Shaping science diplomacy: Perspectives of universities of science & technology

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CESAER – the strong and united voice of universities of science & technology in Europe – welcomes renewed attention to science diplomacy efforts at the European level. Various actors have diligently worked towards this goal since the 2010 report by AAAS/Royal Society. Recently, the European Commission initiated a process to draft a European framework for science diplomacy. This framework aims to coordinate these diverse efforts and propose a cohesive EU-wide approach that could yield significant benefits for science, society, and Europe.

As the definition of science diplomacy continues to evolve, there is a broad consensus that science diplomacy involves mobilising state-of-the-art scientific knowledge to inform policy-making, including foreign policy. Additionally, it involves fostering transnational scientific collaboration to collectively tackle global challenges.

Specifically, science and technology have a transformative role in such endeavours. The political priorities of the EU increasingly relate to the application of scientific knowledge in the form of technology, as demonstrated by ongoing discussions around dual-use technologies and by calls for ‘technological sovereignty’ and ‘strategic autonomy’. This reaffirms the transformative power and societal significance of universities developing and advancing key technologies, such as artificial intelligence, quantum technologies, nanotechnologies and life-science technologies. Universities of science & technology are taking action to help steer academic cooperation in times of global crises, and to safeguard their autonomy in the face of geopolitical challenges while addressing research security considerations with key recommendations elaborated in our recent white paper.

In this position, we welcome ongoing efforts towards a European framework for science diplomacy and provide recommendations in three areas to advance efforts and follow-up actions: (i) integrate knowledge and expertise for evidence-based policy, (ii) safeguard science as an independent bridge-builder, and (iii) boost international scientific cooperation.

1) Science in diplomacy: integrate scientific and technological knowledge and expertise for evidence-based policy

Particularly in the dimension of science in diplomacy, which is about informing all aspects of foreign policy with scientific advice, it is crucial to ensure that foreign affairs decisions and activities are informed by knowledge and expertise at the forefront of science & technology. We welcome efforts made by EU member states and the European External Action Service to incorporate scientific knowledge and expertise into their foreign affairs decision-making processes through their delegations and embassies. EU institutions, among other actors, have developed numerous science-for-policy toolkits and mechanisms, such as the Knowledge4Policy (K4P) platform, which can be effectively used in providing advice for policy-making and diplomatic endeavours. However, they are not yet disseminated and used to their full potential, as they are not yet structurally incorporated into the academic sector,
nor yet aligned with the activities of embassies and foreign affairs offices. Mechanisms established by the National Academies of Science or their networks, such as the European Academies Science Advisory Council (EASAC), advisory bodies, and the Scientific Advice Mechanism (SAM) currently provide advice to EU institutions on a limited number of topics. However, this engagement often involves a low number of individual researchers, typically in a personal capacity. Unfortunately, this de facto lack of broader sector representation hinders the possibility of ensuring a comprehensive view on a given topic.

Efforts by policymakers and diplomats to integrate scientific and technological expertise should extend beyond the current engagement directed towards individual researchers. Instead, there should be a focus on establishing an ecosystem at institutional level with favourable framework conditions and supported by appropriate funding. On the model of the Council conclusions on ‘Strengthening the role and impact of research and innovation in the policymaking process in the Union’, measures can include establishing platforms where communication between researchers, and policymakers including diplomats can take place. Additionally, raising awareness about these platforms, capacity-building, and providing appropriate incentives to encourage engagement are essential. To maximise their potential, these activities should harness the expertise of both academic and non-academic personnel, as well as knowledge brokers who can facilitate the integration of science into policymaking, including foreign affairs.

We call on national governments to strengthen efforts to integrate knowledge and expertise at the forefront of science & technology into foreign affairs and diplomatic activities by:

- Mapping, aligning and promoting initiatives that support and facilitate the exploitation of research outcomes. This includes creating platforms where researchers communicate with policymakers and diplomats and provide scientific advice, therefore establishing an ecosystem and mechanisms ensuring the effective use of expertise and representation from the academic sector.
- Supporting the establishment and maintenance of such ecosystems with the appropriate funding while safeguarding the full independence of the advising researchers.
- Raising awareness among the scientific community about possibilities to engage in policy advice communication opportunities within all publicly funded research collaborations, and recognising these activities as integral to the research projects, providing the necessary financial support.
- Providing accessible methods and capacity-building programmes within research organisations to equip researchers with the necessary skills and knowledge to engage effectively with policymakers, particularly concerning foreign affairs.

2) Science for diplomacy: safeguard science as an independent bridge-builder for global collaboration

International collaboration in science can have beneficial effects on diplomatic relations by fostering confidence, partnerships and trust. Simultaneously, science diplomacy sheds light on the escalating international competition for scientific talent, excellence, and technological innovation.
When aligning scientific activities with diplomatic objectives, we emphasise that safeguarding research values and principles is paramount. In this regard, academic freedom and institutional autonomy are non-negotiable values that enable universities to fulfil their societal roles and responsibilities, including global cooperation, as laid down in Magna Charta Universitatum and recalled in our 2021 position ‘Go beyond resilience to tackle local and global challenges’ and 2022 position ‘Guiding principles for the Global Framework for S&T Cooperation’.

The starting point to safeguard both is to ensure a clear delineation of the roles and a shared understanding of responsibilities, with universities recognised as an autonomous and peer sector, at eye-level, by government, industry and other related sectors.

We call on EU institutions and national governments to safeguard science as an independent bridge-builder for global scientific and technological collaboration by:

- Ensuring a clear delineation of roles and a shared understanding of responsibilities of sectors involved;
- Recognising the academic sector as a peer sector, at eye-level, alongside government, industry and other related sectors, to shape global strategic initiatives to be as open as possible, and as restricted as necessary, while protecting academic freedom and ensuring institutional autonomy;
- Stimulating and providing a platform for dialogue within the academic sector and beyond to create a mutual understanding of geopolitical consequences on the academic sector, such as modulated cooperation schemes with third countries, taking into account the Commission guidelines on tackling R&I foreign interference;
- In light of increasing scientific engagement, taking mitigating measures to ensure that individual researchers and their academic freedom will not be at risk, by fostering scientific engagement through dedicated platforms.

3) Diplomacy for science: boost international scientific cooperation

Scientific knowledge and its bearers – learners, teachers, researchers and innovators – thrive when they can circulate without borders and barriers. In addition, due to the highly specialised nature of the frontier of scientific knowledge and technological innovation, experts at the leading edge of any specific scientific and technological field are dispersed all over the world. Advancing the very frontier of human knowledge is greatly accelerated by international collaboration. Diplomacy for science can be a key enabler for such collaboration.

As highlighted in the Commission communication on its Global approach to research and innovation, maintaining collaboration while acknowledging new tensions in the evolving geopolitical landscape underlines the need for a nuanced approach. We urge all involved parties to keep doors as open as possible and introduce restrictions only as necessary, and safeguard long-standing science & technology cooperation as much as possible. Boosting global science & technology cooperation also acts as a prime vehicle for science for diplomacy, reinforcing existing diplomatic relations and supporting the creation of new relationships.
Finally, Europe greatly benefits from Horizon Europe as a funding programme for excellent international research and innovation collaborations. This programme, a prime example of international scientific collaboration, should be celebrated and substantially strengthened.

We call on EU institutions to advance science diplomacy by:

- Ensuring that ‘as open as possible, as restricted as necessary’ remains a core guiding principle for European policy and funding programmes related to research, education and innovation;
- Positioning the European framework programme for research & innovation as a prime vehicle for boosting global cooperation in science & technology (and therefore also science diplomacy), and continuously supporting and strengthening the framework programme and its successor, following the key design considerations outlined in our FP10 paper.

We offer our full support in the advancement of science diplomacy.

For more information and enquiries, please contact our Secretary General Mattias Björnmalm.

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