

ERA-LEARN Annual Report 2023



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Foreword

In 2023, efforts regarding European Partnerships were aimed primarily at expanding the Partnership portfolio under the second Horizon Europe Strategic Plan, the interim evaluation of Horizon Europe and starting the first discussions with the community on the design and development of European Partnerships under the next Framework Programme (FP10).

Throughout this year, the Commission has continued, with the help of an independent expert group, the work on the 2nd Biennial Monitoring Report on the performance of European Partnerships (BMR). The report will be published in September 2024 and will provide a strong evidence base for the FP10 discussions and the role of European Partnerships therein.

The Partnership Knowledge Hub has continued its work by organising a workshop on phasingout strategies and playing a strong role in the Second Annual Partnership Stakeholder Forum. It also took the first steps in preparing an Opinion on the role of European Partnerships under FP10.

ERA-LEARN has continued to be a strong partner of the Commission in this work, not in the least through its invaluable support in organising the second Annual Partnership Stakeholder Forum. Its website continues to be one of the prime resources and repository of information for policy makers, Partnership professionals and other stakeholders. Targeted workshops on areas of need, such as the implementation of Co-funded European Partnerships, monitoring and evaluation of Partnerships and synergies with cohesion policy funds have also supported the Partnership community, as has the publication of frequent News Alerts and the dissemination of information.

This annual report provides a comprehensive overview of the activities and achievements of European Partnerships that would not have been possible without the support and meticulous work of the ERA-LEARN consortium.

The ERA-LEARN team, led by Roland Brandenburg from FFG, will continue to be key in accompanying the implementation of European Partnerships under Horizon Europe and the preparation of their role in its successor.

We very much look forward to continuing this close collaboration.

Marnix Surgeon

DG RTD,

Deputy Head of Unit G4 Common Missions and Partnerships Service

Executive Summary

The 2023 ERA-LEARN Annual Report has been prepared by the ERA-LEARN project team using data provided by the P2P networks. In this report, which celebrates 20 years of P2Ps, we provide an updated picture of the P2P landscape that has evolved over the last two decades. It provides an overview of P2Ps over the last 20 years, describing the changes in the funding frameworks, thematic focus and the strategic impacts that P2Ps have made.

ERA-LEARN undertook a range of strategic activities during 2023 that includes an update of the R&I Partnership Evaluation (RIPE) Toolkit to reflect both the new requirements of the new approach in the monitoring and evaluation of Partnerships in Horizon Europe and the requirements of the Biennial Monitoring Report (BMR) for Partnerships. A number of documents were also published during this period, such as the report on the 'Challenges of Widening Countries in the Creation and Implementation of the European Partnerships', the policy brief on 'Translating Research into Innovation: Lessons from 3 case studies in health Partnerships', and the 'Model Consortium Agreement for Co-funded European Partnership' as a tool based on the DESCA Horizon Europe Model Consortium Agreement, with adaptations according to the co-fund needs. ERA-LEARN also organised, and supported the Commission to deliver, a number of webinars and workshops to provide information and support to Partnerships, addressing specific areas of concern such as in the definition and implementation of additional activities, monitoring and evaluation in European Partnerships, the implementation of synergies with Cohesion Policy Funds and the implementation of Cofunded European Partnerships. ERA-LEARN was also delighted to co-organise, with the Commission, the second annual European Partnership Stakeholder Forum, which reviewed the state of play of implementation of the European Partnerships launched under the first Strategic Plan as well as looking at the interim evaluation of Horizon Europe and starting the conversation with the community on European Partnerships in the next Framework Programme. The ERA-LEARN website has also been updated and continues to provide valuable information and guidance to support Partnerships. The provision of new supporting material and information will be an ongoing process to ensure we meet the needs of all stakeholders.

Ther P2P landscape is clearly changing as fewer H2O2O networks remain active and the collaborative strategic activities and transnational joint calls are carried out, more and more, by the larger European Partnerships in Horizon Europe. P2Ps have, however, played a transformative role in the EUs research and innovation landscape over the last 20 years, fostering cross-border collaboration and addressing shared challenges. They have made a significant contribution to innovation and the digital and green transitions, and their impact will live on in the more streamlined and strategically focussed approach under Horizon Europe.

ERA-LEARN continues to provide updated statistical data in relation to networks, calls and funded projects. Detailed charts and statistics can be found on the ERA-LEARN website and much of this is summarised throughout this report. Some headlines include:

- 61 networks were active in January 2023, but 13 ended during the year
- 24 joint calls closed in 2023, over half of which were ERA-NET Cofund additional joint calls (with no EU co-funding)
- By the end of 2023, more than 850 joint calls had been implemented by P2P networks, with cumulative investment of some Euro 10.4 billion in around 10,800 transnational projects
- Six countries have each participated in more than 200 joint calls over the last 20 years Spain, Germany, France, Belgium and Italy
- Germany has committed more funding than any other nation to P2P transnational joint calls, around 45% more than the next closest country in the rankings, France

We could not provide the statistical data without the support of the P2P networks that take the time to provide this data on a regular basis and so we thank all of them for their continued support.

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1. Introduction

The ERA-LEARN annual report continues to be focussed on the Public-to-Public Partnership landscape from the dawn of the ERA-NET scheme in 2003. While the Partnership landscape has changed in recent years, and ERA-LEARN has evolved in line with this, the Annual Report, currently, does not include analysis and statistics on the new European Partnerships in order to avoid duplication with the wealth of data provided in the Biennial Monitoring Report (BMR). The annual report is a complementary source of information on the ongoing P2P Partnerships and demonstrates the significant impact they have on the landscape.

This 9th annual report, from the ERA-LEARN project, commences with an acknowledgement and celebration of 20 years of Public-to-Public Partnerships, reflecting on how they have developed and grown over the last 20 years and the wider impact they have had. It continues with an overview of the work of ERA-LEARN during 2023 and then provides a statistical update on the evolving P2P landscape in relation to calls, committed budgets and transnational projects. Again, this celebrates the commitment of P2Ps over the last 20 years, the leverage effects of EU funding and the continuing national commitment to advancement of the ERA.

Note that additional statistics are available on the ERA-LEARN website.

In line with previous reporting, the networks are segmented into eight types:

- ERA-NET Cofund (the Horizon 2020 ERA-NET Cofund instrument)¹
- EJP Cofund (European Joint Programme)
- JPIs (Joint Programming Initiatives)
- Article 185 Initiatives
- ERA-NET FP6 (the FP6 Coordination and Support Actions)
- ERA-NET FP7 (the FP7 Coordination and Support Actions)
- ERA-NET+ (the FP7 ERA-NET Plus Instrument)
- Self-Sustained Network (P2P networks that continue implementing joint calls after the end of the EU funding)

¹ Analysis of Cofund networks is shown for both the EU co-funded joint calls and the additional calls (without EU co-funding)

Limitations

The majority of the information and statistical analysis contained in the report is based on factual data provided by the P2P networks but there are some limitations and gaps. In such cases, informed estimates have been made so that the scale and diversity of the joint calls are fully apparent.

The ERA-LEARN team and the Commission rely on the data that comes directly from the P2P networks in relation to calls and projects to ensure we can provide the community with the most accurate and up-to date information and analysis available. It is, therefore, important that we can count on the continuing support of those network coordinators and call secretariats that have provided the necessary data that will help us to improve the overall quality of the aggregated data.

Acknowledgements

The ERA-LEARN team would like to sincerely thank the P2P networks that have provided the detailed datasets to support production of this report and the additional statistics available from the ERA-LEARN website. We very much appreciate this ongoing support.

We would also like to thank Marnix Surgeon and Lucas van Hattem at the European Commission for their valuable insight and guidance to support this process.

Feedback

Any comments on this report and/or suggestions for future reports may be addressed to hayley.welsh@optimat.co.uk.

2. 20 Years of Public-Public Partnerships

Public-Public Partnerships (P2Ps) have represented a cornerstone of the European Union's strategy to foster cooperation across member states for more than 20 years, with the aim of strengthening economic, social, and technological advancements throughout the region. These partnerships, formed between multiple governmental entities, leverage collective resources and expertise to tackle challenges that transcend national borders, such as climate change, health security, and digital transformation.

The importance of such collaborations cannot be overstated. By pooling resources, P2Ps have been able to facilitate a higher level of research and development, innovation, and infrastructure development than would have been possible by individual entities acting alone at a national level. This synergy not only accelerates progress but also ensures a more efficient use of public funds, enhancing the impact of government spending.

EU funding for P2Ps reflects a commitment to collaborative action across the continent. Collective funding from the EU and Member States is crucial as it not only provides the necessary monetary resources but also sets a framework for accountability and success measurement. Furthermore, the joint efforts encourage a harmonised approach to solving complex problems, promoting best practice and enabling a smoother exchange of information and knowledge between EU countries. This is particularly important in areas like public health and transport, where coordination across borders can make the difference between success and failure.

Funding and support for P2Ps by the European Union has been, and continues to be, pivotal in shaping the landscape of European cooperation. The Partnerships stand as a testament to the power of collective action and are integral to the EU's vision of a more integrated and resilient Europe.

Historical Context and Evolution

Public-Public Partnerships have evolved significantly since the early 2000s, driven by the EU's strategic goals and the need for enhanced cooperation among member states. The period from 2004 onwards has been particularly transformative, marked by the EU's enlargement, strategic policy initiatives, and the establishment of robust funding frameworks to support collaborative efforts.

The enlargement of the European Union in 2004 and 2007, which brought in thirteen new member states from Central and Eastern Europe, was a catalyst for the development of Public-Public Partnerships. This expansion highlighted the need for deeper integration and cooperation to address disparities in economic development and infrastructure across the EU.

The launch of the Seventh Framework Programme (FP7) was a major step forward, which emphasised the importance of research, innovation, and collaboration. It sought to foster partnerships among member states to address common challenges such as climate change, energy security, and public health. In 2010, the European Commission introduced the Europe 2020 strategy, which set ambitious targets for smart, sustainable, and inclusive growth.

This strategy underscored the importance of public-public partnerships in achieving these goals, particularly in areas like digital innovation, green technologies, and social inclusion.

The launch of Horizon 2020 in 2014 marked a significant milestone in the EU's support for P2Ps. With a budget of nearly €80 billion, Horizon 2020 was the largest EU research and innovation program to date. It focused on three key pillars: Excellent Science, Industrial Leadership, and Societal Challenges. Public-Public Partnerships under Horizon 2020 facilitated significant collaborative projects that brought together public institutions, universities, and research organisations from multiple member states.

Horizon Europe, the current framework program for research and innovation, represents the latest phase in this evolution. With a budget of €95.5 billion, it underscores the EU's commitment to fostering innovation through collaborative efforts. European Partnerships under Horizon Europe are focused on a wide range of topics, from digital transformation and artificial intelligence to climate action and pandemic preparedness.

Shifts in Funding Levels and Thematic Focus

The evolution of the European Union's research and innovation frameworks over the past two decades has seen a dynamic shift in funding levels and thematic priorities. From FP6 through Horizon Europe, the EU has continually adapted its strategies to address emerging challenges and opportunities, ensuring its research programs remain at the forefront of scientific and technological advancement. Public-Public Partnerships (P2Ps) have been a central element in these frameworks.

The Sixth Framework Programme (FP6) marked a significant step in the EU's efforts to promote research and innovation across Europe. With a budget of approximately €17.5 billion, FP6 aimed to integrate and strengthen the European Research Area (ERA) by fostering collaboration among member states. P2Ps under FP6 focused on establishing a cooperative research infrastructure and integrating new member states into the ERA. It was under FP6 that the ERA-NET scheme was introduced, supporting the networking of research activities conducted at the national or regional levels. The focus was on bottom-up initiatives that allowed member states to propose topics based on their national priorities. The themes more relevant for FP6 were related to life sciences, genomics and biotechnology for health; Information Society Technologies (IST); nanotechnologies and nanoscience; and sustainable development, global change and ecosystems.

ERA-LEARN data indicates that around 72 P2P networks were launched under FP6, with national investment of some €877 million. Indeed, many of the networks implemented under FP6 continued to grow and expand further into FP7, H2O2O and even beyond in some cases e.g. EDCTP, CORE Organic, BiodivERsA, Neuron.

The Seventh Framework Programme (FP7) significantly increased funding levels and broadened the scope of EU research and innovation activities. With a budget of €50 billion, FP7 was designed to enhance Europe's competitiveness and address the societal challenges of health; food, agriculture and biotechnology; ICT; energy; environment (including climate change); transport (including aeronautics); and socio-economic sciences and humanities. The ERA-NET scheme continued under FP7, further strengthening the coordination of national and regional research programmes and continuing to launch transnational joint calls for proposals, cofunded by national agencies. ERA-NET Plus was also introduced in FP7 with the aim of providing additional top -up funding to enhance the impact and scale of joint calls. ERA-NET Plus targeted areas of high European added value, ensuring alignment with border policy objectives.

Some 112 distinct Partnerships were implemented under FP7 (22 of which were ERA-NET Plus), with more than €3 billion being committed by member states, associated countries and third countries to transnational projects launched through the P2P joint calls. As indicated above, there was a level of continuity in FP7 with many Partnerships successfully seeking new grants to build on and develop the work started in their FP6 funded Partnerships, such as in the case of BiodivERsA 2, ICT-AGRI 2, BESTF2, MANUNET II, etc.

Horizon 2020 represented a substantial leap forward in both funding and ambition. With a budget of nearly €80 billion, it aimed to drive economic growth and create jobs through research and innovation. The societal challenges addressed under H2020 changed somewhat from those in FP7, reflecting the EUs response to evolving global and regional needs as well as a strategic effort to address more complex, interconnected issues that have a significant impact on society, the economy and the environment. The seven broad areas covered by the H2020 societal challenges were: health, demographic change and wellbeing; food security, sustainable agriculture, and forestry, marine and maritime and inland water research and the bioeconomy; secure, clean, and efficient energy; smart, green, and integrated transport; climate action, environment, resource efficiency, and raw materials; Europe in a changing world - inclusive, innovative, and reflective societies; and secure societies - protecting freedom and security of Europe and its citizens. One of the key funding mechanisms under H2020 was ERA-NET Cofunds, which evolved from the ERA-NET and ERA-NET Plus schemes and combined the coordination of national research programmes with substantial EU co-funding (of up to 33% of the total eligible costs of the joint calls and implementation of additional activities). ERA-NET Cofunds encouraged the pooling of resources to address societal challenges. Joint Programming Initiatives (JPIs) were also introduced under H2O2O to tackle grand societal challenges that required coordinated research efforts, with member states voluntarily joining forces to create long-term research programmes. Article 185s were another important mechanism that have sought to integrate national and EU funding to support largescale, long-term research programmes.

H2020 has spawned some 90 Partnerships and funded around 6,000 transnational research projects, with member states, associated countries and third countries committing more than €6 billion to joint calls. Almost one third of H2020 Partnerships remain active today, with the final Partnership ending in December 2027.

Contributions and Achievements of Public-Public Partnerships

P2Ps have been pivotal in aligning national and EU-level research agendas, pooling resources, and addressing shared challenges. In terms of innovation and competitiveness, P2Ps have strengthened the EU's position on the global stage by enabling collaboration in R&D. Transnational funded projects, implemented by Partnerships' joint calls have led to significant advancements in a number of fields, including health, digital technologies, climate action, and sustainable agriculture. Partnerships under Horizon 2020 have, for example, facilitated multinational clinical trials and coordinated national research efforts to address critical health challenges, demonstrating the power of collaborative innovation.

P2Ps have also been instrumental in supporting the EU's green and digital transitions. Partnerships like BiodivERsA3 and Water4All, for example, have focused on promoting environmental sustainability, addressing critical issues such as biodiversity conservation and water management. These initiatives have contributed to the EU's broader environmental goals by encouraging sustainable practices. In term of the digital transition, P2Ps have

driven advancements in smart cities, digital health solutions, and advanced manufacturing technologies. The research and innovation undertaken by the projects funded by the Partnerships have helped to enhance the EU's resilience and technological capabilities, positioning Europe as a leader in digital innovation.

P2Ps have been able to demonstrate significant success in both their core and additional activities and, under Horizon 2020, this was particularly evident in terms of enhancing research outputs and influencing policy. Partnerships have produced substantial research outputs, including numerous publications and intellectual property rights applications, which have contributed significantly to Europe's knowledge economy, advancing scientific understanding and technological developments. The collaborative activities implemented by P2Ps have led to cutting-edge discoveries and innovations, showcasing the EU's leadership in various scientific and technological fields.

Furthermore, P2Ps have had a profound impact on policy-making at both national and EU levels. Aligning national research agendas with broader EU objectives has allowed the Partnerships to ensure that research and innovation projects funded under their joint transnational calls are central to national policy agendas. This alignment has led to more coherent and effective policies that support scientific advancement and economic growth across the EU.

Despite these successes, the Partnerships have faced a number of challenges, a key one of which has been, and remains, ensuring consistent coordination across different national policies and priorities. It is not surprising that the diverse regulatory environments and varying strategic interests of member states can, and does, often hinder seamless collaboration, making it difficult to achieve cohesive and unified project implementation. Recognising this issue, however, a new governance framework - the strategic coordinating process - was established under Horizon Europe and seeks to enhance alignment and coordination. The process is designed to harmonise the efforts of member states, ensuring that all can effectively participate in and benefit from European Partnerships. By working together with EU countries, it aims to increase the visibility and impact of participation in European Partnerships at the national level.

Another critical challenge that the Partnerships have faced over the last 20 years is the sustainability of funding. Securing long-term funding commitments from member states is crucial for the ongoing success and impact of the Partnerships, without which the continuity and effectiveness of collaborative projects can be jeopardised. To address this, the transition from Horizon 2020 to Horizon Europe sought to establish more robust and stable funding frameworks within which European Partnerships have the necessary financial resources to achieve their objectives and continue to drive research, development and innovation. Horizon Europe's focus on creating more reliable and predictable funding mechanisms aims to mitigate the uncertainties that can disrupt long-term collaborative projects.

The Partnerships have clearly achieved notable successes in enhancing research outputs and influencing policy over that last 20 years and they continue to do so within the Horizon Europe funded Partnerships. The challenges they face will need to be overcome to ensure their continued contribution to an integrated, innovative and resilient society and to maximise the impact of European Partnerships within the wider Partnership landscape. The challenges are being addressed now by a number of different means as the European Commission looks towards the next framework programme.

Conclusion

Public-Public Partnerships have played a transformative role in the EU's research and innovation landscape over the last 20 years. By fostering collaboration across borders and addressing shared challenges, the Partnerships have contributed significantly to innovation and the green and digital transitions. Moving forward, the streamlined and strategically focused approach under Horizon Europe will help to maximise the impact of these collaborations and ensure they continue to drive socio-economic progress across the EU.

3. ERA-LEARN in 2023

The work of ERA-LEARN in 2023 built on the experience and knowledge gained over several previous phases of the project and we continue to support the needs of the evolving Partnership landscape, addressing relevant policy issues, providing guidance and helping to overcome challenges faced by the Partnerships.

A summary of various strategic activities from ERA-LEARN's work during 2023 is provided here.

Partnership Stakeholder Forum

A key event in ERA-LEARN's calendar during 2023 was the second European Partnership Stakeholder Forum, hosted together with the European Commission on 5 and 6 December. The Forum brought together the whole community of co-funded, co-programmed and institutionalised Partnership stakeholders, including officials from national and regional governments, public funding agencies, the private sector and other science policy makers from all over Europe and beyond involved in the design and implementation of European Partnerships. In total, more than 250 participants attended the event in person, while the plenary sessions were streamed live on both days.

The aims of the second Partnership Stakeholder Forum were to:

- Review the state of play of implementation of the European Partnerships launched under the first Strategic Plan, as well as to have a first look at the interim evaluation of Horizon Europe
- Present and discuss the enlargement of the Partnership portfolio under the second Strategic Plan
- Undertake an initial exchange of views, with the community at large, on European Partnerships in the next Framework Programme.



In his opening speach, Markus Schulte - Head of Cabinet of Commissioner Iliana Ivanova, replacing the Commissioner - noted that "amidst the ecological and digital transitions, collaboration is not just nice to have, it is an absolute necessity... European Partnerships are key tools for pooling resources and addressing societal challenges". This reflected the importance of the topics to be discussed and the need to consider how to maxmise the opportunities that lie ahead in the next Framework Programme.

Delegates took part in several parallel sessions that addressed important topics for the Partnership community: synergies between Partnerships and Missions; experiences, achievements and needs of the European Partnerships based on the HE interim evaluation; the additionality and directionality of European Partnerships; as well as openness and transparency and developing a coherent Partnership portfolio. At the same time, the future of Partnerships was discussed in detail, both in terms of their selection process and their design under FP10, considering also their internationalisation and global links under the spectrum of strategic autonomy for the EU. Opportunities for networking were also be provided.

Some key messages emerging from the event included the following:

- As Partnerships enter a maturity phase, they need to ensure a balance between economic and social goals; escape the bureaucracy trap; set high goals; and achieve the scale needed for global competition
- The importance of evaluating the Partnerships and assessing their impacts cannot be overstated. Additionality of Partnerships includes qualitative impacts such as building valuable networks and innovative ecosystems, international visibility and the development of standards or regulations that give Europe a leading position in the world, as well as the mobilisation of public and private funding towards common EU priorities
- Implementation of Partnerships needs to be straightforward; structures and administration should not be excessive or overburden partners and beneficiaries
- New topics should be discussed, putting Partnerships at the centre of EU goals in the industrial and societal sphere
- There is a need for a strengthened, more balanced co-creation approach between all stakeholders - the Commission, Member States, Associated or Third Countries, research actors and industry
- The creation of new Partnerships needs to be backed by sound justification
- There is a need for a constant learning cycle among policy makers, the research community and industry to make the most of this important instrument for achieving EU policy goals.

A full report of the event (summarising the key messages that were drawn from the discussions), as well as video recordings of the sessions and the full agenda for the Forum, is available on the ERA-LEARN website.

RIPE Toolkit

European R&I Partnerships are an important instrument in the new, ever more ambitious EC framework programme, Horizon Europe. Monitoring their progress and evaluating impacts is vital for both establishing their added value within the complicated landscape that has grown over the years, and for informing future steps. The new approach in monitoring and evaluating Partnerships as a policy instrument in Horizon Europe is a reality. This approach complements the individual approaches applied by the Partnerships and the central approach applied by Horizon Europe in evaluating projects supported by Partnerships. The suggested approach has set specific standards and indicators that need to be regularly explained, practiced and mastered, both by Partnerships and participating states.

In this context, ERA-LEARN has updated the guidance and tools provided by the RIPE toolkit to reflect the new requirements of the new approach. This resulted in the addition of an extra part in the RIPE toolkit – now called Revised RIPE Toolkit, i.e. R²IPE – focusing on the Horizon Europe approach and the requirements of the Biennial Monitoring Report (BMR) for Partnerships. The 'old' RIPE part includes the basic information related to monitoring and evaluation practices adjusted to Partnerships and including relevant examples and tips but does not reflect the needs of the BMR. This is done in the new block of the R²IPE toolkit, that includes the data collection and analysis requirements that need to be met by Partnerships and countries to prepare the BMRs. It draws on the reports produced by the Commission's expert group on support for the strategic coordinating process for Partnerships – EU monitor.

The new part of the R²IPE toolkit is based on the most updated work on the monitoring and evaluation (M&E) of European Partnerships. As the BMR process proceeds, regular updates will be made, where relevant, to include the most recent examples, lessons learnt and tools. The examples and lessons learnt that are included in this new version are based on the BMR 2022 report. Cross-references are also made to sections in the Basic M&E part of the R²IPE toolkit as relevant.

Monitoring & Evaluation Basics The Horizon Europe approach - Monitoring system - BMR requirements - Intervention logic - Logic Frame - Complementarity of the - Evaluation timing & questions new approach - Data collection R²IPE - The partnership level **Cross-references** - Data analysis - The country level - Using the results (quality of report, - The EC level communication) Each topic including good - Challenges in M&E of Ps practice examples and Each topic including examples and lessons learnt from BMR good practice tips

Glossary

Further Reading

Tools for internal review of participation in networks

List of criteria to access network participation

Country Reports

In order to describe the 'performance' of a country in European R&I Partnerships within the context of their own national and regional research and innovation systems, we regularly develop and publish Country Reports. Previous reports covered Poland, Austria, Spain, Belgium, Finland and Norway, Germany and Estonia and, in 2023, the ninth Country Report on France was published and can be found on the ERA-LEARN website, with some highlights provided here.

Similar to the other heavy weights in European Partnerships, France, like Germany, Spain or Italy, presents a high level of participation in Partnerships as well as the funding of transnational projects. France enjoys a mission-oriented policy approach that very much favours a leading position in both the European Partnerships and the wider EU policies discourse. National coordination in the R&I policy arena is high and there are structures enabling wide consultation and mobilisation of research actors in international cooperation in research and innovation. Transnational / international collaboration has always been a high-level priority for France, which has undertaken a number of initiatives driving developments in European Partnerships.



Overall, participation in European Partnerships in Horizon 2020 was positively assessed by the interviewees. The networking enabled between the main European players (ministries and funding agencies) was highly appreciated, alongside the opportunities for monitoring key issues and the sharing of knowledge / data requirements as well as in relation to developing skills and knowledge and exploring the possible harmonisation opportunities at the EU level, where relevant. European policies were better understood and shared, while national policies, know-how and initiatives gained in international visibility. Gains were also acquired through the opportunities for concerted influence of European research programming in relation to national and European public policy needs. The EU glue money and collaboration within the Partnerships allowed players a unique opportunity to work together with non-European countries outside Member States, i.e. Associated or Third countries. This has been very important, in particular with Africa and southern Mediterranean countries. It also allowed collaboration with European countries where little collaboration existed previously. Moreover, Partnerships helped bring together communities whose research efforts were rather dispersed, by combining their efforts around common goals, for example in biology and health.

Yet, there are several areas of improvement that were highlighted in the research, and it is clear that some specific issues persist in the new Partnerships established under Horizon Europe. Managing participation in Partnerships can be time-consuming, with slow and or complicated decision-making processes that take even longer in Partnerships with large memberships. Appropriating and operationalising the results and outputs of the SRIA and the portfolio of activities may also prove challenging. Alignment of the procedures and regulations in relation to financial aspects, decision-making processes, eligibility criteria, etc. across the different funding agencies remains an issue, and there are further challenges facing the new Partnerships such as the conflicts of interest for research institutions when they take part as both Partnership members and as project beneficiaries. The interviews highlighted that another area in need of continuous effort is the creation of synergies, both across and between Partnerships, and with other instruments such as missions. A key enabling opportunity noted is in relation to the development and implementation of joint calls with other Partnerships; this is a complex process but overcomes the problems in developing separate complementary calls that, ultimately, do not facilitate the transdisciplinary nature of projects. Encouraging the involvement of local and regional authorities (regions, overseas territories) is another important topic that was raised and is still in need of particular attention.

Notwithstanding the areas of improvement highlighted by the research and the persisting challenges noted, France continues to show strong commitment to exploiting the Partnership instrument to the full in Horizon Europe.

Workshops and Webinars

During 2023, ERA-LEARN organised, and supported the Commission to deliver, a number of webinars and workshops to provide information and support to Partnerships, addressing specific areas of concern or interest. Some key events to note, from 2023, are:

 Webinar on issues of Co-funded European Partnerships - definition and implementation of additional activities beyond joint calls

Co-funded European Partnerships are facing challenges in defining and executing additional activities beyond joint calls ("in-kind" contributions). In an effort to resolve these challenges, the European Commission and ERA-LEARN organised a webinar on this

topic, which was delivered on 24 January 2024. The aim of the webinar was to explain the concept of "additional activities" with a short presentation by the European Commission on the general principles, a clear practical example from a Co-funded European Partnerships that has already been successful in executing these additional activities and two simulations. In addition, during the webinar, there was time to discuss (common) challenges that the Co-funded European Partnerships are facing and their specific experiences, so they could exchange good practices and learn from each other.

Webinar on Monitoring & Evaluation of Partnerships

ERA-LEARN hosted a webinar (on 18 September 2023) to familiarise Partnerships and member state officials with the requirements for preparing the BMR 2024, building on the guidelines (2nd Interim Report) of the Expert Group on support to the Strategic Coordination Process that prepared the BMR 2022. Capitalising on the experiences of the individual Partnerships and the common monitoring and evaluation framework of Horizon Europe, the workshop aimed to:

- Establish a common understanding of the requirements of the new monitoring and evaluation framework of Partnerships under Horizon Europe
- Offer participants and member state officials a hands-on experience in designing and advancing their monitoring and evaluation framework in view of positioning this into the overall M&E framework

Webinar on Synergies with Cohesion Policy Funds

This webinar, hosted by ERA-LEARN on 10 May 2023, was designed to provide a discussion and mutual learning space for the implementation of synergies with Cohesion Policy Funds. It was designed for coordinators and beneficiaries of European Partnerships as well as regions and managing authorities with the objectives of sharing experiences related to the first wave of European Partnerships and to gather information on how improvements could be made in terms of mutual communication, meeting respective needs and implementing synergies with mutual benefit.

Webinar on the Implementation of Cofunded European Partnerships

DG Research & Innovation, in collaboration with ERA-LEARN, delivered a webinar on the "Implementation of co-funded European Partnerships" on 27 April 2023. The presentations focused on urgent issues such as the use of in-kind contribution and the involvement of Research Performing Organisations (RPOs). This was enhanced by a facilitated discussion on the experiences of various stakeholders and Partnerships on governance and financial/call management. The webinar was aimed at coordinators and beneficiaries of co-funded European Partnerships.

Note that the agendas, video recordings, presentations, and Q&A outputs for all workshops and webinars can be found on the ERA-LEARN website.

Website Updates

As a new type of instrument under Horizon Europe, European Partnerships, as noted, continue to face challenges with regards to their implementation. ERA-LEARN has, therefore, continued to support the Partnership community to address these challenges, providing relevant information on its website, organising workshops and events, and by providing guidance where needed. In addition to the information and links already provided throughout this section of the report, we note further documents, tools and information that is available on the ERA-LEARN website that may be of use to the wider Partnership community.



- European Partnerships aim to address global challenges and industrial modernisation through joint actions of the Member States and other stakeholders. In the ERA-LEARN Report <u>Challenges of Widening countries in the Creation and Implementation of the European Partnerships</u>, we present the results of an ERA-LEARN survey on some of the early organisational and national challenges and opportunities faced by national and regional stakeholders in EU Members States and Associated Countries, comparing the experience of Widening countries in comparison to the non-Widening countries.
- One of the aims of Partnerships is to bridge the 'valley of death' by linking excellent research with technology and solution-minded business undertakings, hence generating virtuous cycles of research and innovation. The role of the Partnerships goes beyond the resources and incentives approach and focuses on opportunities for knowledge co-creation and diffusion as well as on entrepreneurial venture. In 2023, ERA-LEARN published the policy brief "Translating research into innovation: Lessons from 3 case studies in health Partnerships" with a focus on health-related Partnerships. The aim of this policy brief is to establish a methodological approach to understand translation of research into innovative outcomes.
- Based on a comprehensive analysis of existing and already validated procedures, ERA-LEARN facilitates the identification of tools that are suitable for a broad use. Part of this set of tools is a <u>Model Consortium Agreement for Co-funded European Partnerships</u>. To support the preparation of specific Consortium Agreements (CAs), ERA-LEARN provides a model CA, which is based on the DESCA Horizon Europe Model Consortium Agreement, with adaptations according to the co-fund needs.

More generally, for increased usability of our Partnership database, we have improved the search and filter functions for both Partnerships and calls. We have, furthermore, launched our <u>LinkedIn</u> channel to aid in reaching out to the Partnership community and we would encourage Partnerships, beneficiaries and other interested stakeholders to follow this page. Over the coming years we will continue to update the content of the website in line with new developments to address the needs of the European Partnerships, as well as improving the functionality and usability of the website to ensure user-friendly navigation through the Partnership landscape and to support the ongoing and emerging needs of the community.

4. P2P Transnational Joint Calls in 2023

In this section of the report, we would like to highlight some key statistics in relation to the joint calls implemented during 2023 to demonstrate the ongoing activity of the H2020 P2Ps.

2023 Joint Calls

In 2023, 24 joint calls closed, across all H2020 P2P network types. A breakdown of this is shown in Figure 1 below. ERA-NET Cofunds were, in line with recent years, the most prominent in terms of the number of calls being implemented, with all ERA-NET Cofund calls being additional joint calls, without EU funding. In 2023, all Article 185 calls were implemented by the PRIMA network.

As in previous reports, the ERA-NET Cofunds that are specifically related to a JPI have been highlighted separately within the overall ERA-NET Cofund totals to demonstrate the additional work of the JPIs beyond their own joint calls. In 2023, three JPI related ERA-NET Cofund calls closed, all of which were additional ERA-NET Cofund calls (without EU co-funding).

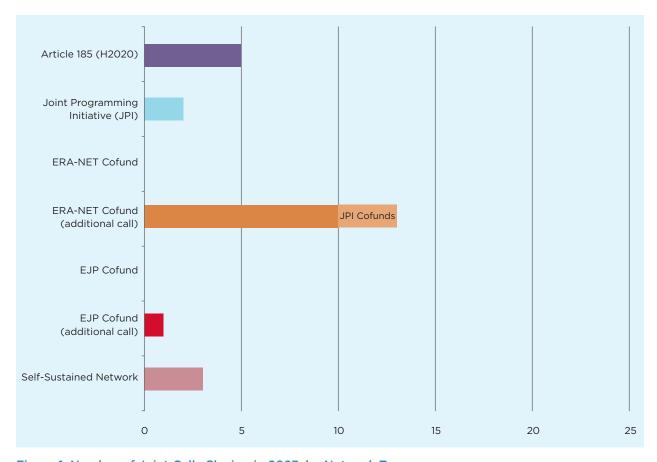


Figure 1: Number of Joint Calls Closing in 2023, by Network Type

ERA-NET Cofunds

In 2023, in the same way as the previous year, only additional ERA-NET Cofund calls were implemented (with no EU co-funding), of which there were 13. Four of these were 2nd calls, four were 3rd calls, three were 4th calls and two were 5th calls. In 2024, there are six additional ERA-NET Cofund joint calls being implemented or planned, with three networks planning their 5th calls.

Figure 2 highlights the changing picture of ERA-NET Cofund calls, both EU co-funded and additional calls, since 2015. Since then, there have been a total of 187 ERA-NET Cofund calls implemented, 110 of which have been additional calls.

As noted each year in our report, there are many ERA-NET Cofunds that will only ever implement one joint call, but others are using the instrument to launch multiple calls and leveraging the effects and the momentum gained from the initial EU co-funding.

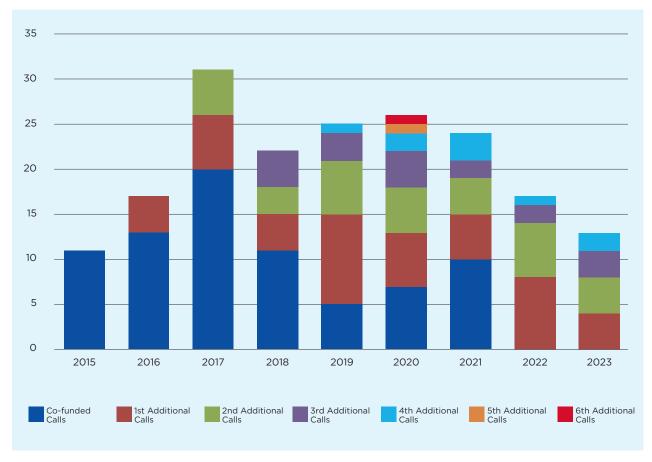


Figure 2: ERA-NET Cofund Calls by Year Call Ended

Many ERA-NET Cofund networks are now coming to an end as the transition to European Partnerships continues. At the end of 2023, 22 of them remained active (28% of the total number of ERA-NET Cofund networks implemented since 2015), with the final ERA-NET Cofund ending in December 2026.

JPIs

In 2023, five JPI related calls closed, two of which were implemented under the framework of the JPI, with the other three being additional ERA-NET Cofund calls with no EU co-funding. The pattern of JPI related calls since 2015 is shown in figure 3.

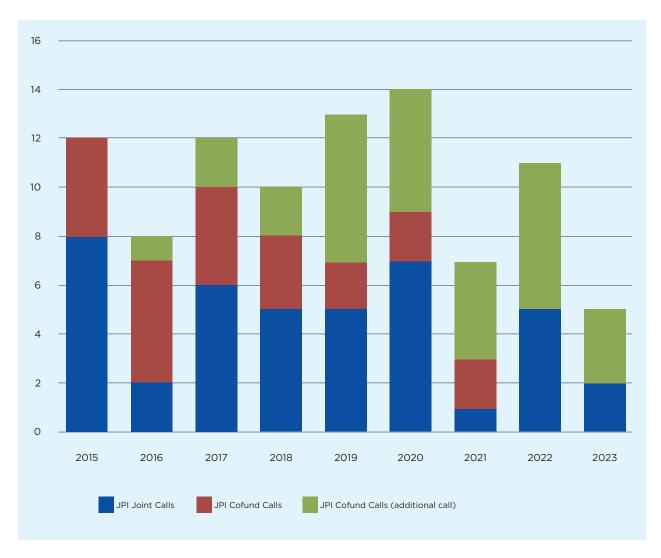


Figure 3: JPI Calls, by Year Ended

There has been a decrease in call activity within the JPI networks over the past year, with 2023 recording the lowest number since before 2014. This, however, is unlikely to fully represent the level of call activity among the wider JPI community as it also transitions to European Partnerships and enhances the level of collaboration it has successfully achieved in recent years.

Article 185s

In 2023, five Article 185 calls closed, all of which were implemented by one network, PRIMA. The broader pattern of call activity since 2015 is shown in figure 4. Most of the activities undertaken by the other Article 185s have now transitioned to the new European Partnerships, although they continue to monitor the projects funded by their previous transnational joint calls.

In 2024, PRIMA will continue to be the only Article 185 implementing transnational joint calls. In 2025, however, it will formally transition to an Institutionalised Partnership under Horizon Europe.

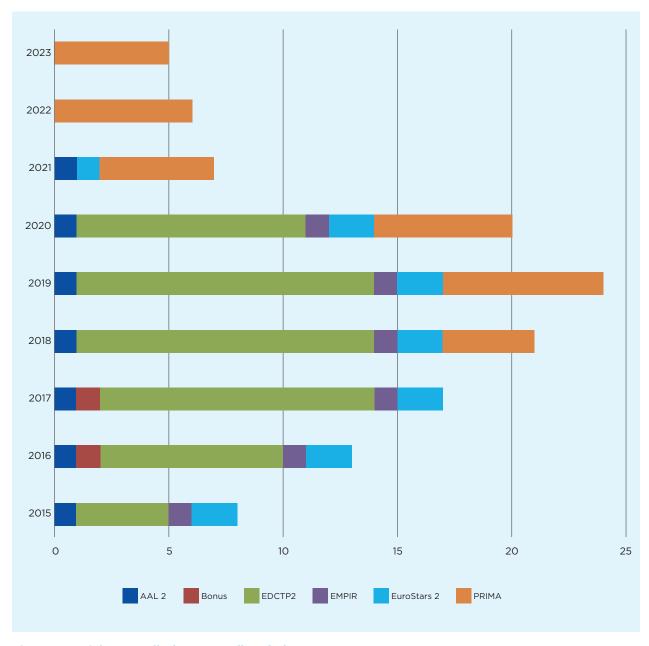


Figure 4: Article 185 Calls, by Year Call Ended

5. Evolution and Diversification of the P2P Landscape over 20 Years

This section provides an update on the evolution of the P2P landscape over the last 20 years, demonstrating the changes and trends over time and showcasing the vast efforts, commitment and experience of the P2Ps that have evolved and flourished since the dawn of the ERA-NET scheme in 2003. It builds on data presented in the previous annual reports and includes all P2P network types.

5.1. P2P Networks

At the end of 2023, there were 48 distinct P2P networks still active, 22 of which were ERA-NET Cofunds, two were EJP Cofunds and four were Article 185s. The 10 JPIs were also active and will continue to be until the end of 2027, and 10 self-sustained networks remained active in launching calls as well as undertaking other relevant strategic activities.

During the course of 2023, 12 ERA-NET Cofund networks ended, alongside one EJP Cofund network (EJP RD).

It is clear that not all P2P networks continue to implement joint calls, with many focussed on the monitoring of ongoing transnational funded projects as well as other strategic and joint activities, some of which are linked to the work of the JPIs or self-sustained networks. Many are also closely aligned with the work of the European Partnerships and so collaborate at a strategic level within the new, wider, Partnership landscape.

The reduction in call activity among the P2P networks, therefore, does not necessarily reflect the strategic efforts, alignment and collaboration that is actually taking place by actors in the P2P community.

5.2. Joint Calls

Since 2004, some 851 joint calls have been implemented. This excludes calls that were launched, but not closed, before the end of 2023. A summary of calls that closed each year is shown in Figure 5. Note that, additional data made available since the previous report has updated some historical figures.

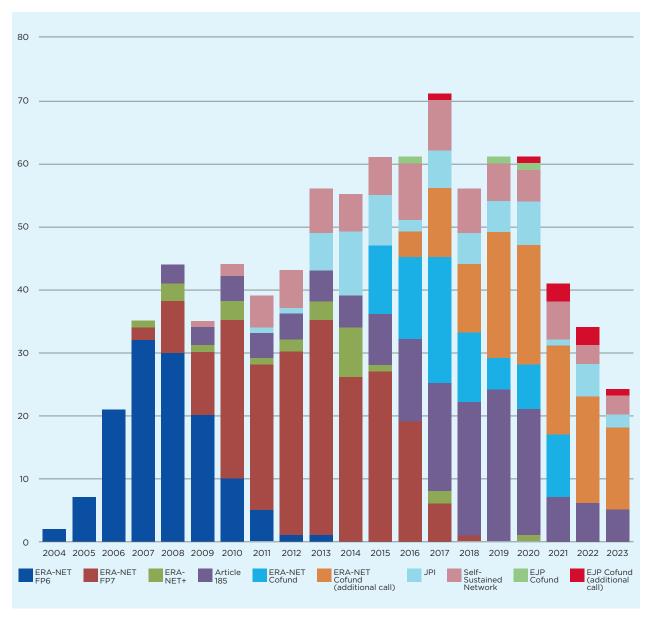


Figure 5: Number of Joint Calls (closed) between 2004 and 2023, by Network Type

Figure 5 presents a clear picture of the P2P landscape that has evolved over the last 20 years. The changing pattern of calls from FP6 through FP7 and into H2O2O is evident. 2017 remains the peak of joint call activity with more than 70 calls closing that year, around 44% of which were from ERA-NET Cofund networks. As the transition to European Partnerships continues and becomes more mature, it is inevitable that fewer calls will be implemented under Horizon 2020 and within its P2P networks. In 2023, ERA-NET Cofund networks represented 54% of all calls.

A cumulative picture of the number of joint calls since 2014 is shown in Figure 6. Since 2021, the number of joint transnational calls implemented under the Horizon 2020 framework has superseded the number spawned from the FP7 funding framework, currently standing at some 322 joint calls (264 joint calls were implemented under FP7). Since 2015, 186 ERA-NET Cofund calls have closed, 109 of which have been additional calls with no EU co-funding (59% of all ERA-NET Cofund calls).

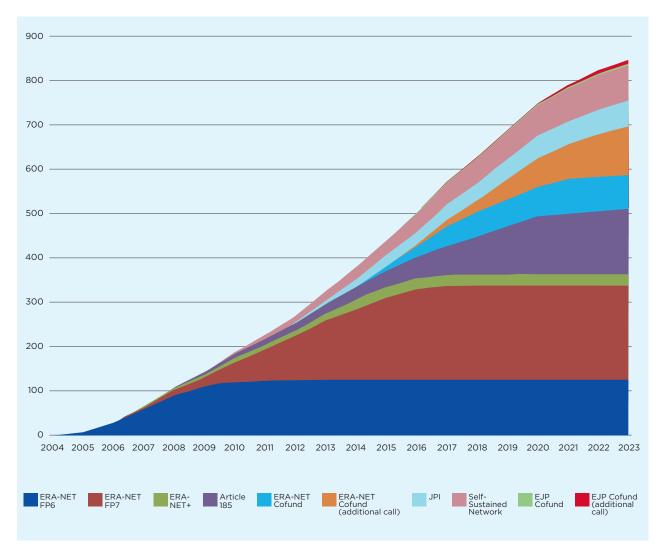


Figure 6: Cumulative Number of Joint Calls, Since 2004, by Network Type

The total national cumulative pre-call budget for all joint calls, since 2004, is over Euro 9.9 billion (excluding EU contributions). The annual comparison, by network type, is shown in Figure 7, below. This demonstrates the intention and commitment of the funding agencies participating in the calls rather than the funds that were actually invested following evaluation of, and negotiation with, the selected transnational projects.

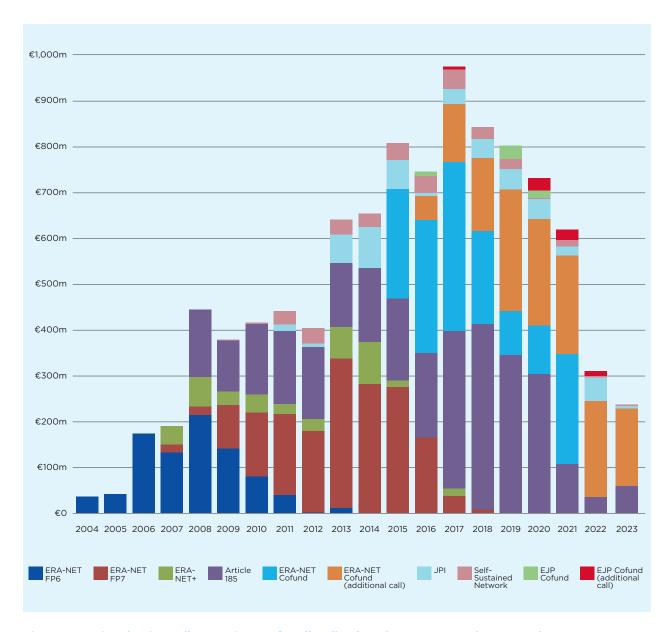


Figure 7: National Joint Call Commitment for all Calls Closed 2004 - 2023, by Network Type

Figure 7 demonstrates that the national financial commitment to calls in 2023 continues to decrease in line with the downward trend in national funding commitment since the peak in 2017 and, in particular, since the transition to Horizon Europe, where national budgets are, naturally, moving. There remains, however, a significant level of national investment in Horizon 2020 P2P calls, reaching almost Euro 250 million in 2023, most of which were additional joint calls without EU co-funding. Given the number of active networks, there is clearly a focus, among many, on monitoring funded projects rather than the implementation of new calls.

As noted in previous reports, the ERA-NET Cofunds have produced the largest national commitment to joint calls (co-funded and additional calls) since 2015 (around 61%). ERA-NET Cofund additional joint calls accounted for more than 71% of total committed call budgets in 2023. Total national commitment to joint calls implemented by ERA-NET Cofunds since their inception has been more than Euro 2.96 billion.

As has been the case since the beginning of the ERA-NET scheme, the total national pre-call committed budget is not always fully utilised and so the actual investment in projects can be lower than planned. Figure 9, below, indicates the cumulative actual investment in projects. This also includes the EU contribution. Note that data in relation to actual national investment in calls is not available for all networks and all calls. ERA-LEARN analysis indicates that, on average, the national investment in joint calls is some 86% of the pre-call committed budget and so where actual investment data is not available or has not been provided, the average realisation of budget has been used to produce estimates for the missing population and allow the scale of investment to be approximated.

Without the EU contribution, the estimated actual investment in calls, as expected, is lower than the figures budgeted by the networks. When the EU contribution is added, however, total investment still reaches more than Euro 10.4 billion.

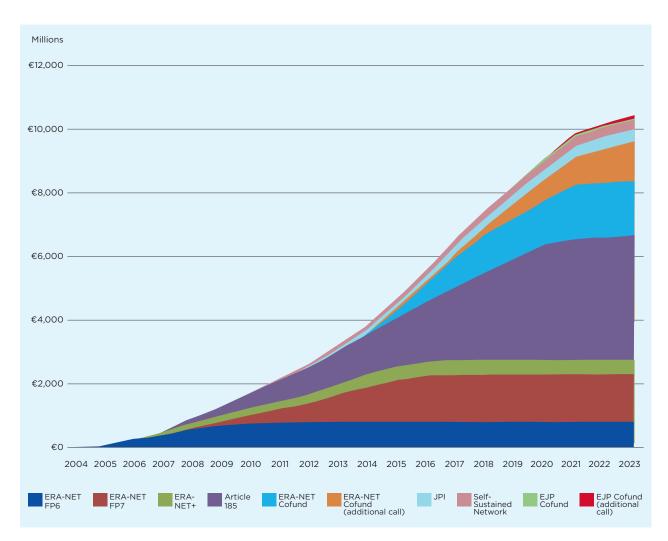


Figure 8: Cumulative Investment in Joint Calls, including EU Contribution, 2004-2023

Note that neither budget nor actual figures include any in-kind contribution to projects (apart from the Metrology Article 185). Complementary investment of institutional funding in Joint Actions, particularly from the JPIs, is also not included.

5.3. Portfolio of Funded Projects

Some 10,800 projects have been funded by the joint calls since 2004. Figure 9 shows the annual volume by network type (based on the year the call closed).

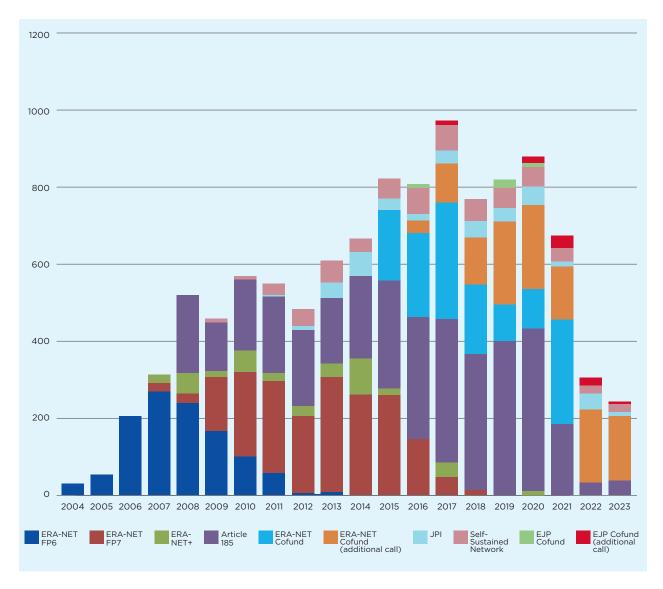


Figure 9: Number of Transnational Projects, by Year and by Network Type

In line with the more limited data available in the short period following the evaluation of proposals, the figures for 2023 are lower than the actual number of funded projects. This is due to the time lag between the joint call being closed and the transnational projects being evaluated and started, which can often be many months. Some networks have not yet been able to provide project specific data in relation to their 2023 calls and the data collection process is ongoing. Note that where no project level data has been provided by the networks, an average figure has been applied to the call to allow reasonable assumptions to be made regarding the overall number of projects that have been funded. Historically the figure for the latest year has increased when accurate data has been provided by the networks.

The cumulative picture of transnational funded projects is shown in Figure 10.

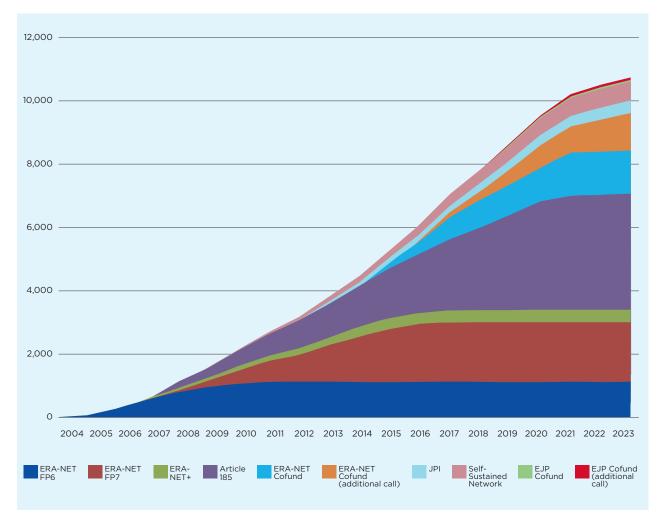


Figure 10: Cumulative Number of Transnational Projects Funded

ERA-NET Cofund networks have funded more than 2,550 transnational projects since 2015, with around 47% of these resulting from additional ERA-NET Cofund calls (without any EU co-funding).

6. H2020 Country Comparators

In addition to the overview of the last 20 years of P2Ps, it is interesting to consider the participation of countries in Horizon 2020 and the huge contribution made to the development of the ERA and the more strategic coordination processes in place today. The impact of the H2020 Partnerships has been, and continues to be, significant in terms of enduring connectivity, capacity building, attitudinal/cultural change, conceptual thinking and the changes in institutions and structures in the national and/or European research landscape, as noted in the BMR (2022).

Country Participation in Transnational Joint Calls (H2020)

Figure 11 indicates the number of transnational joint calls in which each country has participated during H2O2O. Note that, for some countries, more than one national organisation may have taken part in the call, and so the number of participations may be higher than reflected here.

Significantly, six countries have participated in more than 200 transnational joint calls, with 12 having taken part in more than 150 joint calls each and 20 participating in more than 100 joint calls during H2020. The most active players also tend to be those that have coordinated most H2020 networks i.e. Germany, France, Netherlands, Austria and Spain.

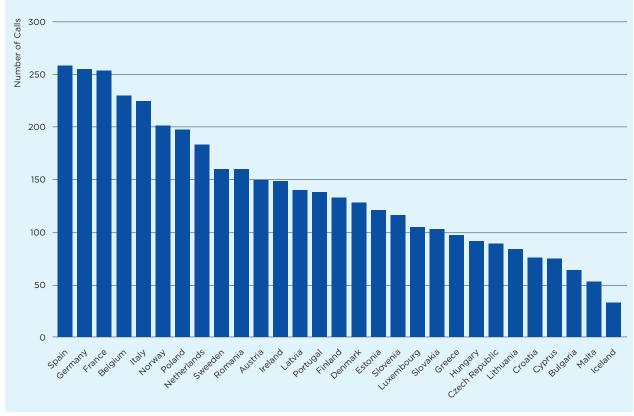


Figure 11: Participation in P2P Joint Calls, by Country, during H2O2O

In terms of the budgets committed by each country to these calls, figure 12 clearly shows that Germany has committed more than any other country to transnational joint calls in H2O2O, at the pre-evaluation stage. This is around 45% more than the second country in the list, France. The most active countries, both in terms of financial commitment and participation in joint calls are Germany, France, Spain and Italy and Norway.

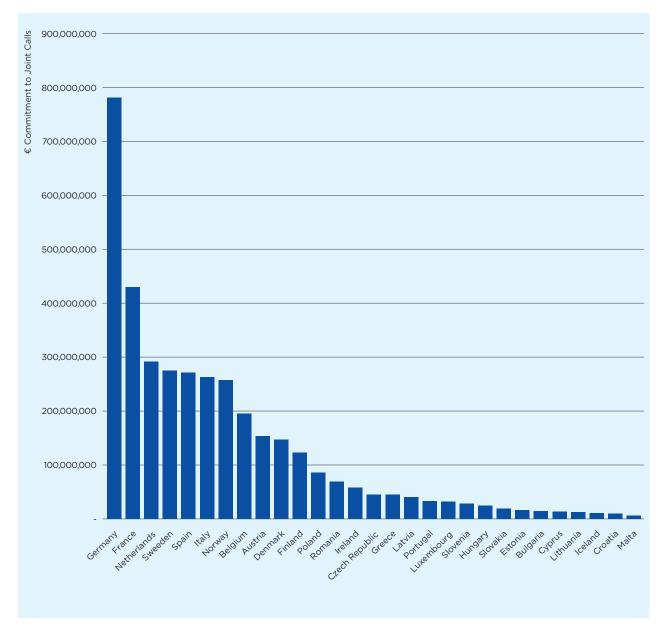


Figure 12: Financial Commitment to Joint Calls, by Country, during H2020

If we look at national commitment to joint calls in the context of each country's overall government budget allocations for R&D (GBARD), however, we can see that while Germany and France have had the highest absolute financial commitment to H2020 joint calls, it reflects a relatively small proportion of the significant R&D budgets available in these countries. On the other hand, countries such as Latvia, Romania and Malta stand out as having had strong commitment to H2020 joint calls relative to their national R&D budgets, which will have helped to enhance their research capacity and foster innovation through partnerships.

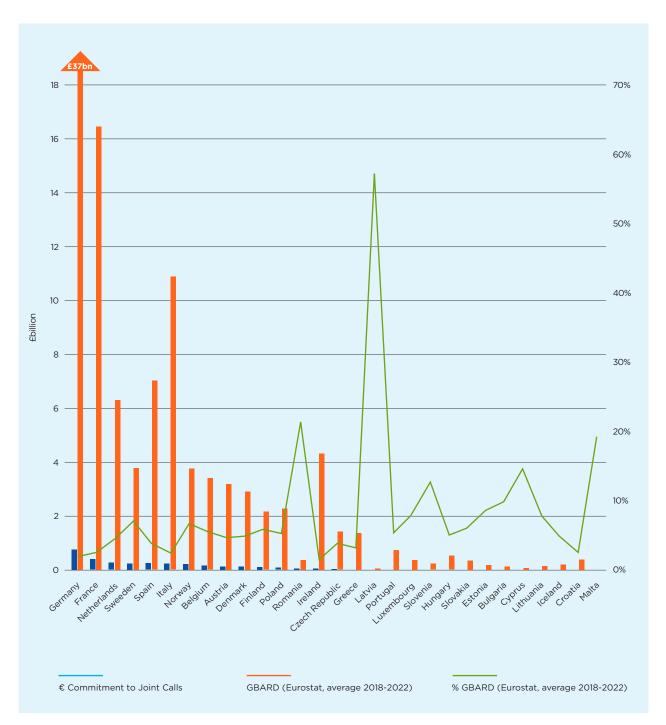


Figure 13: MS/AC Commitment to Horizon 2020 Partnerships compared to GBARD

The figures above include all data available to ERA-LEARN for calls to the end of 2023.

7. Conclusion

It is clear that P2P activities from the Horizon 2020 Partnerships is reducing year-on-year, with calls and other strategic activities being implemented in the new European Partnerships under Horizon Europe. The transition path of the Partnerships was explored in the 2021 and 2022 ERA-LEARN Annual Reports and clearly demonstrates the continued effort, interest and commitment of participating countries in Horizon Europe. Indeed, an even more strategic approach is being applied in the various European Partnerships as the potential of the scheme as a policy instrument is realised, in terms of both alignment and strategic development.

ERA-LEARN continues to support the strategic and learning needs of the wider Partnership community and will regularly publish new and updated content on the website in line with both the existing and emerging needs of Partnerships.

On a final note, the 2024 Annual Partnership Stakeholder Forum is being co-organised with the European Commission and will take place in Brussels on 4 and 5 December 2024. Further details will be published on the ERA-LEARN website in due course as well as via the ERA-LEARN newsalert.

