ERA-LEARN

Guidance on international cooperation for European Partnerships

24/06/2024

Information

Project no.	101102316
Project acronym	ERA-LEARN
Project full title	Strengthening the European Partnership community
Funding scheme	Horizon Europe
Start date of project	01/07/2023
Duration	48 Months
Deliverable	Tools and guidance
Authors	Katja Lamprecht (AIT), Michael Dinges (AIT), Maximilian Zieser (AIT), Vitaliy Soloviy (AIT)

Table of content

Contents

1. Introduction

The European Partnerships for Research and Innovation (R&I) are an important player in the internationalisation of European R&I activities. Let alone, during the runtime of Horizon 2020, they have established global Research, Technology and Innovation collaborations with more than 60 non-EU countries, more than 150 third-country funding organisations participated in public-public partnership calls, and more than 700 memberships or associations with global counterparts have been agreed upon. The European Partnerships coordinate research and innovation communities that tackle global threats, societal and technological challenges.

The European Partnerships are an important entry point and coordination hub for EU Member States to internationalize their R&I activities, and they also provide room for collaboration with global organisations like the WHO or UN organisations. ERA-LEARN has conducted various activities around the internationalisation aspects of European Partnerships. It monitors the international participation of third countries in partnerships and put a spotlight on the globalisation activities of European Partnerships to explore good management and operation practices as well as potentials for synergies and mutual learning between Partnerships in Horizon 2020.

In **Horizon Europe**, not only the partnership landscape has been reformed, but the European Union also renewed its **strategic orientation towards international cooperation**. In its Communication on the [Global Approach to Research and Innovation](#) - Europe's strategy for international cooperation in a changing world[1], the Commission presented a strategy to deepen international R&I cooperation based on openness and respect of fundamental rights and values.

Open Strategic Autonomy becomes important to address intellectual property infringements, increase resilience and ensure technological sovereignty amid geopolitical tensions. The Ministerial Conference from February 16th, 2024 highlighted the need to "enable diverse and equitable cooperation in a trusted, open, accessible, inclusive, participatory, non-discriminatory and safe manner"[2]. In the context, multilateral dialogues play a crucial role for dealing with the

---

[1] EC COM (2021) 252 final, ["Global Approach to Research and Innovation - Europe's strategy for international cooperation in a changing world"](#)

[2] EC (2024). MULTILATERAL DIALOGUE ON PRINCIPLES AND VALUES FOR INTERNATIONAL COOPERATION IN RESEARCH & INNOVATION. https://research-and-innovation.ec.europa.eu/document/download/3c569c60-93bf-45c1-82a3-b52301baaf7b_en?filename=ministerial-statement-principles-and-values-2024.pdf

diversity of international cooperation approaches adopted around the world. The recent round of the Multilateral Dialogue meetings revolved around the following key topics[3]:

- principles and values of freedom of academic and scientific research
- research excellence
- research ethics and integrity of scientific conduct
- human rights, accessibility, gender equality and inclusiveness
- open science
- the knowledge valorisation, including industry-academia collaboration
- risk management, security of research, protection of IPR and protection of scientists
- societal and environmental responsibility and response to the needs of society
- partnership with low- and middle-income countries.

The country fiches of the Biennial Monitoring Report 2022 indicate that European Partnerships (e.g. ERA-NETs from previous funding periods) are seen as important door openers and entry points to international cooperation. Partnerships require trustworthy and meaningful international relations that effectively address each of those aspects, considering both risks and opportunities of collaboration. ERA-LEARN organised several events on the international dimensions of European Partnerships during the two recent European Partnership Stakeholder Forums in Horizon Europe[4],[5]. Those events covered topics such as the motivations and goals of international cooperation, good practices, and methods to achieve successful international positioning and involvement of international stakeholders by Partnerships, challenges and the respective needs for support of Partnerships and international stakeholders.

Building on these experiences, the guidance aims to help them develop such approaches in an informed and tailored manner. It highlights 1) motivations and approaches for international co-operation and respective challenges, 2) describes new framework conditions for international co-operation in Horizon Europe and 3) provides guidance material for defining international co-operation activities within the European Partnerships.

_____

[3] EC (2024). MULTILATERAL DIALOGUE ON PRINCIPLES AND VALUES FOR INTERNATIONAL COOPERATION IN RESEARCH & INNOVATION. https://research-and-innovation.ec.europa.eu/document/download/3c569c60-93bf-45c1-82a3-b52301baaf7b_en?filename=ministerial-statement-principles-and-values-2024.pdf

[4] European Partnership Stakeholder Forum - One-year review of European Partnership Initiatives in Horizon Europe, Brussels (November 2022), https://www.era-learn.eu/news-events/events/european-partnership-stakeholder-forum-one-year-review-of-european-partnership-initiatives-in-horizon-europe

[5] European Partnership Stakeholder Forum 2023 Report

2. Rationales and Challenges of International Cooperation by European Partnerships

This section presents key findings from ERA-Learn events on international cooperation, including dedicated workshops and stakeholder events.

2.1. Motivation and rationale for developing international cooperation

International cooperation efforts of European Partnerships rely upon several main rationales.

Tackling global challenges jointly and enhancing impact

Partnerships address challenges that are global in nature, and international cooperation is essential to this pursuit. International crises exposed the dependencies of both the European R&I to international partners and highlighted the urgency of developing more diversified and nuanced approaches to international cooperation. International R&I cooperation can create new opportunities in established and emerging markets and strengthens the global role of the Union to be reinforced through science diplomacy.

Connecting to leading R&I communities

It is important to access and share latest expertise and knowledge, conduct collaborative research, advance and align joint research agendas, and co-develop and test innovative instruments. This can increase potential for scaling-up while connecting to leading R&I communities and key actors, allowing to jointly tackle complex problems.

Increasing international coordination of R&I roadmaps and activities

International activities can help to coordinate the development of technological solution providers in global value chains. An example in this vein is the collaboration of the Clean Energy Transition Partnership with Mission Innovation (MI), a global initiative catalysing a decade of action and investment in research, development, and demonstration to make clean energy affordable, attractive, and accessible for all.

2.2. Challenges to international cooperation

Perception of European Partnerships among targeted global partners

The concept of "European Partnership" is not very well understood outside Europe. This perception refers both to the **strategic level** and to the **operational level**. Global partners have difficulties to identify European Partnerships as a potential partner due to this complex landscape and for the partnerships themselves, paving the way for a successful cooperation is time consuming. Long-term efforts and a dedicated budget are needed to jointly identify synergies, match expectations, overcome legal constraints and build reliable relations and trust.

Coordination across policy, science diplomacy, and funding agencies

Managing a meaningful dialogue between the different policy arenas (R&I, Foreign Policy, Development Policy) and improving communication and coordination between the EC, diplomatic services of member states and European Partnerships mean essential support for international cooperation activities. Accompanying initiatives on EC level, like CSAs dedicated to specific countries of strategic interest (f.e. Brazil, China, US) foster mutual understanding and support the identification of strategic areas for cooperation.

Integration modalities of partnerships

There is uncertainty regarding eligibility conditions for international partners in Horizon Europe partnerships, while the share of partnership budgets dedicated to international collaboration varies vastly across the partnerships.

Changing framework conditions for international cooperation

The increasing global tensions and changes in the political landscape have also had an impact on European Partnerships. Heightened geopolitical conflicts and tensions between countries hinder R&I collaboration. Trade disputes, economic sanctions, or political disagreements may lead to restrictions on the movement of researchers, technology, and scientific data, limiting cross-border collaborations. Increasing certainty around international cooperation requires diplomatic efforts, policy coordination, and a commitment to open science and collaboration.

Communication, cultural barriers and ethical standards

In the context of increasing global tensions, language barriers, mistrust, or differences in scientific practices and norms can also hinder effective global collaboration, hampering knowledge exchange and cooperation between researchers from different countries. Joint ethical standards, alignment of data sharing and security policies within networks, Open Access policies are increasingly relevant for the process of setting up global collaboration.

3. Framework Conditions for International Cooperation in R&I

The EU developed a common set of principles and values for R&I and launched a multilateral dialogue with partner countries to preserve openness in international R&I cooperation, while putting in place restrictive measures when needed for open strategy autonomy. It also implemented new provisions for the association of third countries to Horizon Europe.

3.1. The New Global Approach

In its Communication on the *Global Approach to research and innovation* (R&I)[6], the EU Commission presented a strategy to deepen international R&I cooperation based on openness and respect of fundamental rights and values. The Council reaffirmed the EU's commitment to openness in international R&I cooperation[7] and in April 2022, the European Parliament supported the strategy in a resolution[8]. This approach replaces the strategy for international cooperation adopted in 2012 in order to respond to today's changing global contexts and to align the EU's international cooperation with its current priorities as well as to strengthen the international dimension of Horizon Europe. The new strategy aims to ensure *multilateralism, openness, and reciprocity*. It seeks to strengthen the EU's leading role in supporting multilateral research and innovation partnerships to find new solutions to green, digital, health, social and innovation challenges which reflect the main priorities of the EU. The European Commission named the following mechanisms to implement this new global approach:

- Modulating international cooperation to make it compatible with European interests and values and to strengthen the EU's open strategic autonomy,
- Mobilising STI to accelerate sustainable and inclusive development and the transition to resilient, knowledge-based societies and economies in low and middle-income countries,
- Initiatives modelled on a *Team Europe* approach, which combines actions by the EU, financial institutions, in particular the European Investment Bank and the European Bank

---

[6] EC COM (2021) 252 final, "Global Approach to Research and Innovation - Europe's strategy for international cooperation in a changing world"

[7] Council conclusions on the Global Approach to research and innovation, 28/09/2021, document 12301/21

[8] European Parliament (2022), "Resolution on Global approach to research and innovation: Europe's strategy for international cooperation in a changing world", P9_TA(2022)0112

for Reconstruction and Development, and Member States to maximize the effectiveness and impact of the actions.

Further, implementing the international dimension of Horizon Europe and synergies with other EU programmes such as *Neighbourhood* and *Development and International Cooperation (NDICI) – Global Europe*[9] are key elements of this new strategy.

3.2. International dimension of Horizon Europe

Following the entry into force of the Horizon Europe Regulation on 12 May 2021, formal negotiations have started between the EU (led by DG R&I) and third countries that have formally expressed an interest in becoming associated to the Horizon Europe Framework Programme and have completed the exploratory talks. Association to Horizon Europe is governed by the Horizon Europe Regulation 2021/695[10]. Legal entities from associated countries can participate under equivalent conditions as legal entities from the EU Member States, excluding specific conditions or limitations in the work programme and/or call/topic text.

In the first two biennial Horizon Europe work programmes (for 2021-22 and 2023-24) around 21% of all collaborative research topics actively encouraged international cooperation[11]. In Horizon Europe, there are 4 categories of countries eligible for association with the programme: European Free Trade Association (*EFTA*) members which are members of the European Economic Area (*EEA*), Accession countries, candidate countries and potential candidates, European neighbourhood policy (*ENP*) countries and Non-EU countries and territories that fulfil a set of criteria related to their economic, political and research and innovation systems.

Associated countries and non-EU countries and their researchers, companies and institutes, as well as other entities are which share European values and have a strong STI profile are offered the opportunity to participate with the same conditions of participation apply as for EU member states. The countries associated with Horizon Europe as of 21 March 2024: Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Georgia, Iceland, Israel, Kosovo, Moldova, Montenegro, New Zealand, North Macedonia, Norway, Serbia, Tunisia, Türkiye, Ukraine, United Kingdom. Transitional agreements also apply to Canada, Morocco and Switzerland.

---

[9] See Global Europe: Neighbourhood, Development and International Cooperation Instrument (europa.eu)

[10] Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013 (OJ 12.5.2021 L 170/1), https://eur-lex.europa.eu/eli/reg/2021/695/oj

[11] EC COM(2023) 356 final, First biennial report on the implementation of the Global Approach to research and innovation

3.3. Cooperation with priority countries and regions

The EU set out joint commitments with prioritised partners, such as the United States of America (US), Canada, Japan, India, Southern Mediterranean countries, and the African Union, to implement framework conditions designed to secure a level playing field and promote shared values. The Commission implemented Article 22(5) and (6) of the Horizon Europe Regulation to safeguard the EU strategic assets, interests, autonomy or security. It developed guidelines on foreign interference, guiding principles on knowledge valorisation[12], a code of practice for the management of intellectual assets[13] and a code of practice on standardisation[14].

The Commission focused on dedicated support measures for Ukraine and facilitated its participation in Horizon Europe and Euratom, including the setup of a Horizon Europe office in Kyiv. The EU-Ukraine science and technology cooperation agreement was renewed in 2022 making it effective as of 8 November 2019 for a period of five years. Western Balkans partners are now associated to Horizon Europe. Relations focus on implementation of the Western Balkans agenda on innovation, research, culture, education, youth and sport.

Based on the discussions about the joint roadmap for EU-China cooperation in science, technology and innovation, the EU and China will cooperate on two research flagships in areas of mutual interest, while having a restricted approach on innovation-related actions. Together with the African Union (AU), the EU has developed a joint AU-EU innovation agenda and endorsed the Union for the Mediterranean ministerial declaration. It launched a dedicated 'Africa Initiative' and 'Mediterranean Initiative' under Horizon Europe, each with a total EU investment of around EUR 300 million.

The EU has stepped up bilateral relations with the United States through the EU-US Trade and Technology Council, with Japan including in the context of the Japanese G7 Presidency in 2023, and with India with the launch of the EU-India Trade and Technology Council. The Commission has continued to implement the EU-CELAC (Community of Latin American and Caribbean States) strategic roadmap on science, technology and innovation. The EU has also endorsed a 2023-2027 plan of action to implement the ASEAN-EU strategic partnership and committed to promoting cooperation in the Indo-Pacific, including with Australia, Republic of Korea, New Zealand and Singapore.

_____

[12] Council Recommendation (EU) 2022/2415 of 2 December 2022 on the guiding principles for knowledge Valorisation.

[13] Commission Recommendation (EU) 2023/499 of 1 March 2023 on a Code of Practice on the management of intellectual assets for knowledge valorisation in the European Research Area

[14] Commission Recommendation (EU) 2023/498 of 1 March 2023 on a Code of Practice on standardisation in the European Research Area

4. Shared Principles and Guidelines for Global Cooperation

Following the Council Conclusions on the global approach to research and innovation, the EU ministers responsible for research, adopted conclusions that establish political guidelines on international cooperation in the field of research and innovation in June 2022. The guidelines are relevant for the international cooperation strategies and activities of the European Partnerships, as they set out the values and principles which must guide international cooperation in research and innovation including scientific freedom, gender equality, research excellence and protection and enforcement of intellectual property rights.

The Council Conclusions on "Principles and values for international cooperation in research and innovation" emphasize that the main aim of international R&I cooperation should be to promote democratic values and cooperation for peace, the achievement of the Sustainable Development Goals (SDGs) of the 2030 Agenda, access to the most up-to-date knowledge as well as collaboration between and circulation of talents in the world, especially young researchers.

The analysis conducted within BMR 2022 report, highlighted that partnerships contribute unequally to different SDGs, with particular focus on climate action (SDG 13), industry, and economic growth, however featuring limited focus on eliminating poverty (SDG 1), fostering gender equality (SDG 5), reducing inequalities (SDG 10) and safeguarding life on land (SDG 15). Additionally, only five partnerships contributed to Partnerships for the goals (SDG 17). Thus, while partnerships strongly prioritize climate, technological and economic SDGs, there is a scope of broadening contribution to other environmental issues and systemic social issues, most of which are international in nature.

The EU's Global Gateway strategy has been specifically devised as strategic entry point for international cooperation on SDGs with the involvement of private sector, aiming to mobilize €300 billion in investments, where many of the Global Gateway projects are directly connected to partnerships foci, including areas such as circular bioeconomy, digitalization, climate resilience, raw materials, among others. Partnerships can leverage the EU's international cooperation initiatives to increase the scope and scale of their impact, deepen their understanding of regional contexts, and exchange knowledge and good practices.

There is a need to rebalance international R&I cooperation based on reciprocity and a level playing field. When considering international R&I cooperation, the Union's principles and values need to be considered. The importance of freedom of scientific research needs to be recognised and the rights of researchers to publish, share, disseminate and communicate openly their results and data needs to be supported. Choices regarding diversification and

prioritizing ties should be made in the view of ensuring strategic autonomy and considering feasible degrees of openness.

European Commission and Member States should base their international R&I cooperation on the European Code of Conduct for Research Integrity. The European Code of Conduct for Research Integrity serves the European research community as a framework for self-regulation across all scientific and scholarly disciplines and for all research settings. The European Commission recognises the European Code of Conduct as the reference document for research integrity for all EU-funded research projects and the European Code of Conduct increasingly serves as a model for organisations and researchers across Europe and beyond.

The 2023 revision of the Code of Conduct reflects an increased awareness of the importance of research culture in enabling research integrity and implementing good research practices and place a greater responsibility on all stakeholders for observing and promoting these practices and the principles that underpin them.

5. Approaches to International Cooperation among European Partnerships

Approaches to international depend on the sectors, type of research (basic, applied), dependencies, levels of trust, impact of specific legal provisions, the types of partners, and other factors. For example, collaboration in basic research is commonly more straightforward than in applied research, e.g., in case of water research collaboration with China. Partnerships also differ in terms of the role of international cooperation to the overall scope of their activities.

Global cooperation activities of European Partnerships are always a long-term effort, in which approaches vary considerably depending on the area of cooperation and on the countries involved. Cooperation approaches and activities should balance multiple facets, such as openness and protection, added complexity and benefits for the involved parties[15]. Some of the common international cooperation activities by Partnerships are outlined below.

Table 1. Examples of activities international cooperation by European Partnerships

International standardization *activities: SESAR, ATM*
Collaboration with standard-making organisations allows to contribute to international standards and make sure the solutions align with such standards and can be applied globally. It also allows to strengthen international leadership and positioning within specific areas.
Leveraging networks and alliances: Clean Hydrogen, CET, EIT KICs
Engagement a wide range of international actors paired with active positioning of Europe within the landscape. CET partners aim to establish the and actively invite MI partners from outside Europe, establish an effective cooperation with the International Energy Agency (IEA) Technology Collaboration Programmes (TCPs) to boost joint activities, and connect their knowledge community with the wider IEA international network from regions outside Europe. Engagement in international industry alliances, education programmes and matchmaking events are common practices of the EIT KICs. CBE JU also actively informs partnership stakeholders about international opportunities
Soft coordination: ADR

---

[15] era-learn-partnership-stakeholder-forum-2023-report.pdf

Soft coordination through dedicated networking and building relationships through national governments contributes to strategic positioning of European Partnerships within relevant areas.
Complete integration of global actors: CETP
CETP aims for complete integration of global actors in the activities of partnerships through active search for suitable partners in research areas with similar challenges and goals.
Regional collaborations with strategic foci: CBE JU, OHAMR
Strengthening regional collaboration within strategic focus areas allows to make an impact where it matters most, while building long-term relationships. For example, CBE JU has contributed to developing the Africa-EU Partnership.

Some partnerships like PRIMA, the Partnership for Research and Innovation (R&I) in the Mediterranean Area, have a specific focus on regions of particular interest for the European Union. PRIMA constitutes a distinct initiative, one of its key targets is to integrate Mediterranean Third Countries into the European Research Area (ERA). In that, it ensures transparency and equality for all the participating partners, aiming to build R&I capacities and develop innovative solutions for water and agro-food systems.

The intensity of international cooperation may be influenced by minimum requirements for joining the partnership, admission rules, credibility checks, trial periods for the integration in European Partnership networks and governance structures. Partnerships may also collaborate on developing approaches to international cooperation, improving preparedness and adaptability, and pooling together analysis and experience, and coordinating the development of technological solution providers in global value chains.

European Partnerships may also learn from international cooperation initiatives by other instruments, such as by referring to the international cooperation examples features on the Smart Specialisation Platform, therefore drawing on regional connections and synergies.

6. Mitigation of Risks in Global Cooperation

While global cooperation and international R&I networks can play an essential role in finding solutions to global challenges, the expansion of global R&I activities "involves a number of risks and challenges that research, and innovation actors must take into account"[16].

The European Commission published a toolkit to *"Tackling R&I Foreign Interference"* that aims to help mitigate foreign interference in research and innovation that allow R&I actors and networks to develop a comprehensive strategy for tackling risks and challenges from abroad. The mitigation measures in the publication cover key areas of attention grouped into four categories: values, governance, partnerships and cybersecurity.

The following summary of mitigation measures excerpt from this publication are of high relevance for European Partnerships and can help guide global cooperation activities. See the original publication for complete list of measures.

Table 2 Tracking R&I Foreign Inference: summary of mitigation measures[17].

Values
- Identify countries and partner institutions where academic freedom is at risk: analyze research, educational and institutional environments, threats to academic freedom, European researchers, and institutions.   - Conduct a vulnerability assessment to understand external pressures on academic freedom and integrity in your institution: assess dependencies, build capacities for protecting academic freedoms, establish mechanisms to report on threats.   - Strengthen commitment to academic freedom and integrity at institutional and individual levels: train staff on risks, support scholars and students from at-risk countries and openly express commitment to integrity practices.   - Continue to cooperate with partners in repressive settings: develop transparency and screening mechanisms, build awareness on the impact of repressive settings, use emergency response mechanisms.
Governance
Publish a Code of Conduct for Foreign Interference, covering essential topics such as

protection of academic freedoms, data security, IPR, procedures for identifying foreign interference, whistle-blower protection, and managing conflicts of interest.

- Establish a Foreign Interference Committees: use institutional structures to raise awareness, monitor risks, manage research data.

Partnerships

- Develop general prerequisites for the implementation of a risk management system: strengthen existing procedures, raise awareness on risks, develop understanding of export control and FDI legislation, develop reporting criteria and due diligence levels.
- Establish a sound procedure for developing robust partnership agreements: Identify safe collaboration areas, perform due diligence, make agreements transparent and monitor implementation.

Cybersecurity

- Raise awareness of cybersecurity risks: provide training, establish escalation processes and checklists, keep up with best practices.
- Detect and prevent cybersecurity attacks from foreign interference actors: conduct OSINT investigations, develop screening procedures, procure certified equipment, implement physical access controls, enforce 2FA, and maintain block-lists.
- Respond to and recover from cybersecurity attacks from foreign interference: develop situational awareness, plan handling of incidents, implement forensic readiness, follow disciplinary actions, involve law enforcement and security agencies.

7. Conclusions

Considering the global developments and increased geopolitical tensions, industrial policy differences, and the need for tackling global sustainability challenges jointly, globalisation activities of European Partnerships are important, and need be included into standard coordination processes of the EU Member States, the Commission Directorates, and the EC External Action. European Partnerships are comparable to other means of international R&I cooperations.

With the new framework conditions for global cooperation in R&I, and the development of the shared principles and guidelines, objectives and requirements for international co-operation have been clearly framed. To operationalise these objectives at the level of European Partnerships, regular and structured coordination processes should be discussed and applied and allow to develop strategies for international cooperation activities. In pursuit of differentiated motivations (e.g., search for excellence, science diplomacy, development cooperation, European sovereignty) with differentiated activities, the respective participation modalities for global partners should expressly follow these motivations.

Global cooperation activities of European Partnerships require clear ethical standards and joint procedures. It is important to develop participation rules, encompassing ethical standards for responsible research cooperation, and European values, wherever relevant. Global cooperation actions also require a sound procedure. Robust partnership agreements with global partners, including joint governance mechanisms, conflict resolution mechanisms, IPR and security standards need to be developed based upon joint ethical stands.

Successful initiation of global partnerships requires preparatory activities prior to participating in joint funding calls or research coordination. These concerns e.g., the identification of specific, mutually beneficial research and cooperation subjects in the scope of the European Partnership, the matching of research teams, and the establishment of functional policy levels, contractual and administrative cooperation modes.

Specific instruments/action and formats/initiatives for global cooperation should support the global cooperation of partnerships, especially in the frame of coordination mechanisms like Senior Official Meetings. Significant time needs to be invested to establish cooperation with partner organisations in third countries. The Commission and the EU Member States should finance respective tasks of European Partnerships accordingly.

Imprint

AUTHORS
Katja Lamprecht (AIT)
Michael Dinges (AIT)
Maximilian Zieser (AIT)
Vitaliy Soloviy (AIT)