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Editorial //////////////////////////////////////

Science diplomacy, a strategic tool for nations worldwide, has seen its roots firmly established in the collaborative efforts of the Global North. The term gained its official title within the European Union in 2012, marking a pivotal moment in harnessing scientific knowledge and innovation for global cooperation. European science diplomacy stands as a beacon, uniting diverse scientific communities, policymakers, and stakeholders to address crucial global issues like climate change, health, and sustainable development. Through robust partnerships, alliances, and knowledge-sharing initiatives, it propels evidence-based policies and fosters international understanding for the collective betterment of humanity.

This issue delves into the heart of European science diplomacy initiatives. The recent 1st European Science Diplomacy Conference, hosted under the Spanish Presidency of the Council of the EU by the European Science Diplomacy Alliance on 18-19 December 2023, marks a milestone. The first article traces the evolution of this alliance, built upon the legacies of three Horizon 2020 science diplomacy projects: EL-CSID, S4D4C and InsSciDE. It highlights the significant impact on the EU framework, showcasing extensive work, including training modules, conferences, and workshops, emphasising the dynamic interplay between diplomacy and scientific advancement.

Furthermore, the second article explores the role of EU-led strategic frameworks, such as the European Research Area, in fortifying resilience-building based on solid evidence. The paper underscores the importance of EU Framework Programmes for Research and Innovation, particularly in steering climate neutrality goals towards 2050.

The third article in the segment redefines STI diplomacy in the contemporary landscape (with examples from Dutch Diplomacy), recognising the increasing importance of economic tools in diplomatic relations. It stresses the need for a more integrated approach, breaking away from compartmentalised government structures and emphasising technical expertise and a broader geopolitical understanding. This paradigm shift calls for significant organisational changes and a stronger focus on protective measures.

The issue culminates in the discussion of strengthening science diplomacy as a pivotal pathway to address biodiversity loss and ecosystem degradation. Collaborative efforts among nations, scientists, policymakers, and stakeholders stand at the forefront to foster knowledge exchange, research collaborations, and innovative solutions. This holistic approach doesn't just facilitate scientific expertise exchange but fuels global concerted actions to prioritise conservation and sustainable practices crucial for restoring our planet's ecosystems.

We extend our gratitude to the contributors and readers of the *Science Diplomacy Digest* for their continuous support and wish them a prosperous and innovative new year in 2024.

Monika Jaggi

From Vision to Impact: Unveiling the Journey of the EU Science Diplomacy Alliance

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The EU Science Diplomacy Alliance, also referred to as the Alliance, is a key facilitator for advancing interaction, dialogue, training, and capacity building in the vital and dynamic area of science diplomacy. Serving as a platform for collaboration and coordination in the science diplomacy field, it unites 32 institutional members and global networking partners. The Alliance is built upon the combined legacies of three Horizon 2020 science diplomacy projects: EL-CSID, S4D4C, and InsSciDE. This article outlines the Alliance's evolution by delving into the individual contributions of these three foundational projects, illustrating their convergence and influence on the Alliance's progression from 2021 to the present. It concludes with a current snapshot of science diplomacy in Europe and the integral role the Alliance is poised to play in shaping it.

Background

Following the revolutionary report *New Frontiers in Science Diplomacy* by the British Royal Society and the American Association for the Advancement of Science (AAAS) in 2010, the buzzword science diplomacy began echoing in halls of government, including those of the European Union (EU). The term made its official EU debut in 2012 in the Commission Communication titled *Enhancing and Focusing EU International Cooperation in Research and Innovation: A Strategic Approach*. This document articulated that science diplomacy aims to leverage international partnerships in research and innovation as a tool of soft power and serve as a means to enhance relationships with essential countries and regions.

The idea was expanded upon in *Open Innovation, Open Science, Open to the World: A Vision for Europe* from 2016, another Commission document, which conveyed the notion that international collaboration in research and innovation – encompassing shared standards, the exchange of scientific knowledge and personnel, the pooling of resources, and scientific guidance to diplomats – can serve as a foundation for promoting effective governance and policymaking while fostering mutual comprehension and trust. In 2017, the European Commission enhanced its commitment further by commissioning the report *Tools for an EU Science Diplomacy*. The report found that science diplomacy initiatives in Europe lacked coordination and recommended developing a comprehensive science diplomacy strategy and a corresponding action plan to support the Common Foreign and Security Policy (CFSP).

Meanwhile, the eighth EU framework programme for research and innovation (FP8), popularly known as Horizon 2020, had already been underway since 2014. The work program of FP8 hosted a variety of sub-programs, like *Industrial Leadership and Societal Challenges*. Under the latter, a sub-sub-program called

* Editorial support from Claire Mays, Elke Dall, Luk Van Langenhove, Stella Reschke, Charlotte Rungius, and Mostafa Shawrav is acknowledged.

Europe In A Changing World - Inclusive, Innovative And Reflective Societies was introduced in order to...
 ...foster a greater understanding of Europe, provide solutions and support inclusive, innovative and reflective European societies in a context of unprecedented transformations and growing global interdependencies.¹

Within *Europe In A Changing World*, various topics were introduced, under which different calls were made. One topic – *Strengthening Europe's position in the global context: science diplomacy and intercultural relations* – released a call that led to a successful proposal from **EL-CSID**; another topic – *European cultural and science diplomacy: exploiting the potential of culture and science in the EU's external relations* – called for projects that **S4D4C** and **InsSciDE** successfully responded to. These three projects, which will be explored in greater detail below, had science diplomacy at their cores. With this shared *raison d'être*, they intertwined throughout their durations, and in 2021, as the sun set on the Horizon 2020 cycle, they joined forces to create the EU Science Diplomacy Alliance. To trace the evolution of the Alliance with any diligence, it is integral to first describe the projects of its genesis.



Member composition of the three research projects EL-CSID, S4D4C and InsSciDE

EL-CSID

The first of the Horizon 2020 science diplomacy projects was *European Leadership in Cultural, Scientific, and Innovation Diplomacy*, abbreviated to **EL-CSID** (Grant n° 693799). Running from March 2016 until February 2019, EL-CSID received approximately €2.4 million in funding to pursue its three core objectives:

- To investigate how the EU engages in cultural and science diplomacy by comparing its bilateral and multilateral ties with other countries, regions, and international organisations.
- To assess how cultural, science, and innovation diplomacy can advance EU interests in the contemporary global context by examining how these forms of diplomacy could enhance Europe's international role.
- To identify ways to promote awareness among relevant stakeholders about the role of science and culture in enhancing the EU's external relations. The aim was to produce scholarly research and policy-related content to be widely disseminated through targeted channels.

Coordinated by the Vrije Universiteit Brussel (VUB) with Luk Van Langenhove as the principal investigator, the EL-CSID consortium constituted a vast network of partners from Europe and beyond: the [University of Warwick](#), [WZB](#) Berlin Social Science Center, the Euro-Mediterranean University (EMUNI) headquartered in Slovenia, the Centre d'Etudes Diplomatiques et Stratégiques (CEDS) in Turkey, the Joint Institute for Innovation Policy (JIIP), the United Nations University's Institute on Comparative Regional Integration Studies (UNU-CRIS) in Belgium, the Graduate School of Public Policy at Nazarbayev University (NU) in Kazakhstan, and the Lee Kuan Yew School of Public Policy at the National University of Singapore (NUS). In addition to one dedicated to management and dissemination, the work was divided between six thematic work packages:

1. *Europe and European Praxis in Cultural and Science Diplomacy in Comparative Perspective* (VUB)
2. *Science for Diplomacy versus Diplomacy for Science: The Tension between Innovation Policy and Sovereignty* (WZB and JIIP)
3. *Cultural and Science Diplomacy: The Transnational and Collaborative Dynamic* (Warwick, NU and NUS)
4. *EU Cultural and Science Cooperation: From the Outside Looking In* (EMUNI and CEDS)
5. *Exploring the Effectiveness of EU's Promotion of Regional and Inter-regional Processes in the South through Science, Cultural and Economic Diplomacy* (UNU-CRIS and VUB)
6. *Leveraging Diplomatic Capacity* (VUB)

Over three years, EL-CSID produced an impressive corpus of [work](#) that included three book chapters, four reports, 14 scholarly articles, 20 policy briefs, and 24 working papers, raising essential questions in the domains of cultural, science, and innovation diplomacy in the EU. For example, one [paper](#) outlined the ad hoc presence of science and innovation in EU trade policy and argued for much-needed integration between the two domains. [Another](#) traced the complex web of transnational governance bodies that engage in science diplomacy. The evolving face of multilateralism and the augmented space it affords to the science and technology community was also [addressed](#) in the project. Running alongside a surge of populist movements like the Brexit campaign and Donald Trump's *Make America Great Again*, EL-CSID also [explored](#) the role of science diplomacy in an arena increasingly crowded with populist sentiments. The extensive body of work generated by EL-CSID not only highlighted the dynamic interplay between diplomacy and scientific advancement but also underscored the urgent need for a cohesive and strategic approach to science diplomacy within the EU framework.

In EL-CSID's [final report](#), it was argued that while there had been an increase in the volume of cultural and science diplomacy activities in Europe during the project's duration, the effectiveness of EU leadership in these areas remained uncertain. It highlighted the potential for EU leadership in cultural and science diplomacy while emphasising the need for improved organisation and communication, recognition of changing political dynamics (namely vis-à-vis the rise of populist nationalism), and proactive engagement with the evolving global order. For science diplomacy specifically, the project picked up on a lack of clear definition and varied interpretations across EU member states. This ambiguity, it argued, hindered the development of a unified strategy and supported skepticism among scientists. EL-CSID emphasised the need for a broader understanding of science diplomacy, not just as a profession or policy tool but as a holistic approach that integrates scientific activities with diplomacy. However, as the project wrapped up, the concept of science diplomacy remained largely unrecognised or even doubted within the scientific community. A coherent EU strategy for science diplomacy, aligned with national policies, was deemed essential amid rising global challenges.

S4D4C

In January 2018, the second science diplomacy project with Horizon 2020 funding set sail under the *Europe in a Changing World* program. This one, *Using Science For/In Diplomacy for Addressing Global Challenges*, shortened to **S4D4C** (Grant n° 770342), received €2.5 million in EU funds for its mission to enhance EU science diplomacy for foreign policy and societal benefit by analysing relevant cases, crafting a governance framework, and developing training modules. The project revolved around the following objectives:

- Enhance knowledge and deeper comprehension of the role of science diplomacy in achieving foreign policy objectives;
- Promote efficient and effective platforms for the execution of European science diplomacy;
- Guide policy for future science diplomacy actions;
- Strengthen the science diplomacy profile and recognition at the European level;
- Build capacity and augment capabilities;
- Expand global influence and visibility of European science diplomacy.

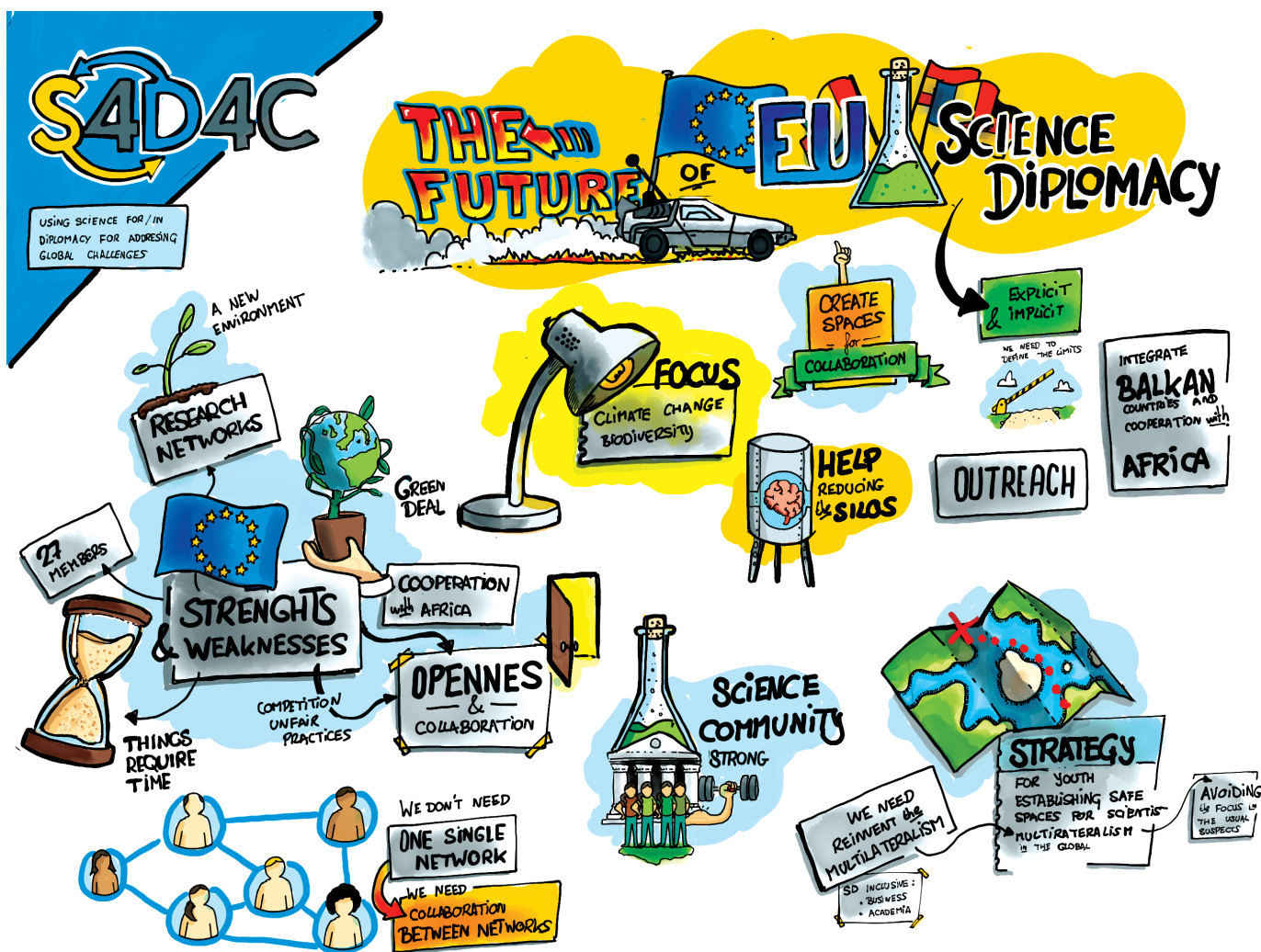
The S4D4C consortium was led by the Centre for Social Innovation ([ZSI](#)) in Austria, with Elke Dall as project coordinator. It included a diverse array of partners: the Charles University in Prague ([CU](#)), the German Aerospace Centre's Project Management Agency ([DLR-PT](#)), the German Centre for Science Studies and Higher Education Research ([DZHW](#)), the Spanish Foundation for Science and Technology ([FECYT](#)), the World Academy of Sciences ([TWAS](#)), the University of Lille ([ULille](#)), the University of Sheffield ([USFD](#)), and the University of Twente ([UT](#)). The work of the project was divided into six work packages:

1. *Ethics Requirements* (ZSI)
2. *Conceptual Framework* (DZHW)
3. *European Science Diplomacy Addressing Global Challenges* (CU)
4. *Science Diplomacy Governance Framework: Processes and Interfaces* (UT)
5. *Training and Knowledge Resources for Science Diplomacy* (DLR-PT)
6. *Management, Dissemination, Exploitation, and Stakeholders* (ZSI)

Like EL-CSID, S4D4C broke ground in the theoretical study of science diplomacy, but it also pioneered putting it into practice. It produced a trove of valuable science diplomacy training materials, such as a comprehensive toolkit for trainers, infographics, engaging videos, simulation games, and an in-depth online course that, to date, has been completed by approximately 1,300 certificate-receiving participants. Still available on the [website](#), these deliverables continue to have an impact far beyond the project's lifetime. S4D4C also championed cohesion between the scientific and diplomatic worlds through scores of webinars and events, including conferences in Madrid and Berlin and three-day workshops in both Trieste and Vienna that brought together diplomats, civil servants, and scientists to strengthen the role of science diplomacy in policymaking.² In October 2018, S4D4C initiated its [Open Doors Programme](#) to educate dedicated scientists in science diplomacy. This selective program provided five recipients with the chance to interact with various diplomatic entities throughout Europe, allowing them to acquire practical diplomatic skills.

By the time the project concluded in April 2021, S4D4C had contributed many high-quality publications³, including nine case studies⁴ showcasing the intersection of science and diplomacy in areas such as transborder water management, cyber security, and joint international research programming.

Perhaps most momentous was S4D4C's consolidation of the science diplomacy community around a common conceptualisation articulated in the [Madrid Declaration on Science Diplomacy](#). Stemming from the first [Global Meeting on Science Diplomacy](#) in 2018, the declaration positioned science and technology as pivotal in addressing the myriad challenges and opportunities faced by societies worldwide. Signed by nearly 200 experts at the cross-section of science and diplomacy, the declaration underscored the necessity of integrating science into foreign policy, not only to advance national interests but also to collaboratively tackle global challenges. This move represented a significant step in fostering a unified vision and approach within



Visual notes taken by a graphic artist at the S4D4C Final Networking Meeting during 15-19 March 2021

the science diplomacy community, emphasising its role in building bridges between science, technology, and innovation practices with national, regional, and global interests.

S4D4C's [impact report](#) illustrated significant strides in advancing science diplomacy. Additionally, S4D4C's interactions with government officials at national and European levels influenced the development of science diplomacy policies, aiding in the strategic integration of science diplomacy into the EU's foreign policy framework. At its conclusion, S4D4C's work was expected to continue shaping the EU's approach to science diplomacy, enhancing global influence and sharpening responses to societal challenges.

InsSciDE

Inventing a Shared Science Diplomacy for Europe, or **InsSciDE** (Grant n° 770523), was the final Horizon 2020 project dedicated to science diplomacy, receiving approximately €2.5 million for a period running from December 2017 through to June 2022. The 2016 funding call under *Europe In A Changing World* reflected the recent determination by the European Commission that Europe must develop an effective science diplomacy. InsSciDE responded with a hypothesis: the Member States possess a great capital of experience from which they can draw. Domestic and transnational initiatives have long used science in global diplomatic engagements in diverse ways and contexts. However, InsSciDE posited that this practice is fragmented, unrecognised, or lacking an overall model that could bring it into view and let it be shared, leveraged, and consolidated for Europe. InsSciDE, therefore, engaged historians of science and technology, STS scholars, political scientists, and practitioners to reveal, formalise, and communicate this intangible capital.

The consortium was the largest of the three projects. Coordinated by the French National Centre for Scientific Research (CNRS) with linked parties in Paris' Sorbonne and Pantheon-Sorbonne Universities, InsSciDE's principal coordinator was Pascal Griset, professor at Sorbonne University (UMR Siricie). The project's umbrella extended over the European Academy of Diplomacy (EAD) in Warsaw; Institut SYMLOG de France; the United Nations Educational, Scientific and Cultural Organisation (UNESCO); the University of Tromsø – The Arctic University of Norway (UiT); NOVA University Lisbon; the National Technical University of Athens; the Royal Institute of Technology in Stockholm (KTH); the University of Padova (UNIPD); the University of Vienna (UNIVIE); the Johannes Gutenberg University of Mainz (JGU Mainz); the Swedish Institute of International Affairs (UI); Chalmers University of Technology in Gothenburg; the University of Veterinary Medicine in Budapest; the University of Manchester; and the University of Erlangen-Nuremberg (FAU). Reflecting this broad consortium was a wide array of work packages:

1. *Engagement and Interface* (EAD and Symlog)
2. *Power With Science Diplomacy: From Theory to Strategy* (UiT)
3. *Science Diplomats: Fluid Identities and Emergent Practices* (NOVA)
4. *Heritage: the Past as a Challenge to Build up a Future?* (JGU Mainz)
5. *Health: Diplomacy as a Tool for a Strengthened and Innovative Europe* (UNIVIE)
6. *Security: Scientific and Technical Cooperation in the Context of European Diplomacy* (FAU)
7. *Environment: Monitoring as an Arena for Science Diplomacy* (KTH)
8. *Space: European Science Diplomacy for Cooperation in a Global Space Competition* (UNIPD)
9. *Communication, Impact and Project Legacy* (UNESCO)
10. *Coordination* (CNRS)

The InsSciDE project review by the European Commission monitors stated that groundbreaking conceptual advances had been obtained in the realm of science diplomacy. Central to these advances was the open-access book *Interdisciplinary Case Studies to Think with History*, a collection of 28 case studies spanning 250 years and myriad focus areas: heritage, health, security, environment, and space. Another notable contribution was the open-access paper *Leveraging Science Diplomacy in an Era of Geo-Economic Rivalry: Towards a European Strategy*, which laid out ways that the EU can solidify its role as a science diplomacy actor. Thematic learning and deep exchanges with practitioners resulted in sectoral policy briefs. Strategic analyses yielded guidance for policy considerations and decision-making at both EU and national levels. Additionally, two week-long pilot summer schools allowed 50 early career scientists and diplomats from 6 continents to activate the future of science diplomacy by considering its past.

Among its impacts, InsSciDE boosted a vanguard start-up: ICONEM, which was responsible for digitising endangered cultural heritage sites and achieving an original science diplomacy field intervention in the Near East. Considering the reactions and support from stakeholders, the assessment suggests that InsSciDE's outputs will continue to serve as valuable resources in the ongoing theoretical and practical work on science diplomacy within the EU and beyond.⁵

InsSciDE also made great strides in teaching and training science diplomacy, notably through the two editions of the *Warsaw Science Diplomacy School* (WSDS) held online in 2020 and 2021. This one-week intensive course, co-organised by EAD and Symlog, engaged project authors and strategists to offer insight into science diplomacy through historical case studies, future scenario exercises, and consideration of risk and security challenges to science diplomats moving across geopolitical borders. At InsSciDE's final conference in Paris, Maria Cristina Russo, Head of International Cooperation in Research and Innovation at the European Commission, praised the WSDS as a "trademark in science diplomacy training".⁶ The network created among WSDS participants continues to generate collaborations.

As InsSciDE wrapped up in 2022, it was clear that the legacy would continue, with the newly elected president of Sorbonne University, Nathalie Drach-Teman, announcing that project outcomes would guide her administration's focus on science diplomacy. In a similar vein, Maria Cristina Russo, Head of International

Cooperation in Research and Innovation at the European Commission, commended the project for its findings and the impact they will have on European science diplomacy in the future.⁶ Most recently, in autumn 2023, the InsSciDE team organised a 6-day hybrid training with the Agence Universitaire de la Francophonie (AUF) to foster science diplomacy in new linguistic spaces.

The EU Science Diplomacy Alliance

At the start of 2021, EL-CSID had already ended, S4D4C was beginning to wrap up, and InsSciDE was well past its halfway point. It was then that the S4D4C team initiated a plan to sustain the impact of these projects beyond their funding period. The impetus stems from an S4D4C policy brief earlier that year: *Nurturing the EU Science Diplomacy Community: The Launch of an EU Science Diplomacy Alliance for Addressing Global Challenges*. S4D4C proposed a *letter of intent* (LoI) to the coordinators of EL-CSID and InsSciDE, envisioning a platform for “interactions and dialogue, training, institutional capacity building, and coordination of grant-seeking or use of joint funding.” This proposal evolved into the EU Science Diplomacy Alliance, which was publicly introduced by the coordinators of the three projects at S4D4C’s *Final Networking Meeting* on 19 March 2021.

The Alliance’s website – science-diplomacy.eu – was subsequently set up to serve as a central hub for the resources developed by the three Horizon 2020 projects. This included a library of articles, blogs, and book chapters; a video gallery; policy briefs and reports; and a centralised location for the case studies from both S4D4C and InsSciDE. Meanwhile, [X](#) (earlier Twitter) and [LinkedIn](#) pages for the Alliance were established, and most accounts that followed the three projects of its genesis were carried over.

The first presidency of the Alliance was chaired by ZSI (the S4D4C coordinator). The first General Assembly in June 2021 set the groundwork for management procedures, stakeholder partnerships, and communication tools like social media and the newsletter. It was agreed that the Alliance would operate on a six-month rotational leadership basis, with ZSI holding the first term, followed by a unanimously agreed list of successors.

Membership is divided between *members* (EU-based) and *global networking partners* (non-EU or with a geographical focus beyond the EU). The list of founding members came from all three projects and beyond. From EL-CSID, VUB and UNU-CRIS came to the table under the newly formed Joint Unit on Non-Traditional Diplomacy (UNTRAD). ZSI, CU, DLR-PT, FECYT, TWAS and ULille represented S4D4C. Meanwhile, InsSciDE had CNRS, FAU, UNIPD, UiT, and EAD as vanguards of its legacy. On top of that, a few entities that were not officially part of the Horizon 2020 projects were among the founding members of the Alliance: the Robert K. Merton Center for Science Studies ([RMZ](#)) of Humboldt University in Berlin, AUF, [SciDipGLOBAL](#), and the Marie Curie Alumni Association ([MCAA](#)). The General Assemblies, convened biannually, operate on a unanimous voting system to accept new members. Currently, the membership includes 32 members and global networking partners.

Most of the work done by the Alliance during its first two years has been through its working groups, which are either fixed, like the ones on communications and capacity building; or ad-hoc, like ones that address a certain policy issue.

Following ZSI’s inaugural presidency, DLR-PT assumed the role from July to December 2021. The guiding theme of the program, *Anchoring the Alliance*, included priorities like ensuring smooth communication and exchange processes; raising awareness about the Alliance in the EU and beyond; enhancing science diplomacy training; and finding synergies within the context of EU policy. Several new members joined during this period: the Department of Political and Social Sciences of the University of Trieste, the Central European Initiative ([CEI](#)), the Department of Science, Technology, Engineering and Public Policy of the University College London ([UCL](#)), [Science&TechCollab](#) in Canada, the United Nations Institute for Training and Research ([UNITAR](#)), and the University of Bergen in Norway ([UiB](#)).

CNRS held the rotating presidency from December – June 2022. With the underpinning theme of *Bringing the Alliance Forward on the International Stage*, this term was dedicated to enhancing direct interactions and dialogues with science diplomacy communities on Alliance-focused topics and actions, intensifying in-depth

discussions to further the progress of the working groups, and strengthening the policies and practices of the Alliance, including the strategic organisation of the trio*. Coinciding with the final months of InsSciDE, which CNRS also coordinated, the Alliance was undeniably brought forth internationally through two high-level InsSciDE conferences in Lisbon and Paris. Four new members joined under this presidency: the International Institute for Applied Systems Analysis (IIASA), SciTech DiploHub in Barcelona, the University of Continuing Education, Krems (UWK) in Austria, and the Institute of Atmospheric and Earth System Research (INAR) of the University of Helsinki.

The final session of the last InsSciDE conference, held at UNESCO headquarters in Paris, was the stage for the CNRS presidency to hand the gavel to UNTRAD, which subsequently set off implementing its July – December 2022 program. Guided by the notion of Empowering the Alliance, the UNTRAD presidency had two priorities. The first was to continue improving the Alliance's organisational capabilities by setting up a working group on science diplomacy vis-à-vis authoritarian states and on administrative questions, where debates on membership fees, acquiring a legal personality, and moving towards a one-year presidency term took place. The second was to empower the theoretical study of science diplomacy. This was done through a conference held at the European Commission entitled *Thinking, Shaping, and Debating Science Diplomacy* and UNTRAD's success (via VUB) in securing a science diplomacy work package within the EUTOPIA European university alliance. Under the UNTRAD presidency, the Alliance welcomed SYMLOG de France and the Polytechnic University of Milan (POLIMI) as members.

The MCAA took the reins from January – June 2023, adopting *Science Diplomacy for Enhancing Global Cooperation* as the guiding theme. This period was marked by a commitment to organisational stability, fostering enhanced collaboration among members, and expanding global networking partnerships. A key initiative was the introduction of a comprehensive survey that delved into important questions about science diplomacy, effectively gauging diverse perspectives in the field. Additionally, the MCAA made significant contributions to the European Science Diplomacy Agenda, details of which will be addressed in the subsequent section. Also noteworthy was MCAA's Cordoba conference, *Challenges in Science Diplomacy & Sustainable Development*, which included a session focusing exclusively on the Alliance. It was decided at MCAA's General Assembly that presidencies henceforth would have a one-year duration. Three new members joined the Alliance during this period: the French Institut de Recherche pour le Développement (IRD), the Association pour la Valorisation des Relations Internationales Scientifiques et Techniques (AVRIST), and the Society of Spanish Researchers in the UK (SRUK/CERU).

The current presidency of the Alliance is held by FECYT, which will keep the position until June 2024. The priorities of this presidency are to advance the European Science Diplomacy Framework by engaging Alliance members in its development and steering committees in November 2023; strengthen the Alliance's organisational stability through its registration as a non-profit entity in Belgium, with the process beginning in early 2024; and enhance collaboration and engagement with diplomatic stakeholders in science diplomacy. This includes expanding Alliance membership, fostering active partnerships, and organising events.

The Alliance and the EU Science Diplomacy Framework

In May 2021, the European Commission unveiled its new strategy for global collaboration in science and technology, titled the *Global Approach to Research and Innovation*. This emphasised the EU's commitment to open cooperation grounded in shared values to jointly address global challenges while underscoring the necessity of reciprocal relations and equitable conditions for building trust with international partners. It also highlighted the importance of integrating science and technology more prominently into the EU's foreign and security policies. In the Competitiveness Council's *Conclusions on the Global Approach* (28/09/2021), the call was made for the Commission and the External Action Service (EEAS) to "to develop a European Science Diplomacy Agenda" to aid the integration of the Global Approach into the EU's external action.

The Alliance has played a significant role in collaboration with the Commission and the EEAS to develop

* Borrowed from the Council of the EU, the trio system refers to the current presidency and those immediately pre- and proceeding.

the European Framework for Science Diplomacy*. Alliance members have actively participated in the steering group responsible for guiding the framework and are prominently represented in the five working groups tasked with its development:

1. *Using science diplomacy strategically to tackle geopolitical challenges in a fragmented, multipolar world*
2. *Making European diplomacy more strategic, effective and resilient through scientific evidence and foresight*
3. *Strengthening science diplomacy in EU and Member States' delegations and embassies and fostering the EU's global science diplomacy outreach*
4. *Building capacity for European science diplomacy*
5. *Definition, principles and EU added value of European science diplomacy*

Alliance members co-chair the second, fourth, and fifth working groups, and the coordinator for the chairs of all working groups is Luk Van Langenhove, the coordinator of EL-CSID and co-chair of the UNTRAD presidency of the Alliance.

As it is an ongoing process, what will emerge from the European Framework for Science Diplomacy cannot be written with certainty. However, one thing is sure: the momentum for science diplomacy continues to build, particularly with Madrid hosting the [First EU Science Diplomacy Conference](#) on 18-19 December 2023 under the Spanish Presidency of the Council of the EU. This event, supported by the current presidency of the Alliance, FECYT, marks five years since the Madrid Declaration showcased a strong commitment to integrating science and diplomacy. It is poised to further reinforce this connection by providing a platform for evaluating the progress of the Framework and discussing future directions.

Meanwhile, projects like the training program delivered by CNRS, DLR-PT, and Sorbonne University at the French [Institut Pasteur](#), which was held in November, or the [science diplomacy seminars](#) organised by VUB on behalf of [EUTOPIA](#) show that the Alliance is involved in many facets of European science diplomacy. This article will end here, but the evolution of the Alliance will most certainly not.

References

1. <https://cordis.europa.eu/programme/id/H2020-EU.3.6./en>
2. <https://www.s4d4c.eu/category/events/>
3. <https://www.s4d4c.eu/category/publication/>
4. <https://www.s4d4c.eu/s4d4c-cases/>
5. <https://zenodo.org/communities/insscide>. Of note, in 2024, the project website will again become available (after a hacking episode) at the new address: insscide.cnrs.fr.
6. <https://www.youtube.com/watch?v=IX0RB3vkOjM> Closing Address by Director Maria Cristina Russo, European Commission, final InsSciDE Conference, June 2022.

* What was initially referred to as the EU Science Diplomacy *Agenda* is now referred to as the EU Science Diplomacy *Framework*.

European Science Diplomacy for Resilience-Building During the Green Transition

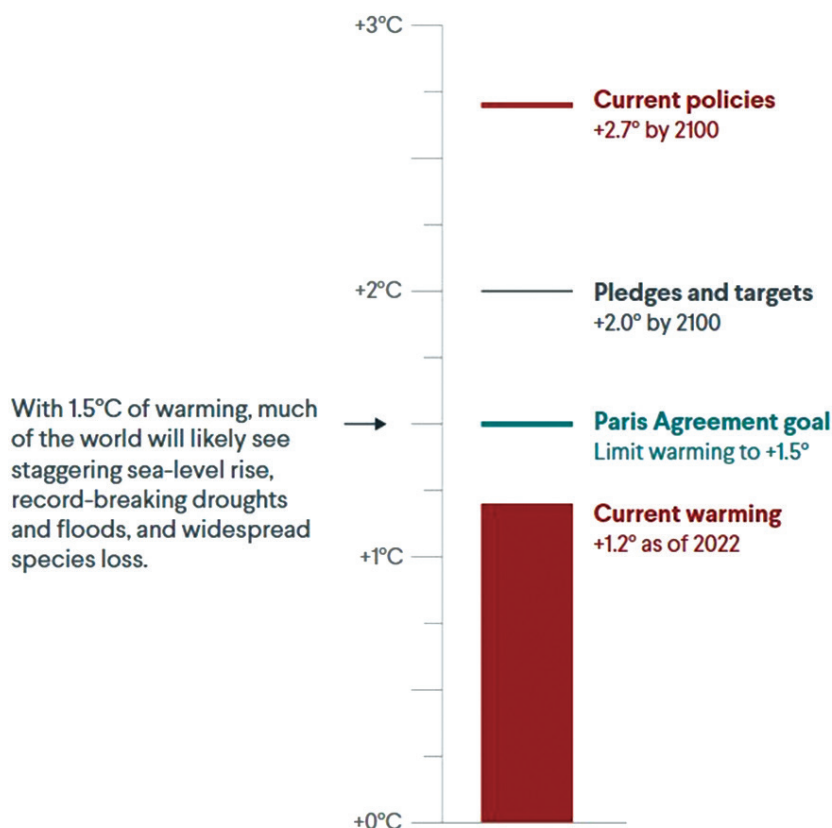
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Introduction

The geopolitical dynamics between the United States and China, as well as the multifaceted implications of Russia's aggression against Ukraine, increase the role of science diplomacy in sustaining the global transition to meet the Paris Agreement adopted in 2015 during the 21st United Nations Climate Change Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21).¹⁻⁵ This reference to the Paris Agreement is made in view of the first global stocktake of this agreement launched during the 28th Conference of the Parties hosted in Dubai in December 2023 (COP28) and its resonance in the international dimension of the ongoing greening of the European Union (EU).⁶



Global temperature rise over preindustrial average. Source: Maizland⁷

This article aims to highlight the role of EU supranationally steered strategic frameworks, such as the European Research Area, to continuously deliver tangible results and lasting achievements in evidence-informed resilience-building. The European Research Area is one of the key strategic enablers of EU science diplomacy. This united space for science and innovation helps to tackle multiple challenges linked to climate change, the socio-economic strains posed by geopolitical volatilities and considerations linked to the calls for a just transition. Drawing on the complementarities already established, the European Research Area is not the only strategic framework that converts EU science diplomacy into concrete actions and a globally coordinated endeavour. However, its role is unparalleled. Thus, this article builds on the prominent position of the European Research Area and projects funded by the EU Framework Programmes for Research and Innovation, especially in view of meeting the climate neutrality targets tied to 2050. This article mentions in very concise terms how thematic coverage of projects connected to the European Research Area in various matters of sustainability, such as Horizon 2020-funded projects on sustainable minerals extraction, proves its worth in addressing expert concerns about whether the path towards climate neutrality will be a just transition.⁸

The first part of the article builds on recent findings concerning EU science diplomacy towards the European Southern Neighbourhood*.⁹ The post-Arab Spring** setting serves as an informative milieu and episode to detect understudied aspects of EU external action.^{10,11} The second part briefly explains how ongoing work under other thematic EU frameworks than the European Research Area clarifies concerns tied to the ongoing green transition in Europe in partnership with the European Southern Neighbourhood. The concluding part explains how this science diplomacy-guided and green transition findings from the European Southern Neighbourhood can inspire the future forging and studying of the EU-India strategic partnership.

Learning from the Southern Neighbourhood Success

Considering the achievements of many projects funded by the EU Framework Programmes for Research and Innovation in the aftermath of the Arab Spring, the European approach to science diplomacy has a solid track record of offering and delivering targeted, comprehensive, and lasting support to tackle various sustainability challenges.¹² The lessons learnt about the EU's capacity to sustain gradual, pragmatic, and mutually agreeable resilience-building in the European Southern Neighbourhood on a variety of topics should be taken as a telling reference point about the indispensable role of the European Research Area in the vast toolbox of EU external action and EU diplomacy. The routine errands funded by the EU Framework Programmes for Research and Innovation seldom reach news headlines. However, it is essential to recognise the project-based achievements in sustaining evidence-informed resilience-building through regular encounters among research and policy experts, civil society, and the business sector and the co-creation of tailored solutions to the pressing challenges.

These valuable meetings often occur far away from the office spaces and buildings of EU delegations, national embassies, and the premises of regional and international organisations. Nevertheless, this lack of closeness to more formal halls, high-level meetings, and geographic separation from the listed venues does not diminish the significance of these outcome-focused meetings for understanding the entirety of post-Westphalian EU diplomatic practice and how the EU converts high-level directives into specific, cooperative tasks.

* The European Southern Neighbourhood refers to the geographic area of ten countries in North Africa and the Middle East near the EU: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Syria, and Tunisia. It is a part of the European Neighbourhood Policy, launched in 2004 following the EU's grand enlargement. The European Southern Neighbourhood is the policy framework for developing tailored and mutually beneficial relations and coordinated activities between the EU and each of the ten countries to manage interdependencies, strengthen resilience, promote prosperity, stability, and security.

** 'Arab Spring' denotes the mass protests and demonstrations that started in December 2010 and swept over North Africa and the Middle East. These pro-democracy popular uprisings had various implications on the political and regime evolution in Tunisia, Egypt, Libya, Yemen, and Syria. These domestic considerations were addressed in the country-specific consultations and joint actions of each country and the EU within the European Southern Neighbourhood and other policy frameworks and consultative forums developed in partnership with the EU.

The European Green Pivot in the Southern Neighbourhood

The green pivot is part of the twin – digital and green – transitions. This sustainability drive aims to ensure that the EU becomes climate-neutral by 2050. The green transition is linked to the evolving cooperation with the Southern Neighbourhood. The Neighbourhood has considerable clean technology potential, including untapped opportunities to develop and sustain clean energy exports to Europe. Nevertheless, this outward drive by the EU to seek new energy sources beyond its borders brings new considerations to the overall thinking revolving around the EU's open strategic autonomy. The green transition comes with new strategic dependencies and environmental concerns, for example, those linked to Morocco's cobalt mining.¹³

To briefly outline another example of increasing mutual dependencies and associated socio-economic and environmental considerations, the interest in partnering with the European Southern Neighbourhood is most visibly shown by the green hydrogen cooperation initiatives pursued by the Southern EU member states and Germany with the Northern African countries.¹⁴⁻¹⁷ The national outreach to Northern African countries (among other considerations) encouraged the young generation of energy experts to highlight the importance of developing interregional cooperation, a coherent market, flexibility in hydrogen certification, and compatibility of certification schemes.^{18,19} These are good examples of emerging green technology markets and multilateral considerations associated with the practical steps already taken with the overall European green transition and its external dimension.

EU-India Partnership Considerations

In the Indian context, resources linked to sustainable transition needs, for example, critical minerals, are associated with science diplomacy considerations. Indian researchers have identified critical minerals as an area where India should foster capacity-building ties with other democratic advanced economies, such as Australia.²⁰ There are concerns linked to the potential green grab of these precious resources as opposed to their use in a truly socially inclusive and transformative way to sustain the green transition.²¹⁻²³ In this article, green grabbing refers to the interest in possessing certain natural resources in the name of environmental and sustainability considerations.²⁴ This article adheres to understanding green grabbing as a quest for natural resources for entrepreneurial, industrial, and green consumerist purposes. In comparison, in some studies, green grabbing is applied to claims aimed at preserving and conserving certain areas of nature and wildlife.²⁵ This is only one example to illustrate the diverse meanings attributed to the term. Any claims or notions of green grab require advanced research capacity to detect such risks, including whether those are well-founded claims. Looking beyond assumptions and notions of green grab potential is essential. References to the green grab denote the importance of science diplomacy to strengthen the resilience of India in its pursuit to make the most of the green transition during the upcoming decades.

The EU has an opportunity to engage with India to strengthen its capacity to make just, inclusive, and sustainable choices during its transition towards climate neutrality. The numerous small-scale task-specific assistance measures offered to the European Southern Neighbourhood during the post-Arab Spring provide some food for thought concerning the value of the EU Framework Programmes-supported projects in raising awareness among diverse research, business, non-governmental circles, and public authorities about the methodologies, research applications, and training tools useful to make evidence-informed environmental choices and economically sound options for the way forward. Perhaps this experience in another geographic and socio-economic context may serve as an inspiration for the EU-India strategic partnership on how to structure some of its climate-neutrality-related joint activities. India is not new to the European Research Area. India-based entities have participated in projects supported by EU Framework Programmes. However, revisiting some achievements crafted in other geographic contexts might be helpful to maintain ambition for future potential collaborative actions.

To conclude, mutual resilience against the (claimed or acknowledged) risk of a green grab can be a point of joint effort and action in the vast thematic area of the EU-India strategic partnership. Given its advanced expertise in sustainability studies and environmental monitoring, the EU is in a good position to help India with certain aspects related to the scientific basis for systematic measurements and analytical

approaches to avoid the potential socio-economic drift associated with the green grab. Tailored science diplomacy support actions from the EU to India and co-creation initiatives might prove instrumental in addressing some scholarly encouragement to adopt research-driven processes and empowering India to make the most of its unique path towards climate neutrality, socially inclusive economic growth, and whole-of-society prosperity.²⁶ This project-based assistance approach should equip aspiring changemakers with the necessary advanced analytical capacity and green industry savviness. In such a time-bound and targeted manner, the EU could empower the next generation of Indian sustainability and climate-neutrality experts to translate their academic commitment into individual professional legacies throughout the subsequent decades of the global pivot to the climate-neutral world.

References

1. European Commission, Secretariat-General (2023) Strategic foresight report 2023 – Sustainability and people’s wellbeing at the heart of Europe’s open strategic autonomy. Luxembourg: Publications Office of the European Union. <https://data.europa.eu/doi/10.2792/9628>
2. Guyet R (2023) The Justice Challenges of the EU Energy Trilemma. CIFE Policy Paper No 143. Nice: Centre international de formation européenne. https://www.cife.eu/en/5/policy-papers_236-1
3. Roggeveen B (2021) Aspirations: for an EU External Action with strategic autonomy and multilateral engagement. In: Rodrigues M J, Balate F (Eds.) Our European Future. Our European Future: Charting a Progressive Course in the World (pp. 84–85). London: London Publishing Partnership.
4. Telò M (2021) Scenarios for global governance and the EU open strategic autonomy: a window of opportunity for a ‘Spinellian moment’. In: Rodrigues M J, Balate F (Eds.) Our European Future. Our European Future: Charting a Progressive Course in the World (pp. 86–93). London: London Publishing Partnership.
5. Rentetzi M (2023) Diplomacies in the plural. *DAAD Letter Science Diplomacy*, Issue 2. <https://www.letter-daad.de/en/science-diplomacy/diplomacies-in-the-plural/>
6. Editorial. The Global Stocktake at COP28. *Nature Climate Change*, 13: 1146–1147. <https://doi.org/10.1038/s41558-023-01832-z>
7. Maizland L (2023) Global Climate Agreements: Successes and Failures. Council on Foreign Relations. <https://www.cfr.org/backgrounder/paris-global-climate-change-agreements>
8. European Commission, European Health and Digital Executive Agency, Publications Office of the European Union (2023) CORDIS Results Pack on Sustainable Minerals Extraction. Publications Office of the European Union. <https://data.europa.eu/doi/10.2830/255287>
9. Southern Neighbourhood. https://neighbourhood-enlargement.ec.europa.eu/european-neighbourhood-policy/southern-neighbourhood_en
10. Robinson K, Merrow W (2020) The Arab Spring at Ten Years: What’s the Legacy of the Uprisings? Council on Foreign Relations. <https://www.cfr.org/article/arab-spring-ten-years-whats-legacy-uprisings>
11. Arab Spring: A Research & Study Guide of the Cornell University Library. https://guides.library.cornell.edu/arab_spring/home
12. Šime Z (2023) The Southern Neighborhood Context of the European Science Diplomacy. CPD Blog. USC Center on Public Diplomacy. <https://uscpublicdiplomacy.org/blog/southern-neighborhood-context-european-science-diplomacy>
13. Kotarska G, Young L (2023) Critical Minerals in the Energy Transition: Environmental and Human Security Risks. RUSI Occasional Paper. London: Royal United Services Institute. <https://www.rusi.org/explore-our-research/publications/occasional-papers/critical-minerals-energy-transition-environmental-and-human-security-risks>
14. Arezki R (2023) North Africa’s Hydrogen Mirage. *Finance & Development: A Quarterly Publication of the International Monetary Fund*, 60(3): 29–31. <https://www.imf.org/en/Publications/fandd/issues/2023/09/north-africa-hydrogen-mirage-rabah-arezki>

15. Cardinale R (2023) From natural gas to green hydrogen: Developing and repurposing transnational energy infrastructure connecting North Africa to Europe. *Energy Policy*, 181 (113623): 1–12. <https://doi.org/10.1016/j.enpol.2023.113623>
16. Schäfer S, Meuleman J (2023) Powering a Global Just Transition: Fostering Socio-Ecological Justice in the EU's Green Hydrogen Partnership with Morocco. In: EU Hydrogen Diplomacy in Africa and the Middle East: A Just Regional Energy Transition, EPICO and College of Europe, Brussels (pp. 1–13). <https://www.coleurope.eu/eu-hydrogen-diplomacy-africa-and-middle-east-publication-epico-and-energy-and-climate-chair>
17. Valenziano M (2023) An EU Strategy: Unlocking the Potential of Green Hydrogen Production in Southern and Eastern Africa. In: EU Hydrogen Diplomacy in Africa and the Middle East: A Just Regional Energy Transition EPICO and College of Europe, Brussels (pp. 33–41). <https://www.coleurope.eu/eu-hydrogen-diplomacy-africa-and-middle-east-publication-epico-and-energy-and-climate-chair>
18. Mondorf A-L (2023) EU Hydrogen Diplomacy vis-à-vis the Eastern Mediterranean. EU Hydrogen Diplomacy in Africa and the Middle East: A Just Regional Energy Transition, EPICO and College of Europe, Brussels (pp. 14–24). <https://www.coleurope.eu/eu-hydrogen-diplomacy-africa-and-middle-east-publication-epico-and-energy-and-climate-chair>
19. Valverde A (2023) Unlocking Cooperation with the Southern Neighborhood on Renewable Hydrogen. EU Hydrogen Diplomacy in Africa and the Middle East: A Just Regional Energy Transition EPICO and College of Europe, Brussels (pp. 25–32). <https://www.coleurope.eu/eu-hydrogen-diplomacy-africa-and-middle-east-publication-epico-and-energy-and-climate-chair>
20. Krishnamurthy P, Chinnasamy SS, Radhakrishna M, Yellishetty M (2023) Report on the India-Australia Joint Workshop on Critical Minerals Research for Sustainable Transition to Green Energy. *Journal of the Geological Society of India*, 99: 1173–1176. <https://doi.org/10.1007/s12594-023-2444-4>
21. Sharma V, Loginova J (2024) The Social Aspects of India's Energy Transition: Coal, Critical Minerals and Socio-Economic Dependencies. In: Mohanty M, Sarkar R (Eds.) *The Role of Coal in a Sustainable Energy Mix for India*, Taylor & Francis. (pp. 75–103). <https://doi.org/10.4324/9781003433088-7>
22. Grover S, Swami N, Suresh V (2024) Governance Principles for a Just Energy Transition. In: Mohanty M, Sarkar R (Eds.) *The Role of Coal in a Sustainable Energy Mix for India* (pp. 119–134). <https://doi.org/10.4324/9781003433088-10>
23. Joshi M, Dsouza S (2024) International Experiences on Just Energy Transition Planning and Lessons for India. In: Mohanty M, Sarkar R (Eds.) *The Role of Coal in a Sustainable Energy Mix for India* (pp. 168–185). Taylor & Francis. <https://doi.org/10.4324/9781003433088-13>
24. Franco J C, Borrás Jr S M (2019) Grey areas in green grabbing: subtle and indirect interconnections between climate change politics and land grabs and their implications for research. *Land Use Policy*, 84: 192–199. <https://doi.org/10.1016/j.landusepol.2019.03.013>
25. Kabra A (2020) Caste in Stone? Exploring Caste and Class Dimensions of Conservation Displacement in Central India. *Journal of Contemporary Asia*, 50(5): 785–805. <https://doi.org/10.1080/00472336.2019.1696877>
26. Swarnakar P, Rajshri S (2024) International Climate Financing and Just Energy Transition: Exploring the Synergies. In: Mohanty M, Sarkar R (Eds.) *The Role of Coal in a Sustainable Energy Mix for India* (pp. 343–351). Taylor & Francis. <https://doi.org/10.4324/9781003433088>

Reassessing STI Diplomacy in the Age of Techno-Politics

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Introduction

Science, Technology and Innovation (STI) Diplomacy is at a pivotal juncture. It has slowly been moving from a relatively neutral “soft-power” or “door opener” issue in diplomacy¹, to a prominent role in shaping bilateral and multilateral cooperations in an evolving geopolitical landscape. This article highlights key technological factors, drawing from Dutch diplomacy practices, which have propelled this changing role of STI diplomacy. It delves into ongoing shifts that increasingly recalibrate existing organisational practices within international relations, necessitating a repositioning of diplomats and the adoption of diverse instruments for effective STI diplomacy. The article thereby re-examines the meaning of STI diplomacy in today’s world.

A Case for STI Diplomacy

The concept of science diplomacy is well-studied and commonly defined as diplomatic activities aimed at fostering international scientific research partnerships or influencing foreign policies with scientific evidence and advice.^{2,3} Traditionally, and often in practice in diplomatic organisations like embassies, science diplomacy is understood as a way to exert soft power. In what is frequently called *science for diplomacy*, science is seen as an instrument to establish better relationships between nations. Notably, initiatives like joint science programs between the People’s Republic of China and the United States during the 1970s exemplify this approach.

A second understanding of science diplomacy is to see it as a strategy to achieve scientific goals, such as increasing a country’s knowledge reservoir by attracting talent, R&D investments and collaboration.⁴ This is known as *diplomacy for science*, in which diplomacy is understood as a promotion strategy that is poised towards ‘selling’ the science and innovation ecosystem of a nation abroad.

Finally, a third take can be coined as *science in diplomacy*, in which science instruments are used in international organisations and relations.⁴ An example is the role of climate-related research in climate diplomacy by entities like the Intergovernmental Panel on Climate Change (IPCC).

“Innovation diplomacy,” less defined than science diplomacy, often navigates between science diplomacy and trade and commerce diplomacy. It is partially aligned with the science diplomacy definitions above, as it is equally seen as a set of activities to establish better relations with other nations and extend a nation’s innovation ecosystem. Leijten (2017)⁴ and Bound (2017)² characterise innovation diplomacy as a distinctive domain, more than traditional science diplomats; it is poised towards ‘international pre-commercial partnerships’ between businesses, universities, and governments to generate national economic growth. Furthermore, Bound² states that innovation diplomacy is invested in creating framework conditions for international innovation collaborations and tech transfers through intellectual property schemes, trade conditions, innovation funding instruments, and better knowledge.

How the World Changed STI Diplomacy

At least three techno-political shifts have significantly reshaped the landscape of STI diplomacy, making it a fundamental element of the discussions on geopolitical shifts and addressing global tensions.

Firstly, a strong awareness of socio-economic dependence on technology, accentuated by disruptions in the semiconductor ecosystem during the COVID-19 pandemic, revealed our acute and heavy reliance on chips and their production hubs. These disruptions exposed vulnerabilities and risks in our economies, which led to increased geopolitical tensions. This has led to increased political investments and prioritisation of STI themes and collaborations in international relations. This shift prompted closer cooperation between diplomats managing political relations, classically from Foreign Affairs, and attaches from science and innovation networks, especially in crucial technology domains like semiconductors.

Secondly, the urgent need for science and technology solutions to global challenges, notably evident during the COVID-19 pandemic, emphasised the reliance on effective and safe vaccines. This intensified focus on STI for global challenges has been ongoing, evidenced by concerted efforts within ministries and research funders to make research spending more strategic and aligned with societal goals. This has led to multilateral research instruments such as [Horizon Europe](#), Eureka's [Globalstars](#), or, more recently, [IPCEI](#) funding to prioritise societal goals in research funding. In the Netherlands, for instance, within the Ministry of Economic Affairs, a shift has been made to mission-oriented innovation, in which tackling societal goals or missions has become the starting point for much government-funded research and innovation. The newest funding instruments, such as the Knowledge and Innovation Covenant ([KIC](#)), bring businesses into the classical academic programs to work together on these missions from a triple or quadruple helix model. The National Growth Fund, with a budget of 20 billion euros, is perhaps the largest innovation funding program. It strives to solve national and international societal goals and future-proof the Dutch economy.

A third factor changing the face of STI diplomacy is a rebalancing of the global economic playing field. With China's rise to become the second-largest economy, a tense stand-off and weaponisation of economic instruments and a so-called 'tech-war' between power blocks such as China, Russia and the US, the discourse on economic security has taken hold of the field on STI. In the classical definitions, science and innovation are seen as tools for soft diplomacy to attract other nations and investors to one's STI ecosystem. These definitions all rely on understanding STI diplomacy as a promotional set of practices. Economic security practices, including the protection of knowledge, science and scientists, intellectual property, and technology, have become integral to diplomatic strategies. This change is reflected in the EU Commission's recommendation paper*, which emphasises the need to 'Promote, Protect, and Partner' to strategically promote the EU's competitiveness by bolstering its single market, innovation, technological and industrial capacities. It is necessary to protect the EU's technological and knowledge security and strategically partner with reliable allies to strengthen economic security.

Consequently, STI diplomats are increasingly engaged in forging geo-economically inclined strategic tech partnerships between individual states and regional blocks. Notably, there has been a proliferation of such partnerships in recent years. For instance, the emergence of the EU-US Trade and Technology Council (TTC, 2021), the EU-India TTC (2022), the India-US Initiative for Critical and Emerging Technologies (iCET, 2022), the EU-Singapore Digital Partnership (2023), and the Japan-Netherlands MOC on semiconductors (2023) highlights this trend.

Organisational Implications

These shifts underscore the significant incorporation of geo-economics within STI diplomacy. Economic instruments are increasingly used in power politics, signifying that diplomacy is changing in many ways. The classical divisions governments used to organise themselves are becoming less effective and require

* [Commission Recommendation of 03 October 2023 on critical technology areas for the EU's economic security for further risk assessment with Member States.](#)

restructuring. Many countries have separate departments for Foreign Affairs, for Science, for Economic Affairs, and for Innovation or (Information) Technology, which too often work in silos. At embassies, we see this translated into rigid boundaries and a division of tasks of units that focus solely on politics, trade, STI promotion, or Foreign Direct Investment attraction. As STI intertwines with geonomics and geopolitics become more technical, a recalibration of diplomacy is necessary, and organisational boundaries need to be reassessed. Political departments will increasingly rely on technical knowledge, networks, and know-how as technology is becoming central to political negotiations. Simultaneously, STI diplomats need to go beyond technical details or promotional narratives and embrace a more geopolitical view of their field. This will require a lot of organisational changes and investments. As the 'promote' element has always been at the core of STI diplomacy, it will be demanding for STI diplomats to learn new skills, narratives, and *modus operandi*. Particularly, the focus for STI diplomats will be on increasing the 'protect' measures and employing various existing and new tools for this purpose. However, the new status quo necessitates these readjustments, particularly for diplomats in countries that aspire to wield substantial geoeconomic power.

Conclusions

This article highlights that science, technology, and innovation diplomacy are no longer separate entities but integrated elements within diplomats' operational practices, collectively termed STI diplomacy. Beyond this integration, it advocates for a broadened understanding of these operational practices. Classical definitions position STI diplomacy as a way to promote and extend a nation's STI ecosystem abroad and forge better relations for scientific, technical and economic growth. Whereas this view sheds light on a core set of objectives for STI diplomacy, on-ground practices reveal a shift. It observes that STI diplomats are moving beyond promotional activities and are increasingly engaging in geopolitics and geoeconomics, shaping and being shaped by these domains.

Three contextual factors drive this urgency: 1) increased technological dependence, 2) global harnessing of science and innovation power to address urgent societal goals, and 3) the rebalancing of global economic power, elevating economic security in international relations. In practice, this has transformed the daily roles of STI diplomats. Their objectives now encompass not only promoting their STI ecosystems and forging new relations, but also understanding the politics of technology, geoeconomic relations, economic security, and strategic dependencies. This knowledge and understanding will lead to work on, for instance, data protection, knowledge protection, and IP protection. Additionally, bilateral and regional tech partnerships have become more strategic and geopolitical, emphasising the diplomatic significance of science and technology collaborations.

These practices necessitate breaking down classical walls and silos between departments in international governmental organisations to facilitate sharing of knowledge, expertise and capacities. Theoretically, classical definitions of STI require a revamp and an extension to include economic security and geoeconomics, aligning with current diplomatic practices.

References

1. Bekkers D, Hansen T, Klemettinen M, Lundin N (2022) Science and Innovation Diplomacy from a Practitioner's Perspective – A Case-study of "Nordic+" Countries in China. *Innovation and Development Policy*, 4: 1–24.
2. Bound K (2017) Innovating together? The age of innovation diplomacy in the Global Innovation Index 2016, World Intellectual Property Organisation (WIPO).
3. Melchor L (2020) What is a science diplomat? *The Hague Journal of Diplomacy*, 15(3): 409–423.
4. The Royal Society (2010) New Frontiers in Science Diplomacy. RS Policy document 01/10. January 2010 - RS1619. London: The Royal Society.
5. Leijten J (2017) Exploring the future of innovation diplomacy. *European Journal of Futures Research*, 5: 20.

Strengthening Science Diplomacy for Reducing Biodiversity Loss and Restoring Degraded Ecosystems

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"Addressing the challenge of halting ongoing losses of species and genetic diversity and the damage to our ecosystems will determine the well-being of humanity for generations to come. Protecting nature's invaluable contributions to people requires that we harmonise our policies and actions at every level. The global biodiversity framework, based on the best available science and evidence, is fundamental to meeting these needs."

-Elizabeth Maruma Mrema

Deputy Executive Director of the United Nations Environment Programme

Introduction

Anthropocene is crippling with multiple environmental concerns like pollution, land degradation, and escalating disaster risks, with climate change exacerbating these issues. One huge risk in all this chaos is that we are crossing some severe lines that keep our planet running smoothly. One of these lines is biodiversity – the incredible variety of life around us. When we mess with it – by wiping out habitats or making species vanish – it is like pulling out pieces from a complicated puzzle that keeps everything in balance. Of late, there is a clear growing global consensus and acknowledgement of the fact that biodiversity is a cross-cutting concern and has the potential to solve many of these complex challenges of the Anthropocene that are interconnected.

The Convention on Biodiversity (CBD) in 1992 marked a pivotal moment, gathering global support and involving many countries, including India, who became signatories to it. India was one of the few countries that became early signatories and also ratified the convention that led to the legalisation and development of the National Biodiversity Act in 2002.

The conclusion of the Aichi targets in 2020 initiated discussions for more rigorous post-2020 goals; however, the pandemic created major hurdles, delaying these discussions. Finally, in December 2022, the Kunming-Montreal Global Biodiversity Framework (GBF) was agreed upon after more than ten days of negotiations. India has numerous policies and guidelines to ensure the preservation of biodiversity in various natural ecosystems – on land, in water, and in marine environments. These regulations aim not only to control and manage the loss of biodiversity but also to restore degraded ecosystems by incorporating native biodiversity elements.

Despite setbacks due to the COVID-19 pandemic, online meetings and novel approaches bolstered diplomatic relations among scientists and experts worldwide, emphasising the interdependence of pandemics and biodiversity loss. One health concept emerged during the pandemic, stressing the need to reduce land

degradation, loss of ecosystems and biodiversity to prevent zoonotic outbreaks in future, highlighting the necessity for interdisciplinary cooperation among ecologists, veterinarians and medical professionals.

IPBES Efforts in Protecting Biodiversity

Since its inception in 2012, the Intergovernmental Panel on Biodiversity and Ecosystems (IPBES) has mirrored the Intergovernmental Panel on Climate Change (IPCC), driving the attention of nations, governments and policy planners toward conserving biodiversity and ecosystems. This effort has emphasised that biodiversity is not just a single nation's responsibility but a crucial global interest requiring transboundary commitment and collaboration through science diplomacy by bringing scientists, policymakers and diplomats together for a common goal.

IPBES has released reports highlighting the alarming risk of biodiversity loss. IPBES's first assessment report on Pollinators was released in 2015. Later, Regional Assessment reports for Asia-Pacific, Africa, America and Europe were released in 2018, followed by Land Degradation and Restoration in 2018 and the Global Assessment report in 2019. IPBES also brought in global experts to review and prepare the report on global thematic assessment for Sustainable use of wild species and Values of Biodiversity published in 2022. This highlighted the crucial relevance of involving indigenous and local communities and supporting interactive governance approaches to address local livelihood and socio-economic concerns to ensure sustainable use. These reports served as a wake-up call, urging policymakers worldwide to base decisions on more than just market values, thereby addressing the ongoing biodiversity crisis.

IPBES reports are not merely academic; they convey key policy messages to policymakers in over 140 member states, ensuring that decisions are grounded in the evidence presented by global biodiversity experts. This global initiative has motivated serious efforts towards conserving biodiversity, employing novel methodological approaches, such as modelling and integrating indigenous knowledge. Upcoming IPBES reports will delve into crucial global biodiversity issues like invasive species, water, food, health nexus, transformative changes and the intersection of business and biodiversity.

The 2015 IPBES assessment on Pollinators spurred attention to fast-depleting pollinator diversity, leading to the formulation of policies in several countries to protect pollinators. USA was the first country to launch a threatened list of bumble bees after this assessment. There were three policies in the USA, four in the UK and five in France related to raising pesticide regulatory standards, promoting integrated pest management (IPM), incentives to help farmers benefit from ecosystem services acknowledging pollination as an agricultural input, promoting diversified farming systems, conserving and restoring pollinator habitat in agricultural and urban landscapes, long-term monitoring, participatory research on improving productivity from organic, diversified, and ecologically intensified agriculture. This has been particularly relevant for developing countries like India, where regional transboundary cooperation can help address the loss of pollinator habitats and their diversity. Furthermore, the IPBES Global assessment influenced the 2022 Global Biodiversity Framework (GBF), emphasising inclusivity and transformative change.

Global Biodiversity Framework (2022-2030)

The GBF lays out a plan to halt & reverse biodiversity loss, aiming to restore nature by 2030. One key goal is the conservation of 30% of land, inland waters, and oceans by 2030, also called 30x30. India is already committed to it as a member of the High Ambition Coalition of 113 countries. India also pushed for Digital Sequence Information (DSI) under CBD's access and benefit-sharing mechanism.

Among 23 GBF targets, 1-9 focus on reducing biodiversity loss, 10-13 focus on meeting people's needs through sustainable use and benefit sharing, whereas targets 14-23 focus on developing tools for implantation and monitoring. Achieving these targets demands strictness and substantial funding from governments and private sectors, with a commitment to mobilising \$200 billion yearly by 2030. Bringing scientists together for biodiversity conservation will require robust diplomatic efforts, especially in transboundary regions. Collaboration between government departments, private sectors and stakeholders is vital for success. This calls for cooperation among key national ministries and state-level authorities and a strict monitoring mechanism to meet deadlines.

Scientific diplomacy must drive decision-making with data, emphasising the interconnectedness of climate and biodiversity crises. It is crucial to break down silos between these challenges, urging collaboration for a sustainable future in the Anthropocene.

National Biodiversity Strategy and Action Plan (NBSAPs)

India has consistently produced and submitted National Biodiversity Strategy and Action Plans (NBSAPs) to CBD, aligning with Aichi targets. It is now gearing up for the GBF by finalising its NBSAPs by 2023. The key challenge for India is to launch and oversee the framework's implementation and to link the GBF with the NBSAPs, which involves targets like lowering environmentally "harmful" agriculture practices, lowering pesticide risks, and combating invasive species.

To meet these targets, India needs increased financial support by 2030. The GBF's Goal A includes Red Listing of Ecosystems* as a headline indicator that needs to be integrated into India's forthcoming NBSAPs. So far, India has not conducted any ecosystem health assessments despite declining biodiversity and ecosystem structure affecting their functions. It will require North-South and South-South cooperation and transboundary efforts with multi-stakeholder and expert involvement in assessing the ecosystem health of high conservation value ecosystems, including the Himalayas, Western Ghats, and Andamans and Nicobar Islands.

Understanding ecosystem structures, functions, and socio-economic impact is crucial for prioritising nature-based solutions. India's NBSAPs involved diverse stakeholders (public, private, civil society and others) and covered details about biodiversity/ecosystem contribution to the national economy (GDP, income, employment, etc.), potential threats to sectors like agriculture, fisheries, tourism, extraction industry, etc. There was information on sustainable management plans and how biodiversity conservation can improve essential sectors.

India's past NBSAPs were data-driven, showcasing policies like Ujjwala Yojna and LPG subsidy that eased pressure on natural forests for fuel, benefiting marginalised local communities. Among 145 countries that submitted NBSAPs, India has progressively improved biodiversity through these plans and policies.

G-20 Presidency of India

India's G-20 Presidency underscored the importance of involving scientists, experts and policymakers in addressing environmental issues like forest fires and private sector involvement in mining areas for biodiversity and ecosystem conservation. A meeting between the Environment and Climate Sustainability Working Group members and the Environment and Climate Ministers led to the unanimous approval of an Outcome document, the Chennai High-Level Principles for a Sustainable and Resilient Blue/Ocean-based Economy, in July 2023. The report highlighted noteworthy achievements & critical takeaways focused on the Environment and Climate track's major thrusts, including Land and Biodiversity, Blue Economy, Water Resource Management, and Circular Economy, bolstering biodiversity diplomacy efforts among G-20 nations. However, achieving proposed targets will require substantial financial backing and scientific interventions within specified timelines.

Success Story 1: Kailash Sacred Landscape Conservation and Development Initiative

The collaboration among India, China, and Nepal in the Kailash Sacred Landscape showcases successful biodiversity conservation diplomacy. The Kailash Sacred Landscape Conservation and Development Initiative (KSLCDI), launched in 2013 under the guidance of the International Centre for Integrated Mountain Development (ICIMOD), Nepal, has demonstrated effective transboundary cooperation. This initiative fosters sustainable development while conserving biodiversity, ecosystems, and cultural heritage. It focuses on innovative livelihoods, ecosystem management, conservation and monitoring, regional cooperation, and policy enhancements. This joint effort has addressed various issues, including academic collaboration, reducing

* <https://iucnrl.org/>

illegal harvesting of species like *Cordyceps sinensis*, restoring spring sheds, promoting local culture and ecotourism, and strengthening access and benefit-sharing mechanisms.

Success Story 2: Restoring Trees Outside Forests

India was the first country to develop an agroforestry policy in 2014 and recognised the potential of tree outside forest (ToF) landscapes for biodiversity and climate adaptation managed by local communities. This initiative inspired countries like Nepal, Bhutan and Bangladesh to develop agroforestry policies through the South Asian Regional Cooperation on Agroforestry (SARCOPA). This further promoted neighbouring countries to join cooperation provided by the SAARC Agriculture Centre (SAC), Center of International Forestry Research - the World Agroforestry Centre (CIFOR-ICRAF), and all national governments (India, Nepal, Bangladesh, Sri Lanka, and Bhutan) under SARCOPA as a historic initiative of SAARC countries that are working on incorporating the advantages of agroforestry systems with a special emphasis on nation-specific actions to combat climate change. Trees Outside Forests in India (TOFI) project, initiated in 2022, a collaborative five-year programme of the Ministry of Environment, Forest and Climate Change (MoEF&CC) of the Government of India & the United States Agency for International Development (USAID), aims to expand tree cover outside forests for the betterment of people and biodiversity, involving the support of eight consortium partners partnered under the leadership of CIFOR-ICRAF.

Conclusion

South Asia has been considered one of the sensitive regions because of its threatened biodiversity, depleting ecosystem services and increasing climate risks. Hence, strengthening science diplomacy on crucial biodiversity issues in the Global South and the Global North can help support the efforts to address the most extensive environmental risks by improving cooperation. In conclusion, this article underlines the necessity of concerted efforts, regional collaborations, and tailored approaches to safeguard biodiversity, promote sustainable development, and combat climate change.

News //////////////////////////////////////

Gesda to open quantum institute in Geneva by March 2024

The Gesda Foundation announced on 13 October 2023 at its annual summit that its flagship Open Quantum Institute (OQI) will open next March in Geneva in partnership with the Swiss Federal Department of Foreign Affairs, the European Organisation for Nuclear Research (CERN) and the Swiss bank UBS. A new, three-year CERN-based programme will make quantum computing resources and technical expertise available to projects designed to support the UN's Sustainable Development Goals (SDGs). The overarching goal of the OQI is to find ways to enable quantum computing to have the widest possible societal impact by promoting and facilitating access to quantum computing resources and technical expertise. Through the OQI, cutting-edge nascent technologies will also become available to people from underserved regions, thus contributing to reducing a possible new digital divide.

Announcements //////////////////////////////////////

AAAS-TWAS Course on Science Diplomacy

Submission deadline: 5 February 2024

Further information at:

<https://twas.org/opportunity/aaas-twas-course-science-diplomacy>

TWAS-DBT Postgraduate Fellowship Programme

Submission deadline: 19 March 2024

Further information at:

<https://twas.org/opportunity/twas-dbt-postgraduate-fellowship-programme>

TWAS-DBT Postdoctoral Fellowship Programme

Submission deadline: 19 March 2024

Further information at:

<https://twas.org/opportunity/twas-dbt-postdoctoral-fellowship-programme>

Call for Papers: Eu-SPRI Annual Conference 2024

Submission deadline: 17 May 2024

Further information at:

<https://www.utwente.nl/en/euspri2024/call-for-abstracts-and-papers/>

MoUs Signed

UAE-India to Cooperate in Sustainable Industrial Development

The UAE and India agreed to cooperate in sustainable industrial development following a MoU signed on 5 October 2023. The MoU focuses on seven key areas, including supply chain resilience, renewable energy and energy efficiency, health and life sciences, space systems, AI, Industry 4.0 and advanced technologies, as well as standardisation and metrology. In the energy space, the UAE and India will collaborate in advancing energy storage technologies, Smart Grid

and IoT deployment, and R&D in renewable energy and energy efficiency. Similarly, in health and life sciences, the countries will collaborate in the development of pharmaceuticals, the use of biotechnology, and R&D. Under the MoU, cooperation includes industrial and academic collaborations as well as collaborative research and development projects. The countries will also share best practices relating to science and technology policies.

India and Saudi Arabia sign MoU in Electrical Interconnections, Green / Clean Hydrogen and Supply Chains

India and Saudi Arabia signed an MoU in Riyadh on 8 October 2023 in the fields of Electrical Interconnections, Green/Clean Hydrogen and Supply Chains. This MoU aims to establish a general framework for cooperation between the two countries in the area of electrical interconnection; exchange of electricity during peak times and emergencies; co-development of projects; co-production of green/

clean hydrogen and renewable energy; and also establishing secure, reliable and resilient supply chains of materials used in green/clean hydrogen and the renewable energy sector. It was also decided that B2B Business Summits and regular B2B interactions between the two countries will be conducted to establish complete supply and value chains in the energy sector cooperation mentioned above.

WHO and Ministry of Ayush signed the Traditional and Complementary Medicine 'Project Collaboration Agreement'

The Ministry of Ayush and the World Health Organization (WHO) signed the Traditional and Complementary Medicine 'Project Collaboration Agreement' on 17 November 2023 in Geneva. The main objective of this agreement is to standardize Traditional and Complementary Medical Systems, integrate their quality and safety aspects into the National Health System, and disseminate them at the international level. Through this cooperation agreement, efforts will be made to connect Traditional and Complementary Medical Systems with the

mainstream of the National Health System. To fulfil this objective, Traditional Medicine Global Strategy 2025-34 will be prepared by WHO with the support of the Ministry of Ayush. Other major objectives of the agreement include efforts to strengthen the system of training and practice in the field of Complementary Medicine System 'Siddha', formulation of guidelines for the listing of Traditional and Complementary Medicines, safety and related efforts, etc. An International Herbal Pharmacopoeia of herbs found in South-East Asia will be developed by the Ministry

New Publications

- Awan AT, Zoubi SA, Ahmed MU, Bettini HF, Arruda MA et al. (2023) **Scholars-at-Risk: challenges facing humanity, can science diplomacy help?** <https://doi.org/10.31235/osf.io/6b3aw>
- CSIRO (2023) **Good neighbours: Three ways our science is supporting Southeast Asia.** <https://www.csiro.au/en/news/all/articles/2023/september/science-diplomacy>
- Czirják E (2023) **Explainer: why should we care about science diplomacy?** <https://www.swissinfo.ch/eng/explainer--why-should-we-care-about-science-diplomacy-/48880508>
- Fieseler CM, Fawzi NAM, Helmuth B, Leitão A, Al Ainsy M et al. (2023) **Expanding Ocean protection and peace: a window for science diplomacy in the Gulf.** *Royal Society Open Science*, 10(9): 230392. <https://doi.org/10.1098/rsos.230392>
- Fuentes M, Cárdenas JP, Olivares G, Rasmussen E, Salazar S, Urbina C, Vidal G, Lawler D (2023) **Global digital analysis for science diplomacy on climate change and sustainable development.** *Sustainability*, 15(22): 15747. <https://doi.org/10.3390/su152215747>
- Hammond J (2023) **Science and Sanctions: Lessons Learned from Twelve Years of Collaboration with the DPRK (North Korea).** *Science & Diplomacy*. <https://doi.org/10.1126/scidip.adl2187>
- Hof B, Sachse C (2023) **Science and Diplomacy: The Max Planck Society in the Field of International Politics (1945-2000).** *British Journal for the History of Science*. <https://doi.org/10.1017/S0007087423000845>
- Keskinen M, Häkkinen E, Haapala J, Sharipova B (2023) **Trust in Transboundary Waters: Identifying Trust-Building in Water Diplomacy Literature.** *Water Alternatives-An Interdisciplinary Journal on Water Politics and Development*, 16(3): 949–977.
- Lin WK, Chan, SJ (2023) **Students as a Nexus of Cultural Diplomacy: Estimating the Outcomes of the International Higher Education Scholarship Program in Taiwan.** *Journal of Studies in International Education*. <https://doi.org/10.1177/10283153231178133>
- Lumkowsky M, Carlton EK, Victor DG, Dannenberg A (2023) **Determining the willingness to link climate and trade policy.** *Climatic Change*, 176(10): 133. <http://doi.org/10.1007/s10584-023-03609-x>
- Luszczuk M, Rakowski P, Szkarlat M (2023) **Poland's polar policy in the face of the Arctic Council 2022 cooperation crisis.** *Polish Polar Research*, 44(4): 339–364.
- Mao Z, Zhang Z (2024) **Taking the “UN Decade of Ocean Science for Sustainable Development” as an opportunity to help build a “Community with a Shared Future between China and Pacific Island Countries”.** *Marine Policy*, 159: 105943. <https://doi.org/10.1016/j.marpol.2023.105943>
- Olšáková D (2023) **A Review of Science Diplomacy: Theoretical Evolution to a Post-Naïve Approach and Its Relevance for the Czech Republic.** *Czech Journal of International Relations*. <https://doi.org/10.32422/cjir.430>

Porsdam H, Mann SP (2023) **Anticipation and diplomacy (with) in science: activating the right to science for science diplomacy.** *International Journal of Human Rights*.
<https://doi.org/10.1080/13642987.2023.2269102>

Rüland AL, Rüffin N, Cramer K, Ngabonziza P, Saxena M, Skupien S (2023) **Blog Post- Science diplomacy from the Global South: New insights, venues for investigation, and lessons learned.**
<https://www.universiteitleiden.nl/hjd/news/2023/blog-post---science-diplomacy-from-the-global-south-new-insights-venues-for-investigation-and-lessons-learned>

Šime Z (2023) **The Southern Neighborhood Context of the European Science Diplomacy.** CPD Blog. USC Center on Public Diplomacy. <https://uscpublicdiplomacy.org/blog/southern-neighborhood-context-european-science-diplomacy>

Call for Proposals //////////////////////////////////////

R&D Funding Opportunity for SPAIN-INDIA Projects and Collaborations

Last Date: February 23, 2024

Further information at: https://www.cdti.es/index.asp?MP=9&MS=31&MN=2&TR=A&IDR=7&id=1643&r=1366*768

India-Singapore Collaborative Industrial Research & Development Programme

Last Date: February 29, 2024

Further information at: <https://www.enterprisesg.gov.sg/grow-your-business/innovate-with-us/market-access-and-networks/global-innovation-alliance/cip/india-singapore-collaborative-industrial-research-development-programme>

EU-India/MoES Research & Innovation Cooperation Horizon Europe 2023

Last Date: March 5, 2024

Further information at: <https://www.csir.res.in/news-calls-and-events/eu-indiamoes-research-innovation-cooperation-horizon-europe-2023-funding>

Forthcoming Events //////////////////////////////////////

The Science-Diplomacy Nexus in Deep Sea Mining

Date: January 18, 2024

Further information at:

<https://www.scipolnetwork.org/event-details?recordId=rec0SEzMZyTJdm019>

2024 Ocean Decade Conference

Date: April 10-12, 2024

Further information at:

<https://oceandecade-conference.com/home.php>

National Science Policy Symposium

Date: April 12-14, 2024

Further information at:

<https://www.scipolsymposium.org/>

INGSA2024: The Transformation Imperative

Date: May 1-2, 2024

Further information at:

<https://www.ingsa2024.com/>