

# Explanatory Note: Towards a European Framework for Science Diplomacy

## What is science diplomacy?

For the purpose of developing a European framework for science diplomacy it is suggested to define science diplomacy as the **direct or indirect use of science, scientific knowledge and scientific cooperation to advance diplomatic goals**. The term is used here in the broad sense of **science, technology and innovation diplomacy**, i.e., including natural sciences, social sciences and humanities, engineering and medicine. Science diplomacy is deployed through various strands<sup>1</sup>, namely:

- **Diplomacy for Science** – the use of diplomatic action to facilitate scientific collaboration (e.g., by associating countries to the Horizon Europe programme);
- **Science for Diplomacy** – the use of science as a soft power to build trust and maintain dialogue, also under difficult conditions (e.g., by countries with strained relations cooperating in international research infrastructures);
- **Science in Diplomacy** – the direct support of diplomatic processes through science (e.g., by providing scientific advice through relevant bodies like the IPCC).

In view of the ongoing reconfiguration of globalisation and the Russian war of aggression against Ukraine in particular, there have been discussions whether **Diplomacy in Science** should be added as a fourth dimension, i.e., science becoming a diplomatic actor in its own right, e.g., by advocating for democratic values and principles and applying restrictive measures against those undermining these.

## Why does science diplomacy matter?

Science diplomacy has gained significant relevance in recent years. This can be explained, inter alia, by:

- the increasing **complexity and interconnectedness of the global challenges** such as climate change, biodiversity loss, and global pandemics, which require a systemic understanding;
- the increasing **politisation, militarisation and commercialisation of the global commons** (oceans and seafloor, polar zones, Low Earth Orbit and outer space, internet);
- the intensifying threats by **foreign interference and the manipulation of the information environment**;
- the **increasing impact of emerging technologies** like artificial intelligence, quantum computing, gene editing, and mRNA vaccines on the global balance of power;
- the increasing **importance of knowledge and its valorisation** in the competition of world powers, including the role of standards and intellectual property, with direct impacts on the EU's strategic autonomy and technological sovereignty.

Despite these developments, science diplomacy efforts in Europe remain largely uncoordinated and are characterised by a lack of synergies and the absence of an EU-wide approach. This creates vulnerabilities against the background of a rapidly changing geopolitical and scientific-technological environment, with global competitors using science diplomacy in a much more strategic manner.

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<sup>1</sup> [https://www.aaas.org/sites/default/files/New\\_Frontiers.pdf](https://www.aaas.org/sites/default/files/New_Frontiers.pdf)

## How has science diplomacy in Europe evolved in recent years?

A growing number of Member States have adopted national science diplomacy strategies or agendas<sup>2</sup> or are currently exploring their development and have appointed in recent years science and technology advisors or science diplomacy coordinators in their Ministries of Foreign Affairs<sup>3</sup>. An increasing number of recent EU policy documents have made explicit or implicit reference to science diplomacy and the need for foreign policy to be based on the best possible evidence<sup>4</sup>. The European Commission funded three dedicated research projects under the Horizon 2020 programme<sup>5</sup>, which enhanced our understanding of European science diplomacy and led to the development of the [EU Science Diplomacy Alliance](#) as most important network in the field. Further input was delivered by the former [Strategic Forum for International S&T Cooperation \(SFIC\)](#), which suggested the development of an EU Science Diplomacy Platform and Roadmap.

Science diplomacy forms an integral part of the [Global Approach to Research and Innovation](#), the EU's strategy for international cooperation in research and innovation, which prominently advocates that a stronger focus on science and technology in the EU's foreign and security policies in terms of science diplomacy would help the EU to project soft power and pursue our economic interests and fundamental values more effectively. In its [Conclusions on the Global Approach](#) the Council called on the Commission and the European External Action Service to develop a European Science Diplomacy Agenda. At the informal Competitiveness Council meeting in July 2023, EU Research Ministers underlined the importance of European science diplomacy action.

## Which are the main pillars of a European framework for science diplomacy?

A Steering Team consisting of the main science diplomacy stakeholder groups has identified four main pillars of a future European framework for science diplomacy<sup>6</sup>, which are also reflected in the recent [Global Approach Implementation Report](#):

- 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 Delegations and Embassies and fostering the EU's global science diplomacy outreach**
- 4. Building capacity for European science diplomacy**

It is suggested establishing informal working groups composed of individuals from both, the science and diplomacy communities, to assist in the development of recommendations that may constitute elements of a future European framework for science diplomacy. Each of the above pillars will be addressed by one working group, while a fifth group will tackle overarching issues regarding the definition, principles and EU added value of European science diplomacy action and related questions such as subsidiarity, multilingualism and scientific autonomy. Working groups are asked to deliver their results by mid-2024 with the aim of informing potential future policy action.

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<sup>2</sup> e.g., France 2013, Spain 2015, Austria 2019, Germany 2020, Denmark 2021

<sup>3</sup> e.g., Chief Science Officer in the Dutch MFA, Special Envoy for Science Diplomacy in the Czech MFA, Ambassador at Large for Research & Innovation in the Slovak MFA, Tech Ambassador in the Danish MFA

<sup>4</sup> Examples include the Joint Communication on strengthening the EU's contribution to rules-based multilateralism (JOIN(2021) 3 final); the Joint Communication on a stronger EU engagement for a peaceful, sustainable and prosperous Arctic (JOIN(2021) 27 final); Communication on a European strategy for universities (COM(2022) 16 final); Council Conclusions on Research Infrastructures (15429/22); Council conclusions on Climate and Energy Diplomacy (5263/21); Council Conclusions on EU Digital Diplomacy (11406/22 and 10526/23); Council's Strategic Compass for Security and Defence (7371/22); see also ERAC-SFIC input paper 1352/20.

<sup>5</sup> Using Science for/in Diplomacy for Addressing Global Challenges (S4D4C), Inventing a Shared Science Diplomacy for Europe (InsSciDE), European Leadership in Cultural, Science and Innovation Diplomacy (EL-CSID)

<sup>6</sup> It should be noted that the "diplomacy for science" dimension is largely covered by the Global Approach to Research and Innovation already and thus should not be repeated.

## **Pillars and examples of actions of a European framework for science diplomacy**

### **1. Using science diplomacy strategically to tackle geopolitical challenges in a fragmented, multipolar world**

Related actions could include (non-exhaustive):

- Strengthening rules-based multilateralism through science diplomacy
- Developing science-based solutions for managing the global commons
- Using science diplomacy strategically in order to support confidence-building wherever possible and exerting pressure where needed, especially in conflict situations
- Harnessing science diplomacy for building positive narratives and fighting foreign information manipulation and interference, including disinformation
- Supporting economic security by ensuring the integrity of international research collaboration and raising awareness and resilience in research and higher education
- Supporting the EU's open strategic autonomy and technological sovereignty through science diplomacy and leveraging the EU's influence as a global regulatory power
- Protecting and projecting the EU's interests and values through science diplomacy action (e.g., by associating countries to the Horizon Europe programme)

### **2. Making European diplomacy more strategic, effective and resilient through scientific evidence and foresight**

Related actions could include (non-exhaustive):

- Strengthening foresight and science advice in foreign policy and international organisations (e.g., by strengthening science advisory ecosystems and processes)
- Mobilising science for tackling the systemic nature of global and regional risks, crises and emergencies and supporting diplomacy to better prepare and respond
- Boosting the European Green Deal / climate action / SDGs through science diplomacy
- Enabling diplomacy to deal with opportunities and threats of new disruptive technologies and their impact on foreign and security policy
- Enhancing the structural linkages between R&I and foreign policy instruments (e.g., Horizon Europe, Neighbourhood, Development and International Cooperation Instrument, Global Gateway)

### **3. Strengthening science diplomacy in Delegations and Embassies and fostering the EU's global science diplomacy outreach**

Related actions could include (non-exhaustive):

- Leveraging the role of science diplomacy in EU and Member State Delegations and Embassies (including the role of science attachés/R&I counsellors)
- Fostering the EU's global science diplomacy outreach beyond capitals and official representations (e.g., through alumni of EU programmes and diaspora scientists)
- Supporting science diplomacy engagement with like-minded partners

### **4. Building capacity for European science diplomacy**

Related actions could include (non-exhaustive):

- Advancing the frontiers and practices of science diplomacy through research
- Building capacity in science and diplomacy to engage with each other through education and training
- Strengthening the interface between science and diplomacy through networking, knowledge sharing and the development of career paths