.

To be categorized as a POP, the Stockholm Convention specifies that a chemical must demonstrate the following characteristics (UNEP 2022):

- **Persistence**: Once released into the environment, the chemical does not degrade for many years (decades or more). In the case of PFAS, a class of substances that is gaining public attention, they are so long-lasting that they are colloquially known as "forever chemicals.")
- **Bioaccumulation**: As a result of their persistence, these chemicals accumulate in the fatty tissues of humans and other living organisms, increasing in concentration as they are passed upward through the food chain. Mammals pass concentrations of POPs stored in their bodies to their offspring during gestation and through their lipid-rich breastmilk.
- **Adverse effects**: These chemicals are toxic to humans and wildlife and are associated with a range of adverse impacts on the health of living organisms (e.g., endocrine disruption, birth abnormalities, and population decline).
- **Long-range environmental transport**: These chemicals are widely dispersed through the environment via soil, water and air. This is a crucial characteristic that necessitates global cooperation. Some of the highest concentrations of POPs are found in the Arctic Circle, where these substances are neither produced nor used.

The Annexes of the Stockholm Convention include the following (UNEP 2022):

- **Annex A – Elimination**: Production and use of the intentionally produced POPs listed in this Annex are prohibited, although Parties may request specific, time-limited exemptions for continued production. When all exemptions have expired or been withdrawn, no new requests for exemptions may be made. Currently, Annex A contains 26 substances.
- **Annex B – Restriction**: Annex B was designed to restrict, rather than wholly eliminate, those chemicals that have been identified as POPs but, as noted above, are needed for critical uses such as disease vector control (in the case of DDT). This Annex allows for the registration of acceptable purposes for the production and use of the listed POPs and enables Parties to request registration of specific exemptions for production and use. Substances listed in this Annex are heavily restricted, but the availability of acceptable purposes is not time-limited. This annex contains only two substances: DDT and the industrial chemical perfluorobutane sulfonic acid (PFOS), which is currently registered only for use in insect baits with sulfluramid (CAS No. 4151-50-2) as an active ingredient for the control of leaf-cutting ants from Atta spp. and Acromyrmex spp. for agricultural use only.
- **Annex C – Unintentional production**: This annex contains those substances that are created unintentionally, usually as a by-product of another process (e.g. incineration of waste, specific chemical production processes that unintentionally produce POPs, textile and leather dyeing and finishing, etc.).

The Stockholm Convention is designed to foreground science in its decision-making process. Chemicals nominated for listing are subjected to extensive scientific review before Parties make policy-focused decisions. This evidence-based process ensures that work carried out under the auspices of the Stockholm Convention is transparent, robust and data-driven, which in turn ensures that its actions are both effective and credible (UNEP 2022).

At the heart of the Stockholm Convention's work to control POP pollution is the Persistent Organic Pollutants Review Committee (POPRC), a subsidiary body composed of 31 technical experts from around the world.

The experts who comprise the Committee are government-designated in chemical assessment or management. They are drawn from the five regions of the UN, ensuring global representation, and taking into account the need for diversity of gender and areas of expertise (common disciplinary backgrounds of POPRC members include toxicology, chemistry, biology and environmental science, among other relevant fields) (UNEP 2022).

The POPRC undertakes a three-stage process to review and prepare technical information for consideration by the Parties to the Stockholm Convention. If, at each stage, the POPRC decides the requirements of the relevant annex are fulfilled, the committee will advance the substance to the next stage of review. If it decides that a substance does not meet the criteria, the substance will be set aside, either permanently or until new data suggests the substance merits further consideration.

Typically, each stage of review takes place over one year, with the Committee reaching a conclusion on each step at one of its annual meetings.

The POPRC's successes in supporting rigorous, science-based decision-making under the Stockholm Convention are due in part to the design of the committee, with geographically and disciplinarily diverse representation of technical expertise. Another crucial factor has been the consistent and active participation of observers from civil society, industry and academia (UNEP 2022).

Stakeholders with specialist knowledge of the chemicals under review have played an important part in the POPRC's work, both during meetings and inter-sessionally, by sharing knowledge as producers, users, or members of groups or communities directly affected by POP pollution.

1.6. Access to scientific and technical information

The Stockholm Convention on Persistent Organic Pollutants, in Article 9, states that "each Party shall facilitate or undertake the exchange of information relevant to the reduction or elimination of the production, use and release of persistent organic pollutants and their alternatives, risks and

economic and social costs," directly or through the Secretariat and that "the Secretariat shall serve as a clearing-house mechanism for information on persistent organic pollutants, including information provided by Parties, intergovernmental organizations and non-governmental organizations." The convention also sets out obligations for Parties to transmit information, proposals, or other measures to the Secretariat including in Articles 3 paragraph 2 (b) (iii) on exports to a non-Party State, Article 4 on the register of specific exemptions, Article 8 on the listing of chemicals and Article 15 on national reporting. The convention also sets out a general obligation for Parties to promote and facilitate access to information to a variety of stakeholders in Article 10 on public information, awareness and education and Article 11 on research, development and monitoring. The functions of the Secretariat are set out in Article 20 and include preparing and making available periodic reports based on information received from Parties pursuant to Article 15 and other available information.[8]

At their meetings held in 2008 and 2009, respectively, the Conferences of Parties to the BRS Conventions adopted decisions on enhancing cooperation and coordination among the three conventions (hereinafter the "synergies decisions"). Consequently, the Secretariat developed a strategy for the further development and operation of the joint clearing-house mechanism for the BRS Conventions, based, among other things, on the overall principles of the Stockholm Convention strategy, the 11 priority areas for information access identified by the conferences of the Parties in decisions BC-12/21, RC-7/11 and SC-7/29, the draft road map for further engaging Parties and other stakeholders in an informed dialogue for enhanced science-based action in the implementation of the conventions, and taking into account the need to serve the information exchange needs of the three conventions as well as to provide emphasis on regional delivery mechanisms and strengthening the network of regional centres.[9]

The joint clearing-house mechanism is defined as a multi-stakeholder global mechanism set up and operated by the Secretariat of the BRS Conventions, pursuant to the provisions of the conventions and decisions of their governing bodies, to facilitate the exchange and dissemination of information and expertise relevant to the three conventions, including the provision of access to information on priority areas identified by the conferences of the Parties.[10] Its three major components are as follows:

- **Information capital**: This is the information exchanged among the joint clearing-house mechanism network members. It consists of scientific and technical information on health, environmental and socio-economic impacts of chemicals and wastes covered under the conventions, information on legislation and other measures relevant to the conventions that Parties and other stakeholders have put in place, information on projects and implementation activities undertaken by different conventions' stakeholders, as well as information on technical and financial assistance available to Parties for implementation. Without prejudice to the conventions and decisions of their governing bodies, the joint clearing-house mechanism embraces the open data principles, i.e., public access to information.
- **Human capital**: Human capital refers to the global network of information providers and users formally contributing to and using the joint clearing-house mechanism. The information providers are selected based on criteria for information quality, relevance to the conventions' implementation as well as on partnerships established by the conventions. The user community of the joint clearing-house mechanism is widely open. The human capital consists of entities and individuals such as: Parties to the conventions, the Secretariat of the conventions, United Nations bodies and specialized agencies, regional centres, States not Parties to the conventions, environmental non-governmental organizations, industry and private sector associations, funding agencies and mechanisms and other donors, researchers, universities and related initiatives, workers' unions and national local authorities.

[8] UNEP/POPS/COP.8/INF/50
[9] Idem.
[10] Ibidem.

- **Operational capital**: Operational capital refers to a set of information and communication technology tools, products and services, and the necessary processes and resources to design, implement, operate and further enhance them. It includes conventions' websites, common websites and documentation centres at the national and regional levels, systems of information exchange, databases, online collaboration tools, online reporting systems, online questionnaires, mobile applications, social media tools, offline media and paper-based information products.

The mission of the joint clearing-house mechanism is to promote, facilitate and undertake the identification, generation, collection, management, distribution and exchange of quality information and expertise to support Parties and other stakeholders in the implementation of the BRS Conventions.[11]

The vision of the joint clearing-house mechanism is to provide updated and valued information and expertise for the effective implementation of the BRS Conventions. Information and expertise are provided dynamically and allow transparent, neutral, efficient and simple access, based on data, knowledge and experience at a regional, national and international level.[12]

The information will be validated, re-packaged and integrated, translated if necessary, processed and made accessible to different target audiences or the general public in a user-friendly format by means of information products and services. Other multilateral environmental agreements and information exchange initiatives could profit from, and contribute to, the mechanism; cooperation and coordination will be enhanced, resulting in the further development of synergies beyond the three conventions.

The joint clearing-house mechanism will facilitate the sharing and dissemination of information through a variety of means, including paper-based, electronic components and internet-based tools. It will operate as a global, open and transparent network that may also be used to go beyond information exchange, for instance, for training purposes. It will take a proactive and collaborative approach in undertaking its mission. In so doing, it would, under the guidance of the conferences of the Parties, be responsive in meeting the evolving needs of the conventions, and contribute to achieving the broader objectives of the three conventions.

Two strategic goals guide the work towards the achievement of the joint clearing-house mechanism mission and vision**:**

- Enhancement of infrastructure and services to facilitate identification, collection, integration and exchange of information and the creation of a global knowledge base relevant to support the implementation of the BRS Conventions; and
- Establishment of the joint clearing-house mechanism global network of information providers, users and institutions, having the common needs of sharing information and expertise relevant to the implementation of the BRS Conventions.

In part III, sections G; H, I and P.5 of the executive summary of the report on the effectiveness evaluation of the Stockholm Convention (UNEP/POPS/COP.11/19/Add.1), members of the effectiveness evaluation committee have recommended that the Conference of the Parties should request the Secretariat under the clearing-house mechanism to explore ways to support national awareness raising efforts through the sharing of resources from the Global Environment Facility (GEF), the UNEP and other organizations and to develop new material to fill any gaps identified. Members of the effectiveness evaluation committee have also recommended that the Conference of the Parties should consider strengthening the clearing-house mechanism to increase collaboration with universities, scientific organizations, research institutions and others to encourage sharing of information relevant to the implementation of the Convention among various actors at the national and international levels.

[11] Ibidem.
[12] Ibidem.

1.7. Other science advisory mechanisms

In addition to the science advisory body that serves as a backbone to the work of the Stockholm Convention, Parties have created dedicated mechanisms intended to facilitate awareness-raising and science-based action on key issues under its remit. For example, the COP has created two groups to tackle the ongoing challenge of DDT:

- An Expert Group, which is responsible for assessing the global production and use of DDT and its alternatives and examining Parties' work to reduce the use of DDT for disease vector control; and
- The Global Alliance for Alternatives to DDT, which promotes science-based action to identify and deploy cost-effective alternatives to malaria (UNEP 2022).

Similarly, in 2009 the Conference of the Parties established the PCB Elimination Network (PEN) to promote environmentally sound management of PCBs, in accordance with the Basel Convention technical guidelines, with the aim of achieving the phase-out goals of the Stockholm Convention. PEN aims to raise awareness and facilitate information exchange on environmentally sound management of PCBs. PEN is a multi-stakeholder network, with members including Parties to the Stockholm Convention, intergovernmental organizations, non-governmental organizations, experts from academia and other sectors, and business/industry in areas that are relevant to PCBs (UNEP 2022).

The Stockholm Convention has established a network of regional and sub-regional centres to support developing countries and countries with economies in transition in their work to implement their obligations under the Convention. The Stockholm Convention currently has 17 centres in countries around the world. These centres operate under the authority of the Conference of the Parties and have been established in institutions that possess the appropriate expertise and capacity to provide technical assistance and capacity-building to eligible countries (UNEP 2022).

The BRS Secretariat also facilitates a wide range of capacity-building activities to support the implementation of the Stockholm Convention. These activities include webinars, hosted by experts, providing information about topics such as new POPs listed under the Stockholm Convention, new guidance on POPs management, and briefings ahead of meetings of the Conference of the Parties and the POPRC. These interactive webinars are open to the public and targeted to a range of time zones. For people who are unable to participate in real-time, recordings can be downloaded from the Stockholm Convention website. These webinars are intended to ensure that all stakeholders can fully participate in the work of the convention, whether through meetings or in their daily work related to POPs.

1.8. Collaborative work

Complex issues related to the management of chemicals and wastes require the input of a diverse group of stakeholders, including experts from different disciplines/areas of responsibility, stakeholders with different interests in the production, use and disposal of chemicals, and people at different scales of governance. Credible, robust policies emerge from transparent policymaking processes, are evidence-based, and are multifaceted to address different aspects of these complicated issues (UNEP 2022).

To this end, the BRS Conventions have established formal procedures to facilitate collaborative work, with joint and back-to-back meetings of their Conferences of the Parties. The science-advisory bodies to the Stockholm and Rotterdam Conventions also typically hold back-to-back meetings, with significant overlap in participation by experts from governments, civil society, and business/industry associations.

Both the Basel Convention and Stockholm Convention are currently tackling different aspects of the growing challenges posed by plastic pollution. As noted above, amendments to the Basel Convention entered into force in January 2021 aiming to enhance control of the transboundary movements and environmentally sound management of plastic wastes. The POPRC to the

Stockholm Convention is currently considering how plastic wastes that contain POPs may contribute to the global spread of this category of chemicals (UNEP 2022).

There are several opportunities to create synergies between these mechanisms and a strengthened science-policy interface for wider management of chemicals and waste, including on issues that are adjacent to but not specifically within the mandates of the BRS Conventions.

1.9. The role of science in tackling pollution

A high-level event "Strengthening Multilateralism through Science" was co-organized by UNEP and the Czech Presidency of the Council of the European Union (EU) and held in hybrid format on 29-30 November 2022. It highlighted the role of science in tackling climate change, biodiversity loss and pollution, and preventing other environmental challenges from emerging. Science has always been the power behind concerted action to address global environmental problems and is key to delivering the Sustainable Development Goals (SDGs). UNEP@50, Stockholm+50 and UNGA 77 multilateral processes that took place earlier this year have bolstered the importance and visibility of science as a foundation of environmental multilateralism.[13] Key messages of the conference were (UNEP and the Czech Presidency of the Council of the European Union 2022):

- There is a clear need to **improve coherence and collaboration** among global institutions, supporting countries to develop an effective science-policy ecosystem, focusing on integrated solutions, leveraging the **transformative power of data, technology and innovation, and promoting governance space** that is considerate of gender, youth and other voices and agile enough to speed up the transition towards sustainability.
- There is a **shared responsibility between the scientific community and policymakers** in the way forward.
- The scientific community should continue to do its utmost to **produce the most advanced analysis possible**, through global cooperation, data sharing, interdisciplinary approaches and foresight. It should continue to find ways to make its work more palatable to policymakers.
- Policymakers should provide a **more adequate legal and financial framework**, at the global but also national levels, to ensure that science can provide the best contribution to address the current crises**.**
- It is important to use science in tackling pollution in an **integrated manner**, as there are always strong interconnections with other issues. Among many examples, speakers referred to the EU's work on pollution reduction, and the necessity to address the entire value chain, including exports of illegal products and hazardous waste.
- There is a need to continue **improving our understanding**, especially when considering the serious knowledge gaps, we face related to new chemicals produced every year which research on environmental exposures and health can hardly catch up with.
- There is an urgency to **challenge the way to measure success** considering existing and potential risks of pollution for the environment and human health.

1.10. A new science – policy panel

In resolution UNEP/EA.5/Res.8, the United Nations Environment Assembly (UNEA) decided that a science-policy panel should be established to contribute further to the sound management of chemicals and waste and to prevent pollution. The UNEA further decided to convene, subject to the availability of resources, an Open-Ended Working Group (OEWG) to prepare proposals for the science-policy panel, to begin work in 2022 with the ambition of completing it by the end of 2024.[14]

The first session of the OEWG was held in two parts. The first part took place on 6 October 2022 in Nairobi, Kenya, in a hybrid format, and the resumed first session (OEWG-1.2) was held in person at the United Nations Conference Centre in Bangkok, Thailand, from 30 January to 3 February 2023.

[13] More information available at: https://www.unep.org/events/conference/strengthening-multilateralism-through-science
[14] https://www.unep.org/oewg-spp-chemicals-waste-pollution

At the resumed first meeting (OEWG 1.2), delegates focused on the scope and functions of the panel. Capacity building attracted particular attention, which delegates ultimately agreed would be a new function of the panel. Discussions will continue, informed by two proposals that put forward different visions for the capacity-building function.[15]

OEWG 1.2 also agreed on a list of the elements that will have to be negotiated and adopted to establish the panel. These include rules of procedure, processes for adopting assessments, and institutional arrangements, among many others. Delegates further agreed to a timeline, when each will be discussed, and how intersessional work will proceed.

1.11. Science-policy interface

Various barriers pose challenges to making policy-relevant knowledge available for informed decision-making. Opportunities to strengthen the engagement of scientists and the science-policy interface include the following (UNEP 2019):

- Take steps towards the cost-effective harmonization of data generation and collection, strengthen monitoring and surveillance capacities, and share data more systematically at all levels.
- Scale up industry engagement in generating and disseminating relevant data.
- Strengthen two-way communication, and support collaboration between scientists and policymakers.
- Explore methodologies that facilitate more systematic identification of future priorities at the international level.

UNEA resolution 4/8 adopted at the fourth meeting of the United Nations Environment Assembly (United Nation Environment Assembly [UNEA] 2019) encourages the involvement of all relevant stakeholders, including industry, in strengthening the science-policy evidence, including consideration of relevant socioeconomic aspects and calls on governments and all other relevant stakeholders including United Nations agencies as appropriate, industry and the private sector, civil society and the scientific and academic communities to "support relevant science-policy interface platforms, including input from academia, and to enhance cooperation in the environment and health areas; and consider at the Strategic Approach to International Chemicals Management (SAICM) Open-ended Working Group (OEWG3) and at the intersessional process on the sound management of chemicals and waste beyond 2020 ways of strengthening science-policy interface, including its relevance for implementation of multilateral environmental agreements at the national level.

The success of a science-policy interface (SPI) platform can be measured by its impact on a given issue area. Whether through convening expert groups, conducting assessments, preparing guidelines, or assessing particular actions, SPI platforms can facilitate policy design and decision-making by bodies such as the Conferences of the Parties to MEAs, the UN governing bodies and/or the fifth International Chemicals Management Meeting (ICCM5) as such, or after decision at ICCM5 in its new form. SPI platforms can also influence a broad range of stakeholders and institutions as they contribute to the design and implementation of policies relevant to their organizations' mandates. SPI platforms can also support national agencies and other groups with awareness-raising activities, capacity-building, access and development of policy tools, and implementation of actions related to sound management of chemicals and waste (UNEP 2020).

SPI platforms can link scientific knowledge/evidence with policymakers at each stage of the policy process:

Agenda setting: SPI platforms can be used for horizon scanning. They can also identify and define problems that require action on a national, regional, or global scale by undertaking scientific assessments, conducting literature reviews, producing reports on the nature and scale of a problem, and how an issue may evolve in the future. They can also play a significant role in raising public awareness.

[15] https://enb.iisd.org/oewg1-2-science-policy-panel-contribute-further-sound-management-chemicals-waste-prevent-pollution-summary

Policy formulation: SPI platforms can generate inputs that inform all actors, both in the negotiation of instruments designed to respond to a problem, and in developing specific policies designed for implementation at the global, regional or national scale.

Policy implementation: SPI platforms can provide critical information about the potential impacts of regulatory action, e.g. data or evidence related to benefits, costs, feasibility, and likely efficacy of proposed actions.

Policy evaluation: SPI platforms can provide critical input on the impacts of policies and strategies on a given problem, drawing out lessons to support increased effectiveness in future actions.

According to the report "Assessment of Options for a Science-Policy Interface" (UNEP 2020), an effective science-policy interface for the area of chemicals and waste would:

- **Engage in horizon scanning**: This systematic process focuses on "the early detection of weak signals as indicators of potential change" (National Academies of Sciences, 2020). The SPI would be able to detect early signals of emerging trends, patterns, or disruptions related to production, use, disposal and impacts of chemicals and waste.
- **Identify emerging issues of concern**: An effective SPI should be able to draw on early warning signals, proactively interpreting their implications and kickstarting action to address new challenges. This work will require close and early collaboration with existing governance bodies.
- **Monitor trends**: The SPI should have the capacity to monitor and document developing trends in chemical pollution, making links (where appropriate) to other environmental issues, both within the chemicals' regime and in other areas of environmental governance.
- **Identify, assess and communicate about the environmental and human health issues associated with [exposure to] chemicals and waste**: The capacity to communicate effectively with stakeholders at different scales (global, regional, national and local) and from different constituencies will be essential to the effectiveness of the SPI. It will be critical to establish formal and accessible lines of communication to key partners, including the science advisory bodies of the BRS and other conventions.
- **Evaluate and refine response options**: A key expected benefit of a new science-policy interface would arise from its work to fill gaps in current governance arrangements. As such, the body will need to be able to identify and promote appropriate practices, policies, technologies, etc. that can be deployed to prevent pollution and mitigate its impact. This work should be closely aligned with the policies being produced by the global chemicals conventions and other bodies that are currently responsible for significant aspects of global chemical management.
- **Stimulate new policy approaches**: Another key potential benefit of a new science-policy interface would be its capacity to spur the negotiation and enactment of new policy approaches. As the production and use of synthetic chemicals have grown over time, so has recognition of new challenges (e.g. establishing regulatory mechanisms that can keep pace with developments in chemical technologies). This body should be able to produce new, research-based solutions to emerging and time-sensitive challenges related to chemical pollution.

The UNEA resolution 5/8 indicates that a new science-policy interface should take the form of an independent intergovernmental panel that would provide policy-relevant, but not policy-prescriptive, advice to support international agencies and instruments, countries, and the private sector. To maximize the effectiveness of such a panel, as well as the efficiency of resources needed to support its operation, it will be critical to ensure that it is filling gaps in the current structure of global chemicals governance, without overlapping with or duplicating the work that is being carried out by existing bodies.[16]

[16] UNEP/CHW.15/INF/49/Rev.1 - UNEP/FAO/RC/COP.10/INF/36/Rev.1 - UNEP/POPS/COP.10/INF/54/Rev.1

In addition, the UN Special Rapporteur on toxics and human rights presented a report to the 48th Human Rights Council focused on the right to science. The report highlights the lack of alignment that exists between regulatory measures and scientific evidence. In that context, SPI platforms are indispensable to overcome this lack of alignment and overcome the increasing toxification of the planet (United Nations Human Rights Office of the High Commissioner [OHCHR] 2021). The report also provides recommendations, including international cooperation and the creation of an SPI platform to transform knowledge into policy. A global science-policy platform would deliver important benefits for the realization of the right to science.

The existing landscape of SPI platforms working on aspects of sound management of chemicals and waste includes several subsidiary advisory bodies that are tasked with recommending actions to support the implementation of an MEA (e.g. the Stockholm Convention's Persistent Organic Pollutant's Review Committee (POPRC) and the Rotterdam Convention's Chemical Review Committee (CRC)). Examples from outside the field of environment include the joint Food and Agriculture Organization (FAO)/World Health Organization (WHO) panels subsidiary to the Codex Alimentarius Commission, as well as other expert bodies that established by UN Specialized Organizations. The Intergovernmental Panel on Climate Change (IPCC) and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), which are tangentially involved in this issue area, have no analogue in the chemicals and waste arena, but provide potential models in that they are independent but highly responsive to the needs of the conventions on climate and biodiversity, respectively.

2. National context

2.1. Science – policy interface at the national level

An effective science-policy interface (SPI) should support science-based decision-making not only in the context of global cooperation, but also at the national level. Effectively addressing the sound management of chemicals and waste will require systematic engagement with the policymakers who are responsible for designing and implementing policies, procedures and other actions to tackle these multifaceted problems (UNEP 2022).

The interface should facilitate the active participation of key stakeholders from the private sector and civil society, as many of these actors will have either experience with the impacts or responsibility for the production and/or use of hazardous substances. National-level strengthening of the interface between science and policy will contribute to efforts to ensure that the science-policy panel is undertaking relevant and valuable assessments, providing policy-relevant advice, and effectively disseminating the results of its work to audiences that can respond and take meaningful action across a range of sectors (UNEP 2022).

By engaging key stakeholders on the national and sub-national levels, an SPI can support the dissemination of relevant scientific data, including policy-relevant, usable information that can be applied to specific national and sub-national circumstances.

Structured mechanisms for communication between a global SPI and national/sub-national stakeholders can significantly increase the impact of the work done at the global level by reaching more stakeholders, raising public awareness of relevant issues, facilitating access to information and other resources available at the global level, and creating space for dialogue and information exchange (both vertically and horizontally).[17]

For this space to work properly, it needs to concentrate on strengthening the legitimacy of the work done by the SPI by, for example, building trust among participants, facilitating ready access to usable information gathered or produced by the SPI, and ensuring that processes by which the panel's work

[17] Ibidem.

is carried out are transparent and open. Such measures can ensure that the work of the SPI is accessible, relevant and useful for stakeholders working in a wide range of roles and sectors.

Communication between participants at the global and national level should be bi-directional; in addition to the 'top-down' communications via assessments and other outputs from global collaborations, stakeholders working at the national and local levels should be able to feed into the work of the SPI through their governments and/or direct participation in the work of the panel and its subsidiary groups.[18]

Ensuring mechanisms for collaboration and formal records of communications will also enable them to deepen the panel's shared understanding of what is required for sound management of chemicals and waste in specific circumstances. Stakeholders can bring nuance and depth to discussions by providing information about local contexts, including the social, economic and political factors that will affect the success of different strategies.

Thoughtful consideration of how to facilitate local input will be an essential part of incorporating research from the natural and social sciences from underrepresented areas of the world, traditional knowledge, and other 'ways of knowing' into the work of a new science-policy panel[19].

Strong science-policy interfaces can raise awareness of critical issues and possible policy responses, build networks among stakeholders, and facilitate cooperation and information exchange among key actors working across sectors and scales.

The Parties to the BRS Conventions have identified three areas of needs, challenges and opportunities for enhancing the science-based action in the implementation of the conventions at the national and regional levels, namely (Basel, Rotterdam and Stockholm Conventions Secretariat 2019):

(a) Improving access to scientific and technical information relevant to the BRS Conventions in particular in developing countries and countries with economies in transition;

(b) Increasing the availability of scientific and technical information relevant to the BRS Conventions in particular in developing countries and countries with economies in transition; and

(c) Strengthening the national capacity to use scientific and technical information for the implementation of the BRS Conventions.

Annex I presents possible activities to address the needs, challenges and opportunities identified in Parties to the BRS Conventions.

In January 2020, the BRS Secretariat hosted the first of a series of sub-regional workshops to enhance science-policy-industry interaction and to support Parties in science-based decision-making for the implementation of the conventions. The Sub-regional Workshop to Enhance Science-Policy-Industry Interaction and to support Parties in science-based decision-making for the implementation of the BRS Conventions, held in Lagos, Nigeria, was attended by 33 participants from English-speaking countries of the African region. The following key conclusions and recommendations specific to support capacity building and improved access to scientific data were identified (Basel, Rotterdam and Stockholm Conventions Secretariat 2020):

- **Capacity for Institutional data generation and management should be strengthened** at national levels. This should include the provision of adequate and quality facilities to universities and research institutions.
- **Enabling environments** should be created for publication of research results.
- There should be **active mainstreaming of scientific information in policy decision making**. Appropriate institutions such as a steering committees should be established to ensure integration and the use of scientific information in decision-making.
- **Data collection and presentation** in support of "science to action" should be effectively coordinated at national and international levels.

[18] Ibidem.
[19] Ibidem.

- **Incentives should be provided to industries** to encourage industry investment in scientific research.
- **Regular constructive engagements and advisory bodies** for interaction between policymakers and science-based institutions should be encouraged.
- Special funding systems should be created to support national programmes on access to scientific information.
- Human resource capacities should be enhanced at the ministries, departments, agencies to provide **expertise to use scientific data**.
- **Data quality control and assurance systems** should be put in place for locally generated scientific data.
- **Guidelines or frameworks** on the use of scientific data should be developed.
- Methods of communication of scientific information to policymakers should be improved by appropriate training activities.

In another workshop held by the BRS Secretariat in October 2022, held in Barcelona, Spain, the following take-away messages and proposals of activities for improving access to scientific and technical information relevant to BRS Conventions were summarized (Basel, Rotterdam and Stockholm Conventions Secretariat 2022):

a) Take-away messages:

A. **Improve communication with stakeholders** • Improving stakeholder involvement and data contributions can be achieved by increasing awareness and contacts with relevant industries. • Effective communication with stakeholders requires interaction between science policy and the transfer of relevant information in a language that is accessible to the intended audience. • To facilitate lasting connections between scientists and implementing agencies, it is essential to strengthen communication between national authorities.	**B. Strengthen international cooperation** • Promoting information sharing and collaboration between countries can help identify and address global challenges more effectively. • Strengthening international cooperation requires creating mechanisms that facilitate dialogue, coordination, and joint action among countries. • To foster lasting cooperation, it is essential to establish trust, respect, and common goals among nations, as well as invest in capacity-building programs that enhance the skills and knowledge of all parties involved.
C. Increase involvement of scientific bodies • Inviting key decision-makers, such as the Ministry of Education/Research/Innovation, to engage with POPs researchers and build laboratories with POPs capabilities. • Clear and transparent transfer of scientific information to decision-makers is critical in ensuring that scientific evidence informs policy decisions. • Encouraging cooperation among research centres and establishing a committee can facilitate a close working relationship with scientists, allowing for a better approach to handling information gaps and identifying products that might contain industrial POPS.	**A. Improve data gaps** • Improving data gaps can be achieved by enhancing the elaboration of national platforms to gather scientific data on POPs. • Collaboration between different stakeholders is essential to identify and address data gaps that administrations are unable to fulfil. • Data gaps can be addressed by developing partnerships between public and private sectors to access relevant data and improve the quality • Improving data exchange and transparency on POPs content in products, as well as assessing existing data to identify gaps, can help address data limitations and inform policy decisions.

B. Increase capacity of policymakers

- Increasing capacity requires further opportunities like workshops to discuss the implementation of the BRS, particularly the Stockholm Convention, and involve all available science and technical capacity to serve governmental decision-makers.
- Awareness raising, involvement of top management, and having sufficient budget and economically feasible solutions are key factors in building capacity and ensuring successful implementation of the BRS.
- Prioritize strengthening national capacity through targeted training programs, resources, and technical assistance.

C. Increase access to financial resources

- Access to financial resources requires mobilizing support from key stakeholders, such as international organizations and private sector entities, to provide additional economic support and funding.
- Encouraging and supporting research to address related issues can help attract financial resources and investments that support the implementation of the BRS.
- It is important to identify and prioritize funding opportunities, build capacity in grant writing and proposal development, and ensure transparency and accountability in the management and use of funds.

D. Integrate gender dimension

- The lack of gender-equality legislation to support gender-responsive BRS implementation in many countries highlights the need for greater efforts to integrate the gender dimension in relation to POPs.
- Health, monitoring, and awareness-raising activities are important areas where the gender dimension can be integrated into POPs policies and programs.
- Integrating the gender dimension in relation to POPs can help identify and address gender-specific risks and vulnerabilities, promote women's participation in decision-making, and ensure that the benefits and burdens of POPs-related policies are distributed equitably.

E. Promote the prevention approach

- Promoting the prevention approach involves a shift towards upstream interventions that focus on reducing or eliminating the use of hazardous substances at the beginning of the POPs life cycle.
- Disseminating further information on regrettable substitutions and recovery costs can help promote the prevention approach by encouraging the use of safer alternatives and highlighting the potential long-term costs of inaction.
- By promoting responsibility at the beginning of the POPs life cycle, stakeholders can prioritize the development and implementation of sustainable and environmentally friendly production and consumption practices, thereby reducing the risk of POPs contamination and exposure.

b) Proposal of activities for improving access to scientific and technical information relevant to the BRS Conventions:

1. Create a website with compiled information on chemical profiles

- Establish a comprehensive digital platform to share chemical profiles of products, sectors, and uses, as well as update profiles on both national and international BRS websites.
- Promote inter-ministerial coordination to facilitate the integration of sound management of chemicals and waste into policy development, utilizing scientific research.
- Develop a dynamic, open-access digital tool to provide scientific information on POPs, including limit values and environmental standards across different countries.

2. Improve awareness of existing tools through workshops on scientific information

- Promote awareness and utilization of existing scientific information tools, such as OECD, IPCHEM, and ECHA.
- Request financial support from the BRS Secretariat to participate in meetings as focal points.
- Organize workshops at national and regional levels, as well as webinars with relevant stakeholders, to increase availability and exchange of scientific data, and build national capacities at ministries with expertise to use such data.

3. Promote coordination and collaboration	4. Increase capacity of laboratories and research bodies
• Establish a coordination committee to improve synergies between government institutions and enhance policy and regulatory structures related to POPs. • Foster collaboration between researchers, policymakers, and industry, and approach industry to increase their involvement in providing data. • Align scientific research with national priorities on POPs and identify existing research on POPs to strengthen linkages between the Ministry of Research and the BRS focal points at the national and international levels.	• Increase accreditation of laboratories for POPs analysis to ensure accurate and reliable data. • Enhance laboratory capacity to analyse POPs at the national level to promote local solutions. • Facilitate research by scientists and NGOs without heavy administrative processes, and implement regional activities on POPs to generate scientific information

The workshop also made the following recommendations:

- Collaboration and coordination between scientific research bodies, policymakers, industry and international organizations are crucial for effective implementation of the Stockholm Convention on POPs.
- Increasing access to financial resources, promoting prevention approaches and establishing inter-ministerial coordination mechanisms are essential steps towards the sound management of chemicals and waste.
- Awareness-raising, involvement of top management, having a sufficient budget and scientifically-based, economically-feasible solutions are vital factors in improving data gaps and implementing sound management practices.
- Promoting the **integration of gender dimensions** and **involving all available technical capacities** to serve governmental decision-makers is necessary to address gender issues in relation to POPs.
- The establishment of coordination committees, enhancing laboratory capacity for POPs analysis and increasing accreditation of laboratories are necessary steps in building the capacity of laboratories and research bodies.
- **Identifying gaps in data, exchanging information and transferring knowledge** through workshops and webinars, and aligning scientific research with national priorities on POPs activities are critical for addressing data gaps and improving the sound management of chemicals and waste.
- Creating additional websites to **share information on chemical profiles, limit values, and update chemical profiles of products** is a useful tool for improving the transparency and accessibility of information related to POPs.
- Technical assistance provided by the secretariat and donors and the **approach to the industry to increase their involvement in providing data** are also necessary steps in promoting the effective implementation of the Stockholm Convention on POPs.

As can be seen, very similar conclusions and recommendations emerge from the aforementioned workshops, regardless of the continents where they are held, and participating countries. In summary, to comply with the commitments of the Stockholm Convention at the national level while strengthening the science-policy interface, it is essential to:

- Establish mechanisms for effective interaction and engagement between the scientific community and policymakers. This may include the creation of scientific advisory panels, expert committees, or institutionalized science and policy platforms; and
- Incorporate science into policy development, by integrating evidence and scientific considerations into the formulation and implementation of policies in different sectors. Governments must prioritize evidence-based policymaking and ensure that scientific findings are considered in the development of laws, regulations and action plans.

2.2. Enhancing science-policy-industry interaction

Multiple stakeholders and multi-level engagement Addressing pollution requires greater multi-level and multi-actor involvement, coordination and policy coherence across global, regional, national, subnational and local levels. The Towards a Pollution-Free Planet Background Report (UNEP 2017) calls for improving environmental governance through, among others, engaging diverse actors and stakeholders and engaging industry and the business community in solutions.

The Strategic Approach to International Chemicals Management "Study on Industry Involvement in the Integrated Approach to Financing the Sound Management of Chemicals and Waste" (Strategic Approach to International Chemicals Management [SAICM] 2022) recommends developing a strategy for outreach to the private sector all along the chemical value chain, to identify opportunities for increasing financial and in-kind contributions from industry associations. The study suggests creating more opportunities for partnerships with industry through the creation of a capacity-building clearinghouse, marketplace, or global commitment platform for the development, implementation, monitoring, and communication of partnerships and other voluntary commitments. Furthermore, the study recommends engaging with business and industry as partners with a view to establishing high-impact partnerships on issues of concern, such as the World Health Organization's (WHO) "10 issues of public health concern" or the 11 "issues where emerging evidence indicates a risk" identified by the Second Global Chemicals Outlook (GCO-II).

In this sense, making use of other UN entities' networks could serve to bring new private sector actors on board, a challenge recognized by participants of the second meeting in the inter-sessional process to consider the Strategic Approach and the sound management of chemicals and waste beyond 2020. Additionally, this could also respond to the call for engaging additional stakeholders, especially local non-government organizations; and how to include the science-policy interface and academia (United Nations Environment Management Group [EMG] 2023).

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Annex I: Possible activities to address the needs, challenges and opportunities identified in Parties to the BRS Conventions

Source: Basel, Rotterdam and Stockholm Conventions Secretariat 2019

Needs, challenges and opportunities	Objectives	Activities	Key actors
1. Improving the access to scientific and technical information relevant to the BRS conventions in particular in developing countries and countries with economies in transition. Parties from developing countries and countries with economies in transition expressed the need for improving access to scientific and technical information and relevant expertise needed for the implementation of the BRS conventions. Collaboration through national, regional and international mechanisms and multi-disciplinary partnerships and networks could contribute to increasing the access to scientific and technical information and expertise. The access to the following information was identified as useful: (i) Experience of other countries in implementing BRS conventions; (ii) National and international regulations and standards; (iii) Monitoring data; (iv) Information on alternatives; (v) Information on environmental and health risks of chemicals and wastes; (vi) Solid waste management and hazardous waste incineration.	A. Enhance information exchange on scientific and technical aspects of the BRS conventions through: (i) Clearing-house mechanism of the BRS conventions; (ii) Regional centres; (iii) National, regional and international mechanisms; (iv) Partnerships and networks, including with industry, civil society and academia.	(a) Identify relevant sources to acquire scientific information (e.g. national legislation and strategies, Pollutant Release and Transfer Register (PRTR) and national reports, monitoring programmes, published academic literature, research data, conference documents and other information) and promote the use of such information including through the clearing house mechanism of the BRS conventions.	Parties to the BRS conventions, Secretariat
		(b) Identify examples of efforts by regional centres, national, regional and international mechanisms, partnerships and networks that support the exchange of scientific information and science-based action for the implementation of the BRS conventions at the national and regional levels and promote multi-disciplinary participation in such mechanisms, partnerships and networks.	Parties to the BRS conventions, regional centres, Secretariat
	B. Strengthen the access to scientific and technical information and expertise at the national and regional levels through: (i) National efforts, e.g. through improving the link to universities and other scientific institutions, industry and civil society; (ii) Regional efforts, e.g. through regional centres, partnerships and networks; (iii) Collaboration among international organizations.	(a) Facilitate access to scientific and technical information through the ongoing strategy of the clearing house mechanism of the BRS conventions.	Secretariat
		(b) Strengthen legal and regulatory framework at the national level to establish reporting mechanisms that enable countries to have relevant information to adopt measures for chemicals and waste management, such as updating inventories, conducting risk assessment, identifying alternatives.	Parties to the BRS conventions
		(c) Collaborate with different stakeholders, regional and international organizations in outreach, awareness raising and information exchange on scientific aspects of the BRS conventions.	Parties to the BRS conventions, regional centres, Secretariat, in collaboration with other entities

Needs, challenges and opportunities	Objectives	Activities	Key actors
2. Increasing the availability of scientific and technical information relevant to the BRS conventions in particular in developing countries and countries with economies in transition. While the information on hazard is more readily available globally, the information specific to national or regional situations such as information on production and use, import and export, monitoring data, environmental, health and socio-economic costs and alternatives, is often lacking or insufficient in particular in developing countries and countries with economies in transition.	Support the collection, generation and use of scientific and technical information at the national and regional levels, taking into account the specific needs of Parties from developing countries and countries with economies in transition, as well as support the use of third-party data collected in a scientifically valid manner, as appropriate, to address data gaps in developing countries and countries with economies in transition.	(a) Identify the specific needs of Parties from developing countries and countries with economies in transition to increase the availability of scientific and technical information.	Secretariat
		(b) Undertake capacity-building activities to improve the generation, collection and use of information at the national and regional levels.	Secretariat, regional centres, in collaboration with other entities
3. Strengthening the national capacity to use scientific and technical information for the implementation of the BRS conventions. The capacity to review and assess scientific and technical information to support decision-making and implementation of the conventions is often lacking or insufficient in developing countries and countries with economies in transition. This gap results in the lack of capacity to provide scientific and technical inputs to various processes under the conventions, e.g. review of candidate chemicals. Scientific and technical information, preferably generated at the national level, and expert advice is needed in: (i) Understanding the scientific aspects of the conventions; (ii) Undertaking risk analysis/evaluation of specific chemicals to support national decisions; (iii) Providing national inputs to the various processes under the conventions;	Strengthen the national capacity to use the scientific and technical information for the implementation of the BRS conventions and to provide national inputs to various processes under the conventions.	(a) Identify the specific needs of Parties from developing countries and countries with economies in transition to strengthen the capacity to use the scientific and technical information for the implementation of the BRS conventions.	Secretariat
		(b) Develop training materials and undertake training to strengthen the national capacity to use the scientific and technical information for the implementation of the BRS conventions.	Secretariat, regional centres, in collaboration with other entities

Needs, challenges and opportunities	Objectives	Activities	Key actors
(iv) Developing and implementing safer alternatives, including nonchemical alternatives, and avoiding regrettable substitutes.			