

EU recommendations on tackling foreign interference in research and innovation: Implications for European research collaboration with China

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The EU document “Tackling R&I foreign interference”

On 18 January 2022, the Directorate-General for Research and Innovation (DG RTD) at the European Commission published a staff working document on [Tackling R&I foreign interference](#). The Commission document provides direction, makes recommendations and contains tools on how research and innovation (R&I) actors should deal with foreign interference. It seeks to support European research actors such as universities, research institutes and companies to make sound decisions on R&I collaborations outside the European Union (EU).

The Commission document aims to mitigate the effects of foreign interference in research and innovation within the EU. Foreign interference is [defined as](#): “activities that are carried out by, or on behalf of, a foreign state-level actor, which are coercive, covert, deceptive, or corrupting and are contrary to the sovereignty, values, and interests of the European Union (EU)”. The four areas covered by the report are: values, governance, partnerships and cybersecurity. The Commission makes recommendations on these areas and proposes various tools for dealing with related challenges. The Commission document is not binding on EU member states, but instead comprises an inventory of what are considered good practices that have been used by actors in various member states. Key suggestions on methods and instruments are education and training, developing codes of conduct, adherence to fundamental scientific values, protection of data and intellectual property through legislation, rules or technology, and performance of due diligence checks.

The main messages conveyed in the Commission document were enshrined in a joint declaration on 8 March 2022 (the [Marseille Declaration on International Cooperation in Research and Innovation](#)) made by all the ministers responsible for R&I in the EU member states. The declaration highlights the importance of EU actors participating in global research activities that create impact and strengthen the competitiveness of member states.

The document also notes the importance of respecting the fundamental values of the EU, such as inclusivity, academic freedom, ethics and an ambition to work with others to resolve global challenges.

The background to the Commission document is the increasingly tense geopolitical situation in the world and the increasing heterogeneity and complexity of the global R&I landscape. In the first two decades of the century, the number of publications authored in countries such as India, Russia, Iran, Egypt, Saudi Arabia, Turkey and China increased dramatically. The rate of growth in the number of scientific publications in these countries has also generally exceeded growth rates in the West, although this is not surprising due to their relatively low base of publication volumes in the early 2000s. One reason for publication growth in these emerging science nations is that European R&I collaborations with non-democratic states such as Saudi Arabia, Iran, Russia and China have increased dramatically in the past decade, not least with respect to scientific publishing. Even as EU-China relations have deteriorated in recent years, EU 28/China research collaborations have been increasing. In the period 2016–2021, EU-China research collaborations as a proportion of global international research publications increased from roughly [5 percent to 8 percent](#).

It is evident from the bibliometric data that the global power dynamics have changed and competition for scientific and technological advantage is now taking place between a broader set of countries. Furthermore, Russia's foreign aggression, the uncertainties surrounding the global role of the US and China's growing strength have led the EU to advocate "[open strategic autonomy](#)", a term that means that the EU is seeking to become less dependent on other parts of the world while at the same time adhering to openness in areas that strengthen Europe's competitiveness. The latter include trade, but also technology, innovation and research.

European-Chinese research collaborations

The increasing number of ever deeper collaborations with new or emerging science nations that have fundamentally different political structures to the EU has raised concerns in Europe that a dependency is being created that could be exploited by non-EU countries, opening up opportunities for foreign interference. The concern is that Europe will lose its competitiveness and that other countries, such as China, are taking advantage of Europe's adherence to open science to build up their research systems at the expense of the EU, including for purposes related to the military-civilian interface.

This can occur through open exchanges but also, less commonly, through espionage. While efforts to acquire data by illicit means have been identified, the overall level of inappropriateness or illegality is unclear. For instance, it is difficult to prove in court that academic espionage has taken place. In addition, while various cases related to [economic espionage and theft of trade secrets, as well as fraud, failure to report income from China and making false statements](#) have been prosecuted by the US Department of Justice, these have not been labelled academic espionage in court. The lack of successful convictions related to academic espionage does not mean that data is not being acquired in nefarious ways. However, more details are needed if security agencies are to argue convincingly that certain matters must be managed.

A common concern is that research collaborations can function as cover for geopolitical agendas. One example is China's strengthened position in the Arctic, where [research collaborations have](#)

[facilitated the country's increasing presence in the area](#). It is unlikely that the Chinese state will directly interfere at the individual researcher level in a systematic way. However, Chinese public funding streams are directed towards research areas deemed strategic by [China, as is also the case in other countries](#). This suggests that there are connections between national strategies and research directions, but the impact is less direct. Hence, it is important for the research community to manage matters at the intersection of security, scientific openness and integrity because the mere suggestion of the existence of geopolitical agendas tends to paint a dark cloud over research collaborations with certain countries.

Examples of how to the research community can manage suspicions and fear of hidden agendas include increased transparency, awareness raising of broader geopolitical tensions, sound risk management that balances due diligence with practices conducive to relationship building and education on responsible internationalization. These approaches will be important for the EU as it seeks to promote an open global R&I landscape that includes collaborations with countries that are very different politically from itself. China is of course the most important country to build collaborations with. The country's R&D capacity has grown rapidly over the past four decades, which has had a [significant impact on global R&D](#). China is a leading nation in many research areas and the country produces the most scientific publications in the world. [The quality of Chinese research publications has also increased](#) over time.

As the world's largest producer of scientific publications and a test bed and market for emerging and established scientific discoveries and technologies, there are reasons why European research actors want to collaborate with Chinese R&I actors. However, this does not come without challenges. China's authoritarian governance and increasing foreign influence, the growing political and ideological control over the country and the lack of transparency make democratic countries' cooperation with China difficult. Problems include the appropriation of technologies through forced transfer in order to gain access to the Chinese market and the increasingly assertive position China is taking with regard to international relations based on its growing global economic and political power. These challenges have led to attempts at "decoupling" and to limit cooperation with China. In Australia, for example, the Minister of Education has a right of veto and has already vetoed publicly funded research projects. The veto power has been used in at least 12 cases since 2018, with the justification that they "[do not demonstrate value for taxpayers' money or contribute to the national interest](#)".

The US Department of Justice under the Trump administration launched [the "China Initiative"](#), a program that sought to detect Chinese research espionage in US companies and universities. In 2022, however, after three years of investigations and intense criticism of selective targeting and racial profiling, the programme was [reframed](#) as "a strategy for countering nation state threats" with a focus on industrial espionage.

In reality, it will be difficult to achieve decoupling and, in many areas, such as climate research or biodiversity conservation, it would not be desirable. Knowledge production and global scientific collaboration in these and other areas are of crucial importance to the world. Raising barriers to collaboration will cause significant challenges for resolving global problems and weaken an important source of connection between states. Hence, Europe is taking a more restrained but still wary approach to collaboration with China compared to the US.

The Commission document encourages continued collaboration with researchers in "repressive settings" but presses the importance of balancing risk management with open science. Discussions are currently ongoing at the EU-level concerning [areas of common interest](#), [how](#)

[collaborative risks can be mitigated in suitable ways](#) and applicable tools. Such discussions need to be conducted in tandem with analyses of what is gained from a European perspective by maintaining such relationships. Risk management should preferably be developed in a context of relationship building and not seen as two independent analyses.

Recommendations for European actors

Ambitious researchers based in Europe generally tend to want to [work with talented researchers regardless of where they are located](#), including in China. Increasing geopolitical tensions mean that a deeper understanding of collaborative processes, better information about partners and an improved ability to evaluate and manage relationships from the perspectives of researchers and their organizations will be needed. This also applies to international collaboration more generally.

Researchers and research organizations need reference points for a coherent analysis and reflection on international collaborations on R&I. The Commission document, in combination with the EU's overall [strategy on China](#), can serve as such a reference point. In particular, it could lead to a more comprehensive discussion in Europe on the trade-offs and decisions that need to be made and whether these can be made at the European level. The work carried out in the EU China Core Group, where all member states are represented, and in the EU Knowledge Network on China, are examples of initiatives launched in the past two years to discuss issues related to European research and development cooperation with China in a more structured way.

The Commission document provides direction based on values espoused by the EU that can guide extra-European collaboration, as well as tools and best practices for use in various countries. Some of these are already in use in Sweden, such as the notion of [responsible internationalization](#). Nonetheless, institutional structures and dynamics can vary quite considerably between EU member states, and a dialogue and contextualization of the tools available at the national level are therefore needed. The Commission document does not provide clear direction in this area. Some important follow-up questions therefore arise about meaningful tools that can be used in certain institutional contexts, and how it is envisaged that these tools will be used. A number of suggestions are set out below to help answer these questions.

- **Create arenas at the national level to discuss and implement recommendations on managing international collaborations:** It is important to have an arena for discussion on how the recommendations developed by the European Commission can be used and contextualized. The Commission document is an inventory of good practices and experience but it is not prescriptive. The document therefore needs to be contextualized for individual countries or actors. Discussions in the EU China Core Group and the EU Knowledge Network on China will be important arenas for promoting a balanced view of European-Chinese R&I collaborations, based on [research integrity](#) and responsible internationalization. A common platform should also be available in individual EU member states that focuses on the management of risk but takes account of the opportunities that arise from collaboration. In this way, idiosyncratic challenges relevant to specific institutional conditions found within national borders can be identified.

- **Evaluate which tools and instruments have been successful and useful for managing international R&I collaborations and why:** Existing tools and instruments that have been used successfully should be identified, followed-up, evaluated and compared. How have different tools for balancing risk and opportunities been used and what effects have they had? How relevant or useful are the tools for different sectors, organizations and countries? An in-depth understanding of how tools and instruments are used creates opportunities for improvement. A set of principles on how to locally anchor such tools could also be valuable.
- **Develop case descriptions to clarify the challenges, opportunities and trade-offs that might arise in international research collaborations:** Specific case descriptions of challenges linked to the legality of research, data security or ethics, as well as possible approaches to solutions need to be identified to strengthen the ability of individuals and organizations to handle complex relationships. These can underpin a more comprehensive discussion about the boundaries of a research collaboration. If there is a sensitivity about using cases that might single out certain individuals, a suitable point of departure might be to discuss commonly encountered risks that many researchers would recognize. This has the benefit drawing from a broader experience base, which can stimulate a more open dialogue.
- **Do not let extreme cases set the norm for how collaboration with Chinese actors should be viewed in general:** Research and collaborations that restrict human and individual rights, violate laws or have direct military use must be handled by authorities or university managers in a resolute and clear manner. There must be no room for discretion on flagrant violations of norms and laws. However, it is also necessary to understand that most collaborations will not violate red lines. It would be unfortunate if the reactions that follow from extreme cases of espionage, direct military use or flagrant human rights violations were to set the norm for how cooperation with Chinese counterparts is viewed. For those collaborations that do not cross red lines, it is important that researchers create a culture of transparency, responsibility and knowledge of the partner's institutional context. If this is achieved, the opportunities that arise from cross-border collaboration have a greater chance of being reciprocal; but responsible behaviour must accompany partnership. Above all, it is important to gain a better understanding of the grey areas that are created in international research collaborations and possible ways to deal with them.
- **Offer support for working with actors in “repressive settings”:** The Commission document notes that the goal is not to avoid cooperation with researchers working in repressive settings, but that it is important that researchers or research organizations which collaborate with actors in such countries understand the [complicating factors](#) that must be taken into account. This includes managing challenges in a responsible and principled way. Nationality, ethnicity or geographical location should not automatically disqualify potential partners, but it might be necessary to be more thoughtful and careful because a partner may have fewer opportunities or more limitations than oneself or even one's own organization. This management can be carried out by higher education institutions, research funders and authorities undertaking active work to increase the awareness of research actors. Training and education are also needed to enhance the ability of individuals and organizations to handle collaborations.

Endnotes

1 The values primarily referred to in the document are academic freedom, openness and research integrity.

2 The Group consists of representatives of all the EU member state STI and education ministries seeking to develop R&I policy on China and to promote a common response.

3 The EU Knowledge Network on China is a broader constellation that discusses matters related to China's STI development and European responses. The network is coordinated by DG Research and includes the China Core Group and various stakeholders in the European STI landscape.

4 Grey areas can form because of differences in national laws, which affect the legality of research areas and practices across countries, or due to varying levels of perception or implementation of ethical codes.



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