Foreword

Throughout 2022, the focus of the work on European Partnerships gradually shifted from implementing the portfolio of candidates included in the first Horizon Europe Strategic Plan towards a stronger emphasis on monitoring and evaluation and the preparation of the second Horizon Europe Strategic Plan.

The work on monitoring and evaluation resulted in the publication of the first Biennial Monitoring Report on the performance of European Partnerships, which will be instrumental in strengthening the evidence base for European Partnership policy. A second version is currently being prepared for publication in 2024.

The work of the Partnership Knowledge Hub has also taken off during 2022, culminating in the organisation of the first Annual Forum on European Partnerships, held in November.

ERA-LEARN has continued to be a strong partner of the Commission in this work, not least of which through its invaluable support in organising the Annual European Partnership Stakeholder Forum. In addition, its website continues to be an important resource and repository of information for policy makers, Partnership professionals and other stakeholders. Targeted workshops on well identified needs have contributed significantly in this respect, as has the publication of frequent News Alerts and the ongoing 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 formidable support and meticulous work of the ERA-LEARN consortium and in particular Hayley Welsh and Katrina Watson from Optimat.

In the meantime, a new grant agreement has been concluded between the European Commission and the ERA-LEARN consortium, securing continuation of its activities for the remainder of Horizon Europe. This will allow ERA-LEARN to enter a new phase in its work. 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.

Fabienne Gautier
DG RTD, Head of Unit
G4 ‘Common Missions and Partnerships Service’
Executive Summary

This is the 8th Annual Report on Public-Public Partnerships (P2Ps) that has been prepared by the ERA-LEARN project team using data provided by the P2P networks. The report provides an updated picture of the evolving P2P landscape and some headline statistics. It also highlights examples of good practice and achievements from networks during 2022 as they seek to address specific challenges and create a wider impact within the community, in an increasingly collaborative manner.

ERA-LEARN has undertaken a range of strategic activities during 2022 that includes the continuation of the work aimed at promoting widening and inclusiveness in Partnerships as well as the publication of a number of reports and guidance documents including a systematic overview of common governance functions that European Partnerships, Responsible Research and Innovation (RRI) guidelines, a new country report covering Estonia and a policy brief looking at 'Translating Research into Innovation: Lessons from 3 Case Studies in Health Partnerships'. A number of webinars and workshops were also organised covering information related to the transfer of data from co-funded European Partnerships to the EC and the monitoring and evaluation requirements in Horizon Europe. ERA-LEARN was also delighted to organise, in conjunction with the Commission, the first annual European Partnership Stakeholder Forum, which took stock of the first year of European Partnerships and, in particular, how they can contribute to the twin green and digital transitions, as well as increasing Europe’s resilience. The ERA-LEARN website has also been updated and continues to provide valuable information and guidance to support the new Partnerships. The provision of new supporting material and information will be an ongoing process to ensure we meet the needs of all stakeholders.

The current P2P landscape continues to evolve, with the leverage of the ERA-NET Cofund instrument evidenced by the ever-increasing number of additional calls being implemented by the ERA-NET Cofund networks with no EU co-funding. There are also some clear examples of good practice from networks across the community as they work to address challenges related to widening, multilateral collaboration and synergies, among others. Details on some of these have been provided in the report to demonstrate such activities and the wider achievement of long-standing programmes, for example:

- **The importance of collaboration in developing and implementing transnational joint calls:** Collaboration is a key theme running through many of the examples in this report and ICT-AGRI-FOOD has highlighted the mutual benefits and significant opportunities that can be achieved through collaboration with partners that include other relevant P2P networks as well as organisations such as the European Space Agency, creating new transnationals and cross-sectoral opportunities for the research community.

- **Celebrating AAL’s lasting legacy:** AAL has held its final European Week of Active Healthy Ageing 2022 (EWAHA2022) 14 years after the programme began. Legacy was a running theme throughout the event, with much discussion about what had been achieved, what had worked and what still needed to be addressed. An emotional event that celebrated the network and the achievements of the community included a keynote speech from a Nobel Peace Prize winner.
— **The Water JPI publication of key reports:** An evaluation panel was assigned the task of evaluating the performance of the Water JPI, with the launch of its Global Impact Assessment Report, which considers the impact created during the first ten years of its existence and explores its future perspectives. It has also completed the development of its international cooperation strategy, which sets out strategic areas in the field of water research and innovation and lists strategic partners with which collaboration will be strengthened in the future.

— **Joining forces of ERA-NET Cofunds, EJPs and self-sustained initiatives:** The Green-ERA Hub started in September 2022 and represents 15 currently active or finalised ERA-Net cofunds and self-sustained initiatives in the field of Agri-food and biotechnology. While not a P2P, it is a new CSA aimed at building on previous achievements, applying the knowledge and experience already gained, identifying common research and innovation priorities and further enhancing cross-sector collaboration between Agri-food and biotechnology ERA-Nets.

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:

— 89 networks were active in January 2022, but 31 networks ended during the year. No new P2P networks started in 2022.

— 34 joint calls closed in 2022, around 50% of which were ERA-NET Cofund calls.

— Of the 17 ERA-NET Cofund calls that closed in 2021, all of them represented additional calls (with no EU co-funding).

— By the end of 2022, some 827 joint calls were implemented by P2P networks, with cumulative investment of some Euro 10.1 billion in almost 10,500 transnational projects.

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.
Contents

1. Introduction 6
2. ERA-LEARN in 2022 8
3. Mapping of the Transition to European Partnerships 11
4. Evolution and Diversification of P2Ps 16
5. P2P Highlights from 2022 22
6. Outlook 38
7. Policy Brief Summary 39
1. Introduction

The ERA-LEARN annual report has always been, and 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). While some changes to the Annual Report are likely to be implemented in the next phase of ERA-LEARN, it remains a complementary source of information on the ongoing P2P Partnerships and demonstrates the significant impact they have on the landscape.

This 8th annual report on the P2P landscape, from the ERA-LEARN project, commences with a short overview of the work of ERA-LEARN during 2022. It then provides an update to the mapping diagrams prepared for the 2021 Annual Report to reflect the ongoing transition of P2P networks to the new European Partnership landscape. Following this, it provides an update regarding the evolving P2P landscape in relation to calls, committed budgets and transnational projects and then highlights some of the work undertaken in 2022 individually and collaboratively by different networks across the various types. The report concludes with an outlook on future planned activities.

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 his colleagues 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 hayleywelsh@optimat.co.uk.
2. ERA-LEARN in 2022

The current phase of the ERA-LEARN Platform comes to an end in mid-2023, with a new phase beginning immediately thereafter. Our work builds on the experience and knowledge gained over several previous phases of the platform, supports the needs of the evolving Partnership landscape and helps to address relevant policy issues.

A summary of various strategic activities from ERA-LEARN’s work in 2022 is provided here.

Launched as a new type of instrument under Horizon Europe, European Partnerships have been facing many challenges with regards to their implementation. To address this, ERA-LEARN continues to support Partnerships with relevant information on its website, tackling key issues and providing guidance where needed. A full update of the website will be completed in 2023 but we highlight here some specific additions to the information available during 2022. ERA-LEARN published, on its website, a systematic overview of common governance functions that European Partnerships should aim to establish. This was prepared against a background whereby the new Partnership approach calls for different governance arrangements to be in place, both inside the individual Partnerships as well as between them. European Partnerships are expected to allow flexibility of implementation and being able to adapt to changing policy and societal and/or market needs requires coordination with other relevant R&I initiatives. ERA-LEARN has also published Responsible Research and Innovation (RRI) guidelines on its website to support Partnerships in Horizon Europe and address any potential issues they might have. The body of knowledge and practice for RRI, relevant for Horizon Europe, was built up during Horizon 2020, with the elements of RRI provided in the Commission’s H2020 guidelines – ethics, gender equality, open access, public engagement and science education – also used as the basis for European Partnerships.

During 2022, ERA-LEARN organised a number of webinars and workshops to provide information and support to European Partnerships in a number of areas. Two key events to note were:

— A webinar on the data transfer of co-funded European Partnerships, focussing on the transfer of data on transnational calls by the Partnerships, was held in June 2022 and organised in collaboration with the European Commission/DG Research & Innovation. It addressed the new requirements under Horizon Europe to provide information on the range of data required and the technical details related to this.

— Following the launch of the first Biennial Monitoring Report (BMR), ERA-LEARN organised the first in a series of workshops to familiarise Partnerships and Member State officials with the new monitoring and evaluation requirements, building on the guidelines (2nd Interim Report) of the Expert Group supporting the Strategic Coordination Process. Experience of the first Biennial Monitoring Report (BMR) 2022 indicated that aligning the monitoring and evaluations efforts of the individual Partnerships with the requirements of the overall monitoring and evaluation framework of Horizon Europe is not a trivial task. Regular training in this area will, therefore, continue to be needed.
Note that the video recordings, presentations, FAQs and Q&A outputs for all workshops and webinars can be found on the ERA-LEARN website. ERA-LEARN will continue to update the content of the website in line with new developments to address the needs of the European Partnerships. We will continue to improve the useability and functionality of the website to ensure continued user-friendly navigation through the Partnership landscape.

In September 2022, ERA-LEARN published the eighth in a series of Country Reports on participation in European R&I Partnerships. The new report is for Estonia and can be found on the ERA-LEARN website, with some highlights provided here. The report notes that Estonia has a strong international profile compared to other EU13 countries and its expertise in certain areas, e.g., medical and health sciences, including personal medicine and genetics, is widely acknowledged. It is a common belief that there are challenges that cannot be tackled by any single country alone and international collaboration is key, especially for a country with a small research community. The research highlights that Estonia takes part in Partnerships for a number of reasons, i.e., to offer researchers the benefits for transnational/international collaboration, to collaborate/align with other countries in developing policies and strategies in areas of strategic importance for the EU, and to contribute to driving developments and creating the necessary critical mass in certain areas of interest. The policy exchange and learning enabled through this participation is much appreciated. It is also acknowledged, through the research, that Partnerships provide a valuable space for mutual policy learning and for shaping and aligning policies in relation to research and innovation, thus strengthening the ERA. The country also has a good standing, compared to its peers, in relation to international co-authorship and the attractiveness of foreign researchers. Yet, the major feature that stands out is the strong commitment to internationalisation, as demonstrated in the recent RDIE strategy and vision statement. The report notes that Estonian researchers appreciate the benefits of collaboration and networking, at European / international level, offered by the Partnerships, although the limited funds made available per project may deter them from fully exploiting the opportunities offered. Partnerships present a clear added value for Estonia, a country that lacks national (bilateral) alternatives that support international research collaboration, with the small-scale consortia and the broadly defined call topics being attractive. In spite of the drawbacks mentioned, the research highlights that Partnerships are valued as an important instrument, complementing other European initiatives (FP and Horizon programmes), and Estonia enters Horizon Europe with a strong coordination mechanism managed by sectoral ministries and ETAG, backed by a sound decision-making framework, and with a successful track record in increasing participation of Estonian researchers in the EC framework programmes, including the R&I Partnerships. Whereas there is still room to exploit the benefits of the European R&I Partnerships to the full, the report acknowledges that the key factors and appropriate measures to make this possible in the future are in place. Previous reports covered Poland, Austria, Spain, Belgium, Finland, Norway and Germany and are also available on the ERA-LEARN website.

A key event in ERA-LEARN’s calendar during 2022 was the first European Partnership Stakeholder Forum, hosted together with the European Commission on 15 and 16 November. The event took stock of the first year of European Partnerships and, in particular, how they can contribute to the twin green and digital transitions, as well as increasing Europe’s resilience. 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 more than 250 people also watched the web-streaming of the plenary and parallel
sessions. A crucial element of the event was the participation of key institutional players in leading discussions and chairing sessions, notably Member States and Associated States representatives, relevant MEPs and high-level Commission representatives. The structure of the workshop consisted of

- an opening plenary discussion with high-level Commission and Member State officials and European Partnership representatives
- parallel sessions addressing the main theme of the forum, “synergies”, across different thematic areas representing the major EU goals (A sessions)
- parallel sessions addressing important cross-cutting topics (B sessions), and
- the concluding plenary where the key messages as well as considerations for the future were highlighted.

A poster session was also hosted throughout the duration of the Forum where around 20 Partnerships were able to present their networks during coffee breaks and sessions dedicated to networking. 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.

ERA-LEARN also launched a survey to explore the early organisational and national experiences of widening countries in comparison to non-widening countries in the creation and implementation of the European Partnerships. The full report is available on the ERA-LEARN website and provides detailed feedback from the survey that was completed by 61 organisations - 35 from widening countries (including 3 Associated Countries and the Azores, Portugal's outermost region) and 26 from non-widening countries. Feedback indicates that participation in European Partnerships is regarded as a tool to pursue national priorities and to develop strategic agendas in the specific area tackled by a Partnership. It was also appreciated as a learning experience and an opportunity to support national R&I communities. A number of issues, however, were highlighted by respondents, such as insufficient budget and staff resources that are needed to develop and implement Partnerships as well as the complexity of the instrument itself. The survey responses also indicated additional challenges for widening countries related to a lack of experience in collaborating with stakeholders at the national level and building national agendas to be incorporated in the Partnership strategy. It was noted that, while measures promoting widening are used in the European Partnerships, widening countries are still reluctant to take leading roles in them. Both groups of countries recognised a need for support from the EC, including a need for user-friendly guidelines on administrative procedures and regulations and also on the role of research performing organisations in the European Partnerships. The report provides evidence that more efforts are needed at the national level, with the support of the EC, with regards to capacity building, training and employing staff that can enhance the participation of widening countries in the European Partnerships.

During 2022, ERA-LEARN published a policy brief entitled ‘Translating Research into Innovation: Lessons from 3 Case Studies in Health Partnerships’. The aim of this policy brief was to set up a methodological approach to understanding the translation of research into innovative outcomes. Three Partnerships were selected (TRANSCAN, EJP on Rare Diseases and the Innovative Health Initiative), with the research investigating how they navigate the process of translating research activities into medical and health innovations for the benefit of patients, the European health system and for society. A summary of this work and the result of the research is provided in section 7 of this Annual Report, with the full report available to download from the ERA-LEARN website.
3. Mapping of the Transition to European Partnerships

The 2021 Annual Report presented a number of mapping diagrams in an attempt to show the linkages between [Horizon Europe] European Partnerships and the Public-Public Partnerships (P2Ps) that have been funded through Horizon 2020. While a rather simplified view of the landscape and the transition from Horizon 2020 to Horizon Europe, it has proved to be a useful tool.

As the Partnerships have evolved and more information has become available since the original mapping exercise was completed, we wanted to take this opportunity to update the previous diagrams and provide, hopefully, a more accurate picture of the transitioning landscape to the wider community.

Figure 1: Cluster 1 European Partnerships and Horizon 2020 predecessors
As noted in the previous report, the predecessors to the European Partnerships are quite varied and, in some cases, include JPIs as well as Horizon 2020 instruments. The consolidation of multiple ERA-NET Cofunds related to the ERA4Health Partnership is also quite clear.

The Partnership landscape for Cluster 4 (digital, industry and space) is quite different to that of Cluster 1 and is dominated by successors to the Horizon 2020 public-private Partnerships (Article 187 initiatives and cPPPs).

Figure 2: Cluster 4 European Partnerships and Horizon 2020 predecessors
The overall picture for Cluster 5 (climate, energy and mobility) is similar to that of Cluster 4 in that the European Partnerships have a clear link to the Horizon 2020 PPPs. There are, however, two important Co-funded Partnerships in this Cluster that provide a succession path for P2Ps.
The Partnership landscape for Cluster 6 (food, bioeconomy, natural resources, agriculture and environment) is clearly dominated by Co-funded Partnership, which account for seven of the eight in this Cluster.

Figure 4: Cluster 6 European Partnerships and Horizon 2020 predecessors
Finally, as noted in the 2021 annual report, there are two European Partnerships that do not align with the Horizon Europe Clusters. One of these (Innovative SMEs) is the successor of a Horizon 2020 P2P. The other is a new thematic topic for PPPs.

**Figure 5: Other European Partnerships and Horizon 2020 predecessors**
4. Evolution and Diversification of P2Ps

This section provides an update on the evolution of the P2P landscape since the dawn of the ERA-NET scheme in 2003. It builds on data presented in the previous annual reports and includes all network types.

4.1. P2P Networks

The analysis indicates that 89 discrete networks were active at the beginning of 2022. During the year, 34 joint calls closed. It remains the case, as in previous years, that not all 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. It is worth noting that 31 networks ended during 2022, most of which were ERA-NET Cofunds.

As mentioned in previous annual reports, some of the ERA-NET Cofund networks are directly linked to a JPI, FP7 ERA-NET or self-sustained network and so, while they appear to be less active than others, there continues to be ongoing joint activities within the thematic area (further details are provided in section 5).

4.2. Joint Calls

Since 2004, some 827 joint calls have been implemented, this excludes those that were launched, but not closed, before the end of 2022. A summary of calls that closed each year is shown in Figure 6. Note that, additional data made available since the previous report has updated some historical figures.

![Figure 6: Number of Joint Calls (closed) between 2004 and 2022, by Network Type](image-url)
Figure 6 presents a clear picture of the evolving landscape of P2Ps across the years. The changing pattern of calls from FP6 through FP7 and into H2020 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. The landscape in 2022 is changing again as, although ERA-NET Cofund networks represented around 50% of all calls, the overall number of joint calls are now decreasing each year as we transitions towards Horizon Europe Partnerships and their calls. It is interesting to note that:

— For the first time since 2015 there were no ERA-NET Cofund calls that received EU co-funding, with all 17 ERA-NET Cofund calls representing additional calls without EU co-funding. This is not surprising, given the change in the wider landscape and the transition towards the Horizon Europe funding framework

— The number of JPI calls returned to similar levels as in previous years after a dip in their call numbers during 2021. This is in addition to the ERA-NET Cofunds that are implemented by many of the JPI networks (both alone and collaboratively) to support their programmes and launch calls within specific topics

A cumulative picture of the number of joint calls since 2014 is shown in Figure 7. Since 2021, the number of joint transnational calls implemented under the Horizon 2020 framework has superseded the number spawned from the FP7 funding framework at some 303 joint calls (264 joint calls were implemented under FP7). Since 2015, 173 ERA-NET Cofund calls have closed, 96 of which have been additional calls with no EU co-funding

![Figure 7: Cumulative Number of Joint Calls, Since 2004, by Network Type](image-url)
The total national cumulative pre-call budget for all joint calls, since 2004, is almost Euro 9.6 billion (excluding EU contributions). The annual comparison, by network type, is shown in Figure 8, 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 8 indicates that the national financial commitment to calls in 2022 was significantly lower than in recent years and is in line with a downward trend in national funding commitment since the peak in 2017. This is, however, a natural change, given that most calls being implemented are now additional joint calls without EU co-funding and that numerous networks are focusing on monitoring their funded projects rather than the implementation of new calls. The transition to European Partnerships within Horizon Europe is also a contributing factor, within increasing national funding commitment to the new Partnerships likely to offset the reduction in spend on H2020 joint calls.

Overall, the ERA-NET Cofunds have produced the largest national commitment to joint calls (co-funded and additional calls) since 2016 (around 51%), with committed funds from Article 185 networks following behind (35%). Additional joint calls accounted for 62% of total committed call budgets in 2022. Total national commitment to joint calls implemented by ERA-NET Cofunds since their inception has been more than Euro 2.78 billion. It is worth noting again, that funding organisations linked to the JPIs and self-sustained networks will have had an impact on the financial commitment to ERA-NET Cofund calls and so the picture presented in Figure 8 should be considered with this in mind.
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 some Euro 10.1 billion.

![Figure 9: Cumulative Investment in Joint Calls, including EU Contribution, 2004-2022](image)

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.
4.3. Portfolio of Funded Projects

Some 10,500 projects have been funded by the joint calls since 2004. Figure 10 shows the annual volume by network type (based on the year the call closed).

![Figure 10: Number of Transnational Projects, by Year and by Network type](image)

In line with the limited data available at this time each year, the figures for 2022 are assumed to be lower than the actual number of funded projects 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 2022 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. Figure 10 will be updated on the ERA-LEARN website during 2023 as more information becomes available. The cumulative picture of transnational funded projects is shown in Figure 11.
ERA-NET Cofund networks have funded almost 2,350 transnational projects since 2015, with around 42% of these resulting from additional ERA-NET Cofund calls (without any EU co-funding).

Figure 11: Cumulative Number of Transnational Projects Funded
5. P2P Highlights from 2022

This section of the report provides a number of highlights from 2022 to demonstrate the breadth of activities being undertaken across the P2P community. This includes good practice examples in relation to collaboration and outreach as well as celebrating the long-term achievements and impacts of the P2P networks.

2022 Joint Calls

In 2022, 34 joint calls closed, across all networks. A breakdown of these is presented in Figure 12 below. ERA-NET Cofunds were, by far, the most prominent in terms of the number of calls being implemented, in comparison to previous years where Article 185 calls featured more strongly. In 2022, all Article 185 calls were implemented by the PRIMA network with the others focussing on the monitoring of previously funded projects.

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 2022, six JPI related ERA-NET Cofund calls closed, all six of which were additional ERA-NET Cofund calls (without EU co-funding).

Figure 12: Number of Joint Calls closing in 2022, by Network Type
**ERA-NET Cofunds**

In 2022, only additional ERA-NET cofunded calls were implemented (with no EU co-funding), of which there were 17. Of these, eight were 2nd calls, six were 3rd calls, two were 4th calls and one was a fifth calls. In 2023, the number of additional calls planned already stands at 12, with two networks planning their 5th calls.

Figure 13 highlights the changing picture of ERA-NET Cofund calls, both EU co-funded and additional calls, since 2015. 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 13: ERA-NET Cofund Calls by Year Call Ended](image)

With the transition to European Partnerships, we see a number of ERA-NET Cofund networks coming to an end. Many are now looking at the impact of their work and reflecting on the lessons learned, but there is an overwhelming sense that collaboration is increasingly important at both a call level and as a way to extend networks and continue to reap the benefits of the experience and expertise built up among consortia and the wider community. Some selected examples of good practice being undertaken within the Cofund networks are provided here to demonstrate the benefits and opportunities of collaboration and to celebrate the success of networks that are leveraging the knowledge gained through their initiatives.
**ICT-AGRI-FOOD – A Collaborative Approach to Joint Transnational Calls**

**ICT-AGRI-FOOD** is an ERA-NET Cofund that started in October 2019 and will be active until March 2024. It aims to fund excellent transnational research and innovation projects that harness and exploit the potential of digital technologies to increase the sustainability, resilience and transparency of the agri-food value chain from farm to fork. The ICT-AGRI-FOOD consortium has 34 partners from 22 countries and involves three European regions and four associated countries. It has close contacts with the International Bioeconomy Forum, the Global Research Alliance, the European Space Agency, Regional Technology Platforms, European Partnerships (“Agriculture of data”, “Food systems”, “Agroecology”, “Animal health and welfare”) and many other stakeholders from across the agri-tech domain.

To date, two transnational joint calls have been launched by the ICT-AGRI-FOOD alone, one transnational joint call in collaboration with three other ERA-NETs (2021 Joint Call with ERA-NETs SusAn, ERA-GAS and SusCrop) and a further three transnational joint calls in collaboration with the European Space Agency (ESA). The collaborative process has proven to be very inspiring and further supports the ERA-NET funding community. In preparation for the calls, the experience and expertise of various stakeholders and partners was sought and, in doing so, helped to identify and formulate challenging, but also very specific and relevant research topics. These topics not only addressed the needs of all collaborating organisations and represented a synergistic approach, but they also addressed topics that might not have been brought to the research community without the input and collaboration of the different initiatives. Another positive aspect of implementing collaborative joint calls relates to the administrative burden, which, when shared with colleagues from the consortia of the other networks involved, makes the work much more manageable.

The calls implemented in collaboration with the European Space Agency open up significant opportunities for both networks. The ESA benefits from input to the scoping discussions, the subsequent definition of the call topics and from the promotion of the call through ICT-AGRI-FOOD’s extensive communication channels. ICT-AGRI-FOOD, on the other hand, welcomes the opportunity to share its experience and expertise and open up new funding streams to the research community without the need to seek additional financial commitment from its participating members. The collaboration between ESA and ICT-AGRI-FOOD is founded on a Memorandum of Intent (MoI) that was signed in July 2021. The Mol not only creates the opportunity to collaborate in the organisation of research calls, but also in the joint planning and implementation of additional activities, such as scientific conferences. Indeed, a high-level conference with approximately 100 participants from all over Europe has been organised in January 2023 with the title “Space solutions for sustainable agriculture - where space data, connectivity and new technologies meet the agri-food sector”.

Note that a 3rd and final ICT-AGRI-FOOD transnational joint call is currently being planned for launch towards the end of 2023 or early 2024.

In addition to implementing collaborative and transnational joint calls, ICT-AGRI-FOOD also provides other services and events to its community members, such as the Knowledge Incubator. The Knowledge Incubator (KI) is aimed at researchers, start-ups and SMEs funded under the ICT-AGRI-FOOD and ICT-AGRI calls, as well as other stakeholders, with a special focus on the multi-stakeholder approach within ICT-AGRI-FOOD. The main objectives of developing a Knowledge Incubator are i) to valorise the
existing experiences that have linked the agricultural research community with the ICT and food industry, and ii) to stimulate a continuous mutual learning process based on the interaction between different innovation actors in order to facilitate the matching of technology demand and supply.

The Knowledge Incubator offers functionality for a number of different stakeholders, including:

- **Start-ups and SMEs** interested in developing or using ICT tools in the agri-food sectors have the opportunity to use the KI for networking, building partnerships for product and project proposal development, understanding the innovation needs of the agri-food sector and the potential demand for ICT, matching technology in line with demand and offer, and overall market analysis.

- **Farmers, food sector, advisors and civil society working in rural areas** have the possibility to share their needs with the ICT sector through an interactive innovation model via the KI.

- **Researchers and research institutions** have the opportunity to use the KI to gain visibility for their research projects and outputs, interact with the industry from ICT, agricultural and food sectors, understand the research needs and the main trends of the mentioned sectors, and learn about funding opportunities.

- **Funding bodies and policy makers** have the opportunity to use the KI as a means to gain a deeper understanding of the key topics and funding needs and to encourage the valorization of the research developed with their resources.

**ERA-MIN 2 successfully achieves its objectives as it draws to a close in 2022**

Worldwide coordinated research funding plays a critical role in supporting the raw materials research community by providing the necessary financial resources to carry out innovative and ground-breaking research in this field. One of the key challenges facing the raw materials research community is the limited availability of funding. Multilateral coordinated research funding from governments, therefore, can provide the financial support necessary to carry out these projects and push the boundaries of raw materials research.

ERA-MIN 2 (2016-2022), coordinated by Portugal, is the ERA-NET Cofund on Raw Materials supported under Horizon 2020. It was built on the successes of ERA-MIN (2011-2015) which was coordinated by France and had 15 partners to which Argentina and South Africa associated to the last two calls. ERA-MIN 2 is a progressive, pan-European network of 21 public research funding organisations from 11 EU countries (Finland, France, Germany, Ireland, Italy, Poland, Portugal, Romania, Slovenia, Spain and Sweden), two EU regions (Belgium-Flanders, Spain-Castilla y Léon), one EU Associated Country (Turkey) and involving four countries outside Europe (Argentina, Brazil, Chile and South Africa). The main aim was to support and promote research and innovation (R&I) cooperation to give the opportunity to the R&I community to apply to a world-wide coordinated funding initiative, gaining access to leading knowledge and new markets, while reducing fragmentation of R&I funding across Europe and globally. This was achieved through joint transnational calls designed and developed specifically for the non-fuel, non-food raw materials sector, namely: one EU co-funded call for transnational R&I proposals in 2017 and...
two additional calls, in 2018 and in 2019, in which three EU countries (Czech Republic, Greece, Slovakia), three EU regions (Belgium-Brussels, Belgium-Wallonia, Italy - Calabria) and the province of Québec in Canada have associated to (in the two last calls), providing further opportunities for collaboration.

A total of 40 transnational R&I projects, with almost €30 million of public, national and regional funding (including €5 million of EU co-funding), were financed in ERA-MIN 2, which contributed to the Research Priorities of the ERA-MIN Roadmap for non-energy, non-agricultural raw materials and also helped to secure the sustainable and responsible industrial supply of primary resources in line with the objectives of the Strategic Implementation Plan of the European Innovation Partnership on Raw Materials as well as supporting the EU Strategic Dialogues on Raw Materials with Canada and Latin America.

The scope of the ERA-MIN 2 joint transnational calls was demand-driven research and innovation on primary and secondary resources of metallic, construction and industrial minerals and substitution of Critical Raw Materials in a circular economy approach. It covered the entire raw materials innovation value chain, from sustainable exploration, exploitation, processing, substitution of critical raw materials and resource efficient production to short-term economically feasible and low environmental impact recycling. The supply of raw materials for batteries and recycling of end-of life batteries were also included and special attention was asked to reconnect raw materials to society.

ERA-MIN 2 has supported the EU’s transition to a Circular Economy by addressing Call topics, informed by an Advisory Board, which aimed at retaining the value of the raw materials that are used in products and returning them into the product cycle at the end of their use, keeping in mind the need for a sustainable and responsible industrial supply of primary resources to feed the circular economy.

The joint transnational calls have been an attractive tool to internationalise the national/regional R&I community in the raw materials sector, in particular, for newcomers and SMEs since 80% of the funded projects are public-private partnerships, in which 30% of applicants are from the private sector (SMEs and large industry). Moreover, the ERA-MIN joint transnational calls for international R&I projects of small size (in terms of consortia and budget) mainly address basic (from TRL1-2) and applied research thus complementing other EU funding instruments and providing the basis for future uptake by Horizon 2020 and the EIT Raw Materials calls.

The new ERA-MIN 3 (2020-2025) network, also coordinated by Portugal is the successor to ERA-MIN 2 and broadens the network of research funding organisations to seven new countries/regions, assesses the impact of the previously funded 57 R&I projects, and launches two new calls in order to reinforce the contribution for the most recent EU Raw Materials policies.
**Green ERA-HUB**

**Coordination of national research programmes in Agri-food and biotechnology**

**Joining forces of ERA-NET Cofunds, EJP and self-sustained initiatives**

The Green ERA-Hub is a four-year CSA, which started in September 2022. It represents 15 currently active or finalised ERA-Net cofunds and self-sustained initiatives in the field of Agri-food and biotechnology. Together, with already completed predecessor initiatives, the Green ERA-Hub accounts for 29 coordination actions in which more than Euro 1,100 million funding has been mobilised via 89 transnational calls. The ERA-Net scheme is a success model for the transnational cooperation of national research programmes and the Green ERA-Hub is an ideal initiative to continue and extend this fruitful cooperation.

The aims of the Green ERA-Hub are to:

- Contribute to the achievement of the SDGs, in particular, zero hunger, industry innovation and infrastructure, responsible consumption and production, life on land, partnership for the goals, the farm2fork strategy and EU’s Green Deal

The Green ERA-Hub will, therefore, provide a clear route for ERA-Net cofunds, national research funders and researchers in the Agri-food and biotechnology sector to find dedicated support in relation to information, communication, co-operation, networking and joint transnational funding that best fits their needs. In turn, the Green ERA-Hub will contribute to maintaining and strengthening the EU’s highly competitive position in Agri-food and biotechnology research.

In March 2023, the 1st Annual Socratic Dialogue Event (ASDE) was held in Budapest. The event provided opportunities to jointly identify activities to preserve, exploit and widen the Green ERA-Hub network towards 11 EU states. The next ASDE will be in 2024, addressing widening options towards the Mediterranean Area. Furthermore, in May 2023 the 1st Green ERA-Hub transnational call “Contributions towards a sustainable and resilient agri-food system” will be launched with, currently, 179 funders from 146 countries inside and outside Europe. The Green ERA-Hub envisages two further transnational calls within its lifetime.

Further information

First Green ERA-Hub call
JPIs

In 2022, twelve JPI related calls closed, six of which was specific to a JPI and the others were part of ERA-NET Cofund networks. Six of these calls were additional ERA-NET Cofund calls with no EU co-funding. The pattern of JPI related calls since 2015 is shown in figure 14.

This shows an increase in call activity within the JPI networks when compared to 2021, with the number of additional joint calls implemented without EU co-funding at the same high level as in 2019. The implementation of joint calls continues to be an important element in the work undertaken by the JPIs as does their other activities related to international outreach, collaboration and assessment of the impacts of their work and how this can support the development of future activities and initiatives. Some examples that demonstrate this are shown here.
JPI Urban Europe in 2022 and the impact of its transnational calls over the last 10 years

JPI Urban Europe (JPI UE), as an intergovernmental research and innovation funding programme, has the ambition to create a European eco-system for urban transitions that goes beyond the funding of research and innovation (R&I) projects. Established in 2010, it addresses the global urban challenges of today with the ambition to develop a European research and innovation hub on urban matters and create European solutions by means of coordinated research and innovation. JPI UE serves as a crucial foundation for the Driving Urban Transition (DUT) Partnership, which was launched in 2022 and elevates the ambitions of JPI UE. Some highlights of JPI UE efforts to shape such an eco-system and create a wider impact of R&I project results are summarised below.

Working with funded projects, synthesis and policy recommendations

One important aspect of JPI Urban Europe’s work is to enhance the impact of its funded projects by continuously engaging with them, synthesising their results, and deriving policy conclusions and recommendations to drive the urban transition. In 2022, JPI UE placed particular emphasis on its projects related to Positive Energy Districts (PED).

Engaging project partners from the four PED pilot call projects involved organising events to facilitate discussions and collaboration. JPI UE supported this dialogue through workshops and meetings with project partners to discuss the current developments and conceptual ideas of PED. The projects showed a clear ambition to jointly communicate and further develop the PED concept as such, therefore, joint dissemination activities and joint messages across the four projects were in focus. Key issues and messages were discussed in online meetings between the project coordinators and the JPI UE PED Programme Management and were further developed at a PED Pilot Call projects meeting, including all project partners, in June 2022 in Helsingborg. Project outcomes were discussed in a public webinar series (“PEDs & Environment”, “PEDs & People”, “PEDs & Money”, “PEDs & Regulation”) in January 2023 and at the final event on 30/31 January 2023 in Copenhagen. The final event was combined with the kick-off event of PED Call II (2021) projects and brought fruitful discussions between the PED project generations, fostering a dialogue on how the latter could build upon the work of the former.

With the PED Call II, JPI UE has also begun exploring new ways to synthesise and foster collaboration among different projects. As part of this effort, an Expert Support Facility was established, consisting of one expert per project to facilitate dialogue between projects, synthesise results, and provide recommendations to the management team. 2022 was an exciting year in terms of the events held and the steps taken in working with the funded projects.

Mobilisation of different urban stakeholder groups and bottom-up community building measures

It is increasingly evident that collaboration, mobilisation, and the involvement of all relevant stakeholders are crucial to enhance the effectiveness of research and innovation (R&I) and its application and integration into the administrations of cities and municipalities. JPI UE is, therefore, dedicated to continuously extending and working with a community of practice through various bottom-up activities.

JPI UE AGORA (JPI Urban Europe’s Stakeholder Involvement Platform) has become synonymous with an engaged community of urban change makers, organising co-creation events that bring together stakeholders and urban actors from diverse backgrounds. The results of
AGORA Dialogues and workshops support the strategic development of JPI UE and DUT by offering a platform for co-creation for a wider audience. Each year, two to four AGORA Dialogues and additional (co-hosted) sessions at conferences are organised. Another format of JPI UE is the Urban Lunch Talks to facilitate science-policy dialogues and promote research and innovation results. Panellists from city administration, research or local initiatives are invited to talk about recent urban transitions issues such as public infrastructure, the concept of the 15min-City in practice and more.

Through this continuous engagement, JPI UE has recognised the need to mobilise and empower different urban stakeholder groups. With this in mind, the ERA-NET Cofund Urban Transformation Capacities (ENUTC) launches a call in 2023 on art and design as a focal point and means for urban change. The call's scope is to emphasise the importance of imagination, creativity and the cultural sector.

Furthermore, JPI UE has identified the need to empower Urban Doers who often lack the necessary specific capacity, networks, and knowledge to participate in transnational R&I calls. Urban Doers face hurdles in obtaining this knowledge as they are not typically embedded in institutional structures, such as universities, which support learning and capacity building for responding to joint calls. Moreover, they may be exposed to personal financial risks if their bids are not successful, and relying solely on trial and error can be a frustrating way to develop these capacities. In light of this, 2022 marked a significant milestone in the conceptualisation of the Urban Doers Grant, that is currently taken forward in the Driving Urban Transitions Partnership. The Urban Doers Grant aims to provide Urban Doers with access to training, coaching, webinars, networking events, and additional financial support to explore how to collaborate with research and innovation projects in order to realise innovative ideas.

Urban living labs and JPI-UE efforts to advance such methods

Over the last decade, experimental approaches, such as urban living labs, have become widely spread across Europe and the world. Urban living labs (ULLs) are tools for transforming urban areas by engaging different publics, from local public administrations and residents, to businesses, NGOs, civil society organisations, and more. In the last ten years, JPI Urban Europe has funded over 100 projects, realising more than 150 ULLs. In 2021, a significant milestone was reached in analysing stakeholder dialogues, conference sessions, project results, and outputs to gain new insights for the ULL approach. Seven key considerations have been identified that need to be addressed for advancing urban experimentation. These findings, along with the ULL 2.0 approach, were elaborated upon in a paper published in 2022. JPI UE remains actively involved in extracting insights and lessons learned from actors implementing these methods to engage and mobilise relevant stakeholders. The aim is to further refine and strengthen the effectiveness of ULLs (see ULL2.0) in collaboration with the project actors. These valuable insights and learnings are then passed on to the new generation of projects, ensuring greater impact and applicability of research results.

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**Water JPI Highlights of Strategic Activities during 2022**

Following the recent launch of the Water4All Partnership, and as decided by its members, the Water JPI has not launched any new calls for proposals in 2022. The initiative has, instead, started to reduce its call activities and it is now focusing on the implementation of an action plan based upon the valorisation of results both from funded projects and additional activities.

2022, however, presented a number of opportunities for the development of the Water JPI’s strategic activities and, indeed, the Water JPI consortium itself.

**Integration of Malta**

In 2022, the Water JPI welcomed Malta as a new consortium member, represented by the Energy and Water Agency (EWA), as an Observer country. In 2022, therefore, the Water JPI memberships consists of twenty voting Member, five Associated Partners, four Observers and the European Commission as non-voting member. The expansion of the Water JPI Partnership further demonstrates buy-in from Member States to the philosophy of the Water JPI resulting in increased critical mass, alignment and the coordination of efforts.

**Launch of the Water JPI’s international cooperation strategy**

In 2022, the Water JPI, through its activities within the IC4WATER project (a CSA dedicated to the development of international cooperation in the Water area), completed the development of its international cooperation strategy. This document lays out strategic areas in the field of water research and innovation and lists strategic partners with which collaboration will be strengthened in the future e.g., Belmont Forum, PRIMA, Danube-based organisations. The strategy also offers a good understanding of the barriers to cooperation, as identified by the initiative through its work with more than 30 countries across the world.

**Participation in international events**

The Water JPI has had the opportunity to participate in several international events during 2022 to extend its outreach and dissemination and to further discussion in the field. It took part in the last edition of the Ecomondo conference, held in Rimini, Italy in November 2022. Ecomondo is the reference event in Europe for technological and industrial innovation in the green and circular economy sector within the framework of the Next Generation EU. The Water JPI hosted a workshop on the valorisation of Research and Innovation results to better support policy decisions and enhance the market uptake of the solutions proposed by the Water JPI funded projects. It was also delighted to participate in the 5th EU-India Forum, in October 2022, which was aimed at the exchange of views on good practices, regulatory approaches, business solutions and research and innovation opportunities in the water field in India and the European Union. This was an excellent opportunity for the initiative to present its current activities and its new international cooperation strategy. Furthermore, the Water JPI was involved in the 5th Asia- Europe Meeting (ASEM), held in November, on the topic of Urban Water Management organised in support of the United Nations Transforming Our World: The 2030 Agenda for Sustainable Development and China’s National Plan on Implementation of the 2030 Agenda for Sustainable Development.
**Project SD WISHEES**

Several members of the Water JPI and the JPI Climate are involved in the SD-WISHEES project (Supporting and Developing Widening Strategies to tackle Hydroclimatic Extreme Events: impacts and Sustainable solutions for cultural heritage). The project is a widening-oriented CSA funded by Horizon Europe, which will run from January 2023 to December 2026. Its overarching aim is to enhance collaboration with widening countries in the field of cultural heritage protection in the face of hydroclimatic extreme events. The Consortium includes partners from Italy, France, Albania, Portugal, Belgium, Kenya, The Netherlands and Romania and the project will, as part of its activities, conduct an impact assessment of project actions on the widening policy of the European Commission.

**Global impact assessment**

Another key activity of the IC4WATER project, during 2022, was the publication of the Water JPI Global Impact Assessment Report. An evaluation panel was assigned the task of evaluating the performance of the Water JPI and the impact created during the first ten years of its existence and, in addition, to explore its future perspectives. This was assessed by looking at the following dimensions: alignment, internationalisation, enhanced knowledge production, governance, and contribution to societal challenges. The full report is available on the Water JPI website, which notes that, amongst other recommendations, the expert panel advocated that Water JPI members should increasingly promote the valorisation of results through dedicated communication and knowledge transfer activities.
**Article 185s**

In 2022, six Article 185 calls closed, with all of these being implemented by one network, PRIMA. As mentioned previously, there is a decreased level of activity among most Article 185 networks in relation to the implementation of new joint calls, although they continue to monitor the projects funded by their previous transnational joint calls. The broader pattern of call activity since 2015 is shown in figure 15, demonstrating a change in the landscape during 2022.

We present here a summary of AAL's European Week of Healthy Ageing event that marks its final annual event if this kind and reflects on the lasting legacy of the programme, 14 years after its inception.
CELEBRATING AAL’s LASTING LEGACY

European Week on Active & Health Ageing (EWAHA) Gdansk, October 2022

The European Week of Active Healthy Ageing 2022 (EHAWA2022), was held in the beautiful and historic city of Gdańsk and was the last ever annual AAL gathering, held 14 years after the programme began. With a summary of the event presented here, legacy was clearly a running theme at the 14th annual gathering of the AAL community, with much discussion about what had been achieved, what had worked and what still needed to be addressed.

An emotional opening ceremony was crowned by the presence of the legendary trade union leader, former president of Poland and Nobel Peace Prize winner Lech Wałęsa, whose speech brought inspiration, laughs, motivation and highlighted a determination to make the most of this rare chance to meet with so many like-minded people. The AAL president, Gerda Geyer, then emphasised, in her opening address, AAL’s unique approach to funding projects – the combination of a strong business approach with the ambitious involvement of end users to enable the co-creation of useful solutions. This approach, she noted, has distinguished AAL from other funding activities and continues to do so. The AAL programme will, like all funding programmes, come to an end, but it will maintain, for the coming years, an environment for ongoing and closed projects to meet and to profit from what they are learning. Indeed, the AAL Programme approach – co-creation, end user involvement, and digitalisation – was influential in the design of the new European Partnership on “Transforming Health and Care Systems”. This EWAHA 2022 has played a vital role in leveraging the expertise gained in the AAL Programme, which, among its many expected outcomes, aims to foster “high-quality digital services for all” into this new Partnership programme.

Marco Marsella, Head of Unit (DG CONNECT) at the European Commission, characterised, at the opening ceremony, the legacy of the AAL programme as a community of innovators working to deliver the benefits of digitalisation for older people while combining an interdisciplinary and ethical approach. The AAL Programme has been funded by the EC over the last 15 years and has supported more than 300 projects, with beneficiaries ranging from SMEs, industry, end-user organisations, academics and care takers, among others. Indeed, it is a recognised brand in Europe, leveraging technology and networking to great success. The second day of the event played host to a variety of workshops, providing multiple opportunities for collaboration, interaction, and the type of conversations that only happen during in-person meeting, highlighting how valuable these types of events are to those who attend. Technology demonstrations, discussion of best practice, open-ended forums and visions for the future were all on display in the workshops.

The second plenary session of the event was focussed on making our health and care-systems fit for an ageing population in the 2020s. It explored how we can create more open systems that can deliver us out of crisis mode, and noted that, to do this, we need to get out of our silos, collaborate more and become part of the systems where we all have a role to play. The panel session was opened with colleagues from central Denmark sharing experiences of how a change in mindset has helped develop the region’s health and care services and has put it on the way to breaking its own silos all the way up to the international scale. It was
then followed by a case example from Italy where inter-regional collaboration supported the identification of emerging synergies occurring in programmes and strategies among regions. The experience of The Netherlands was such that it recently opted for the decentralisation of its care systems; in doing so, The Hague, for example, was able to take on more responsibility for care. The panel session ended with a more open discussion on the future of health and care systems. There was agreement that eco-systems must be developed in ways that fit most naturally with the local environment, culture, and circumstances. There must always be sensitivity and empathy applied to ensure that the wisdom and practical solutions that are found in other places are carefully and compassionately adapted to suit the needs of each place and people.

The final plenary session of EHAWA 2022 was focused on the legacy of AAL. The AAL Programme has invested in digital innovation to achieve overarching goals: improve the quality of life for older people and their networks, strengthen the industrial base in Europe, and support the increased efficiency and sustainability of care and support systems. The aim of this session was to retrace and look back on the legacy of 14 years of the AAL Programme with the assembled panel of experts and the audience, looking at the impact of the research, taking stock for future ideas and helping to bridge this moment in the ecosystem with the future. It was noted that AAL has evolved from a “solution looking for a problem” approach to a much more all-encompassing ecosystem that has encouraged co-creation, business development, ethical introspection, interoperability and the need for open platforms.

The purpose of AAL has always been to develop products and services that make a real difference to people’s lives. It has achieved great things in working towards this aim and in establishing a continuous dialogue with its vibrant community. In the coming years, the AAL Programme is planning to conduct further impact assessments to measure its impact in the three overarching programme objectives noted above. These impact assessments will also result in the creation of a portfolio of AAL success stories, which will be part of the AAL legacy and will be disseminated through a global communication campaign.
Other Networks

In addition to the main types of networks that the annual report has historically focussed on, we highlight good practice examples of work being carried out within the European Joint Programmes. EJP RD, which focusses on rare diseases, clearly understands the need for, and benefit of, collaboration to advance research and education and create a community that empowers all actors and stakeholder groups.

EJP RD’s Approach to Collaboration

Rare diseases are one of the prime examples of where collaboration is a key element in moving forward research, education, healthcare and policies as no country alone can encompass and address the challenges of rare diseases: few and geographically scattered patients (while there are about 7000 rare diseases), fragmented knowledge and expertise, unequal healthcare access and approaches and limited funding. The European Joint Programme on Rare Diseases decided to overcome some of those barriers by creating a comprehensive ecosystem to support rare diseases research to accelerate patient diagnosis, the development of treatments, and to improve education. This is being done by bringing on board different types of stakeholders that together build this unique ecosystem.

Currently, the EJP RD consortium is composed of 150 institutions from 35 EU, associated and third countries. These organisations represent all types of actors that must be involved for the success of the programme. That is why the funding bodies (ministries, funding organisations) govern and work hand in hand with the research performing organisations (universities, research institutions and hospitals), European research infrastructures, charities and patient advocacy organisations. In practice, this is translated into the set of complementary activities that form the basis of the support ecosystem for the RD community but that also builds the bridges between stakeholders that typically do not collaborate on a regular basis.

An example of this is where joint activities between research funders and patient advocacy groups allowed for the generation of dedicated guidelines (for researchers and funders) on how to meaningfully engage with patients in research. This led to the provision of funding for patient organisations in research projects and resulted in the revision of practices related to the definition of the topics of calls for projects and evaluation of the proposals (patients are involved as evaluators).

A further example relates to collaboration with EU research infrastructures that foster biology/medical research or data (BBMRI, EATRIS, ECRIN, ELIXIR, INFRAFRONTIER). This allowed for the creation of RD-specific services and support (provided by these infrastructures to the RD community) that were jointly developed and tailored to the user’s needs (mentoring service, clinical trials support office, virtual platform of data tools and resources). The benefit for the EU research infrastructures is, among other things, increased visibility and attractiveness for potential “clients”. For the decision makers and Member States it translates into the optimization of investment and a better return (since they sustain these infrastructures through national contributions and fees) and for the funders it provides privileged access for funded research projects to high quality services and infrastructure (thus optimizing research results and quality of projects).
Finally, it is important to note how collaboration between funders, universities, hospitals and patient organisations has resulted in new education and training programmes that were tailored to the needs of each type of stakeholder but that also build support for the creation of new networks and the education of a new generation of scientists capable of connecting research and healthcare.

Through the work of EJP RD, the importance of bridging the gap between EU14 and EU13 countries has also been reflected and translated into specific education, training and research activities.

The virtuous circle of the rare disease ecosystem, encompassed by EJP RD, is presented below:
6. Outlook

This section provides a brief overview of planned joint calls for 2023.

### Planned Calls for 2023

There are 27 transnational calls that have been/will be launched and will close during 2023. The ERA-LEARN call calendar has full details of calls launched to date and is updated regularly to include any new calls announced. Table 1 below provides an overview of the calls that have been launched (as of May 2023) and provides a summary of those that will launch later in 2023 where the dates are not currently known. Please note that other calls may also have been launched of which ERA-LEARN is not aware or has not been informed about. Clearly further calls will currently be in preparation now or in the coming months and so this list should be considered as indicative.

<table>
<thead>
<tr>
<th>Network</th>
<th>Joint Call</th>
<th>Launch</th>
<th>Close</th>
</tr>
</thead>
<tbody>
<tr>
<td>BlueBio</td>
<td>4th BlueBio Joint Call</td>
<td>29/11/2022</td>
<td>15/02/2023</td>
</tr>
<tr>
<td>IraSME (former EraSME)</td>
<td>31st Call for Proposals</td>
<td>01/12/2022</td>
<td>29/03/2023</td>
</tr>
<tr>
<td>ERA-MIN3</td>
<td>ERA-MIN3 Joint Call 2023</td>
<td>07/12/2022</td>
<td>30/03/2023</td>
</tr>
<tr>
<td>EJP RD</td>
<td>4th EJP RD Joint Transnational Call for Rare Diseases Research Project (JTC 2023)</td>
<td>12/12/2022</td>
<td>14/06/2023</td>
</tr>
<tr>
<td>ACT</td>
<td>ACT Open Call</td>
<td>01/01/2023</td>
<td>31/12/2023</td>
</tr>
<tr>
<td>JPN</td>
<td>Large scale analysis of OMICS data for drug-target finding in neurodegenerative diseases</td>
<td>04/01/2023</td>
<td>27/06/2023</td>
</tr>
<tr>
<td>NEURON Cofund2</td>
<td>Neuron Cofund2 Joint Call 2023</td>
<td>09/01/2023</td>
<td>29/06/2023</td>
</tr>
<tr>
<td>NEURON Cofund3</td>
<td>ELSA-JTC 2023 “Neuroethics”</td>
<td>09/01/2023</td>
<td>04/05/2023</td>
</tr>
<tr>
<td>JPIAMR-ACTION</td>
<td>4TH JPIAMR-ACTION Joint Call 2023</td>
<td>10/01/2023</td>
<td>04/07/2023</td>
</tr>
<tr>
<td>PRIMA</td>
<td>Section 1 - Water Management 2023</td>
<td>25/01/2023</td>
<td>06/09/2023</td>
</tr>
<tr>
<td>PRIMA</td>
<td>Section 1 - Farming Systems 2023</td>
<td>25/01/2023</td>
<td>06/09/2023</td>
</tr>
<tr>
<td>PRIMA</td>
<td>Section 1 - Food Value-chain 2023</td>
<td>25/01/2023</td>
<td>06/09/2023</td>
</tr>
<tr>
<td>PRIMA</td>
<td>Section 1 - Nexus theme 2023</td>
<td>25/01/2023</td>
<td>06/09/2023</td>
</tr>
<tr>
<td>PRIMA</td>
<td>Section 2 - Multi-topic 2023</td>
<td>25/01/2023</td>
<td>13/09/2023</td>
</tr>
<tr>
<td>QuantERA II</td>
<td>QuantERA II Call 2023</td>
<td>31/01/2023</td>
<td>11/05/2023</td>
</tr>
<tr>
<td>JPI HDHL</td>
<td>FOODRETEC</td>
<td>21/02/2023</td>
<td>21/04/2023</td>
</tr>
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<td>2nd ENUTC Call 2023</td>
<td>22/02/2023</td>
<td>25/04/2023</td>
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<td>M-ERA.NET 3</td>
<td>M-ERA.NET Joint Call 2023</td>
<td>01/03/2023</td>
<td>21/11/2023</td>
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<td>Flag-ERA III</td>
<td>Flag-ERA JTC 2023</td>
<td>09/03/2023</td>
<td>01/06/2023</td>
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<tr>
<td>ForestValue</td>
<td>ForestValue Joint Call 2023</td>
<td>02/05/2023</td>
<td>01/09/2023</td>
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<td>TRANSCAN-3</td>
<td>3rd TRANSCAN-3 Joint Call 2023</td>
<td>09/05/2023</td>
<td>15/12/2023</td>
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<td>CHIST-ERA IV</td>
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<tr>
<td>EIG CONCERT-Japan (self-sustained)</td>
<td>10th Joint Call of the EIG CONCERT-Japan</td>
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<td>EnerDigit</td>
<td>2nd Joint Call 2023 on digital transformation for green energy transition</td>
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<td>JPI Oceans</td>
<td>Changing Marine Lightscales</td>
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<td>JPI Oceans</td>
<td>Blue Carbon</td>
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<td>M-ERA.NET 3</td>
<td>M-ERA.NET Joint Call 2024</td>
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Table 1: Planned Joint Calls for 2023 (indicative at May 2023)

Further details of ERA-NET, JPI and Article 185 networks and calls can be found on the ERA-LEARN website, with information, guidance and support related to the European Partnerships also available.
7. Policy Brief Summary

Translating research into innovation: Lessons from three case studies in health Partnerships

The aim of the policy brief, prepared by ERA-LEARN and available on the website, is to establish a methodological approach to understand the translation of research into innovative outcomes. In this study we focused on the translational activities of three health-related Partnerships: 1) ERA-NET Sustained collaboration of national and regional programmes in cancer research (TRANSCAN), 2) The European Joint Programme on Rare Diseases (EJP RD) and 3) the Joint Undertaking, the Innovative Medicines Initiative (IMI) now Innovative Health Initiative (IHI).

TRANSCAN operates as a traditional research funder and positions itself at the frontier between biomedical/molecular research and clinical research in oncology. It does so by sponsoring research and innovation projects spanning the two domains. This approach revealed to be very effective in connecting the two worlds of basic and clinical research and, at the same time, has consistently provided resources and support for ‘first in human’ trials. During the course of the Partnership, there have been several highly valued innovations that have made their way to patients.

The aim of EJP RD is to coalesce rare diseases stakeholders towards collaborating within a European-wide rare diseases ecosystem. This is progressing by reaching out and fostering collaborative undertakings across research centres, clinical research hospitals, patient advocacy groups and charities, national and European regulators and, to a lighter extent, industrial partners engaged in rare diseases. This strategy is coherent with the nature of the problem that the Partnership is facing: rare diseases are heterogeneous, there are over 6,000 rare conditions affecting a small number of individuals distributed across regions and countries. The EJP RD has become a European and international reference point for the rare diseases communities acting as hub for knowledge generation and exchange, research and innovation support services and, more generally, providing an international platform for research and innovation in this medical and health area.

IMI/IHI has the ambitious objective of promoting a comprehensive approach to healthcare in Europe. It does so by operating in the pre-competitive space, bringing together public institutions, industry, third sector actors working in health, universities, research hospitals, SMEs, patients and their advocacy groups, regulators and other stakeholders. With an overall budget to match its ambition, the Partnership operates on several fronts: from 1) basic and applied research in critical medical and health areas, to 2) supporting and driving the formation of a robust network of infrastructure and 3) leveraging the synergies of its partners to accelerate the European health system’s response to medical emergencies and longstanding strategic aims in public health policy. The Partnership’s reach also extends to those system-making and enhancing connections established amongst the stakeholders (public institutions, industry, third sector, etc.) and functional resources (i.e., infrastructure, clinical trials, regulatory and business capabilities), enabling excellence within the European health innovation system.
The variety of Partnerships in the European medical and health system is a valuable asset for policy and for health sector research and innovation. From a policy perspective, these Partnerships provide invaluable input into the policy process as they are directly involved by providing a rich policy learning experience and an extended network of relations amongst the stakeholders including public institutions, the business community, the third sector and the medical and health communities that have reach across the EU Member States. Partnerships boast excellent research competences and, increasingly, have demonstrated capabilities in enabling functional channels to market and to patients for the benefits of patients and the health systems.

A policy challenge is that of capturing the potential synergies generated within the complex system of health-related Partnerships. In fact, we have seen that relatively small projects, even when extremely successful, may find difficulties in accessing competences and resources to further advance their innovations towards the bedside. Often, for these beneficiaries, the way to overcome such hurdles consists in bootstrapping, repeat applications for funding and, in a minor capacity, searching for a route to market through patenting and licencing, spin-offs and collaborations with other established firms. From our interviews it emerged that a small number of very successful research groups had ongoing complementary projects funded by different Partnerships (and other sources) and that this opportunity helped them enormously in progressing in their basic and clinical research. Through capitalising on these synergies, they gained better access to knowledge and resources to bring their findings and milestones to clinical trials enabling further pathways to impact involving commercial partners. On the other hand, Partnerships focusing on ecosystem-building activities may have capacity and capabilities to foster larger projects with diverse sets of beneficiaries who contribute to research activities as well as advancing potential innovation to the bedside more effectively.

1. The overall budget of the partnership amounts to €2.4B. A half of its funding comes from the European Union and the other half from the private partners including large companies, charities and foundations operating in the medical and health sectors.