



European
Commission

PERFORMANCE OF EUROPEAN PARTNERSHIPS

BIENNIAL
MONITORING
REPORT 2022
ON PARTNERSHIPS
IN HORIZON EUROPE

1. Introduction



1. INTRODUCTION

HIGHLIGHTS OF THIS CHAPTER

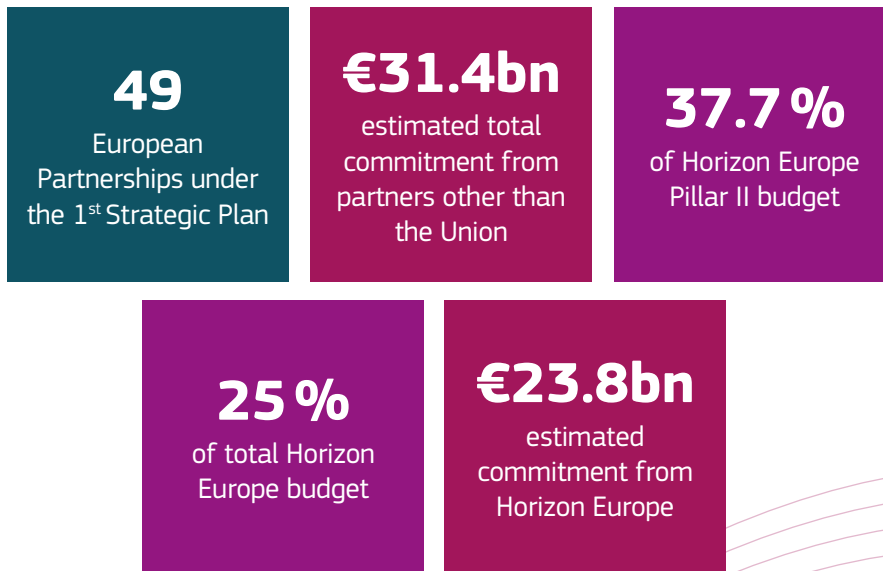
THIS CHAPTER ADDRESSES THE FOLLOWING QUESTIONS

- Why are partnerships needed, what is their underlying rationale and what is expected from them?**
- When and where did the European Partnership instrument originate, how has the landscape of partnerships evolved over time, and what are some of the major achievements?**
- What partnerships are there under Horizon Europe and why?**

Because the Horizon Europe project monitoring system is not fully functional, data regarding the performance and impact of European Partnerships in Horizon Europe is currently still very limited. Thus, this report provides both illustrative and indicative observations based largely on Horizon 2020 (H2020) data. Future reports will be based largely or entirely on Horizon Europe (HE) data.

This report covers 37 European Partnerships officially launched at the time of publishing this report. The number of Horizon Europe partnerships is expected to reach 49 by the time all currently planned partnerships have officially been launched under the first Strategic Plan in Horizon Europe (2021-2024).

SELECTED KEY FIGURES





This report on the Performance of European Partnerships, also known as the Biennial Monitoring Report (BMR), aims to provide a strong evidence base to guide the implementation of partnerships and to inform strategic discussions on the effectiveness of the new policy approach to European Partnerships and, where relevant, how it should evolve.

The BMR provides a systematic overview of the overall European Partnership landscape by shedding light on:

- The effectiveness of the new policy approach for European Partnerships and the extent to which it leads to a better achievement of objectives and impacts compared to traditional calls under the Framework Programme.
- The progress of European Partnerships towards their objectives and targeted impacts – both individually and collectively, at the EU and national level.
- Early implementation barriers and drivers towards impacts – e.g. in terms of contributions, coherence, collaboration, openness or accessibility of partnerships.
- First results achieved, in view of their further demonstration, exploitation and valorisation, including for policymaking by Commission Services and national administrations.

This is the first in a series of four BMRs planned to be published in 2022, 2024, 2026 and 2028. It focuses on introducing the new Horizon Europe Partnership landscape and provides a reference point for future BMRs. This first report has been drafted with the support of an independent Expert Group of the European Commission³.

The four planned BMRs will have fixed content that will be repeated in each of the reports. In addition, each will discuss a limited number of cross-cutting themes, which will vary from one BMR to the next. The broad theme of Synergies was selected as a cross-cutting theme for this first report as European Partnerships are expected to take a more intensive and systematic approach to developing synergies with other international, EU, national or regional programmes. They are also expected to cooperate with other partnerships and initiatives, or new types of stakeholders, to maximise their efficiency and impact.

The BMR is broadly looking at quantitative and qualitative evidence, ranging from what has already been achieved, to what is currently being implemented, to future intentions. It explores the added value of European Partnerships by providing examples of outcomes and impacts, which would not have been (or will not be) generated, or at least not to the same extent, without such partnerships. Furthermore, the report looks at the expected contribution of European Partnerships to the EU priorities of green and digital transitions and resilience.

Besides data and indicators reported at the Horizon Europe level, the BMR also reports on progress through six common partnership-level indicators, capturing the agreed principles for their effective implementation and monitoring of European Partnerships: additionality and directionality, coherence and synergies, openness and transparency, and international visibility.

For this first BMR, data collected from 29 countries and 37 partnerships defines a reference point for future reports. It will also feed into the upcoming interim evaluation of Horizon Europe. The detailed methodology and process for preparing the BMR is described in the Second Interim Report of the Expert Group (forthcoming).

This report constitutes the first attempt at the comprehensive monitoring of the European Partnership landscape, using indicators decided upon by the Council and the European Parliament. The challenges of this exercise should not be underestimated given the high diversity of partnerships and lack of data at the beginning of Horizon Europe. Nevertheless, this first report already provides insights for policy development that hopefully readers will find interesting and paves the way for more complete BMRs in the future.

³) <https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?do=groupDetail.groupDetail&groupID=3738&news=1>



1.1 EUROPEAN PARTNERSHIPS – POLICY CONTEXT

1.1.1 BRIEF HISTORY – 20 YEARS AS PART OF THE EUROPEAN RESEARCH AREA

Partnerships are not new. The first partnerships were set up in the context of developing the ERA and the launch of the Sixth Framework Programme (FP6) in 2002. The partnership concept was developed with the aim of addressing the fragmentation and unnecessary duplication of research efforts and to increase public and private investment in research activities and enhance their impact. The resulting size, scale and critical mass achieved by pooling resources across Europe was to ensure a strong global position for European research. Over the years, acknowledging that research plays a central role in providing solutions to address ‘the grand challenges of our time’⁴, such as sustainability, climate change, food safety, clean and affordable energy, etc., it has become clear that European Partnerships must increasingly focus on societal challenges.

At first, the Framework Programme focused on coordinating and aligning national research and innovation programmes and organising joint calls through ERA-NETs, Article 169 of the TFEU⁵ and Joint Programming Initiatives (JPIs).

Building on the European Technology Platforms, the Commission also set up the first Joint Technology Initiatives (now Joint Undertakings) in the fields of aeronautics, medicines, fuel cells and hydrogen, nanoelectronics and embedded computing systems by using Article 171 of the Treaty establishing the European Community (now Article 187 of the TFEU) in 2007.

The 2008 financial crisis demanded quick action to support the competitiveness of key industrial sectors of the European economy, which led to the launch of several contractual public-private partnerships (cPPPs).

Finally, in order to address the knowledge triangle, a new type of partnership – the European Institute of Innovation and Technology – Knowledge and Innovation Communities (EIT-KICs), supported by the overarching EIT, were introduced in 2008.

Obviously, the practical implementation of the general partnership concept is critical in achieving success. With every new Framework Programme, new partnership types and partnership instruments have been proposed, although it has proved to be much more difficult to abandon or replace existing ones. The complexity of the partnership landscape reached its peak during Horizon 2020 with eight forms of implementation⁶ and close to 120 partnership initiatives running without clear exit strategies and with increasing concerns about their lack of coherence, openness, and transparency.

There were also increasing concerns about the contribution of partnerships to European and national policy priorities, despite the fact that the partnerships delivered several positive impacts in progressing towards their objectives (e.g. by setting long-term agendas, structuring research and innovation (R&I) cooperation between otherwise dispersed actors and leveraging additional investments). Finally, the evidence on the added value was scarce, notably on what had been achieved beyond establishing joint agendas and launching calls⁷.

During the informal Council of Research Ministers in Tallinn in July 2017, there was a large consensus on the need to simplify the EU R&I landscape by drastically reducing the number of R&I partnerships and making them more open and attractive for stakeholders across Europe.

4) Lund Declaration 2009, <https://era.gv.at/era/societal-challenges/the-lund-declaration/>

5) Art. 185 as from 1 December 2009

6) For a full overview, see the Impact assessment of Horizon Europe, Commission Staff Working Document, SWD(2018)307, pp. 108. These include initiatives based on Article 187, Article 185 of the TFEU, contractual public-private partnerships, EIT KICs, ERA-NETs, European Joint Programmes, JPIs, and FET Flagships.

7) <https://www.technopolis-group.com/wp-content/uploads/2020/02/Increased-coherence-and-openness-of-European-Union-research-and-innovation-Partnerships.pdf>



This was also concluded by the interim evaluation of Horizon 2020⁸ and by the so-called Lamy Report⁹. Consequently, the Commission carried out a major reform of its partnership policy with the aim of rationalising the landscape and making partnerships more open, coherent, and strategic.

1.1.2 RENEWED AMBITION FOR EUROPEAN PARTNERSHIPS UNDER HORIZON EUROPE

Horizon Europe – the EU’s R&I framework programme for 2021-2027 – introduced a new strategic, coherent, and impact-driven policy approach to European Partnerships. In this new policy framework, European Partnerships are expected to play a key role in achieving the EU’s strategic objectives – namely, accelerating the transition towards a green, climate neutral, and digital Europe while strengthening the resilience and competitiveness of European industry in line with the European Industrial Strategy¹⁰.

The challenges of climate and environmental change, attaining European technological leadership and open strategic autonomy, and ensuring a sustainable and inclusive recovery require directing dispersed research and innovation efforts towards a shared vision on the required transformation process. By teaming up with both the public and private sectors, European Partnerships are expected to help speed up novel solutions, particularly those that can reduce greenhouse gas emissions by 2030 in line with the European Green Deal and the Horizon Europe 35 % climate expenditure targets and help achieve the green and digital transitions.

To maximise the impact of European Partnerships, Horizon Europe has introduced several novelties compared to Horizon 2020:

A simple architecture and toolbox for partnerships and a common umbrella brand ‘European Partnerships’. European Partnerships may only be set up using three different forms: co-funded, co-programmed and institutionalised.

Whilst the co-funded and co-programmed partnerships are linked to the comitology procedure (including adoption of the Strategic Plan and the Horizon Europe Work Programmes), institutionalised partnerships require the adoption of separate legislation and are subject to an *ex-ante* impact assessment¹¹.

The main differences between the different forms of European Partnerships are in their preparation and how they function, as well as in the overall impact they can trigger. The Horizon Europe Regulation foresees that the least complex form of implementation should always be preferred, which introduces some bias against institutionalised European Partnerships that take the longest to set up.

8) Impact assessment of Horizon Europe, Commission Staff Working Document, SWD(2018)307.

9) <https://op.europa.eu/en/publication-detail/-/publication/ffbe0115-6cfc-11e7-b2f2-01aa75ed71a1/language-en/format-PDF/source-77975731>

10) COM(2020) 102.

11) Following the Commission’s Better Regulation Guidelines: https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how/better-regulation-guidelines-and-toolbox_en



TABLE 1. Types of European Partnerships and their key characteristics

Type	Legal form	Implementation
Co-programmed	Memoranda of Understanding	Division of labour, whereby the EU contribution is implemented through a Framework Programme and partners' contributions under their responsibilities.
Co-funded	Grant Agreement	Union provides top-up funding for an integrated programme with distributed implementation by entities managing and/or funding national R&I programmes.
Institutionalised	Based on Art 185/187 of TFEU and the EIT Regulation for 2021-2027	Integrated programme with centralised implementation.

Source: European Commission

Coherent life-cycle criteria for all European Partnerships: including the notion of exit strategies from Horizon Europe funding. All European Partnerships have to follow the common criteria laid down in the Horizon Europe Regulation (Article 10 and Annex III):

- Directionality and additionality
- Coherence and synergies
- Transparency and openness
- International visibility
- Flexibility of implementation.

This means that European Partnerships are established only if there is evidence that they support achieving EU policy objectives more effectively than other Horizon Europe actions. They are all based on agreed objectives and a long-term vision, underpinned by Strategic Research and Innovation Agendas (SRIAs) that are shared and committed to by all partners in the partnership.

The launch of a European Partnership is conditional on the partners signing up to the objectives and committing the resources and investments needed to achieve these. In this context, the Commission has introduced a new approach to private partners' contributions in order to increase their level and relevance. A coherent approach also enables comparability in calculating contributions across European Partnerships with industry involvement.

Another important difference compared to Horizon 2020 is that European Partnerships are expected to be more transparent and open to the involvement of new participants and actors, including from public bodies and foundations, in identifying their priorities, as well as allowing newcomers to enter as members, participate in open calls and benefit from their activities and results.

All European Partnerships are expected to establish collaborations among one another, and synergies with other relevant programmes at the international, EU, national and regional level, including EU Missions. This means that partnerships need to set up and maintain a clear strategy for interfaces and joint activities with other relevant initiatives in order to secure an optimum level of interconnection and ensure effective synergies.

Operational guidelines for implementing the criteria framework were developed by the Commission in 2018¹² to support the coordinated preparation of European Partnerships and were further elaborated during the impact assessment for institutionalised European Partnerships¹³. These criteria were also the basis for developing the common indicators used in this report for monitoring the performance of European Partnerships (Section 2.4).

12) <https://www.era-learn.eu/documents/wk-14470-2018-init-en.pdf/view>

13) https://ec.europa.eu/info/sites/default/files/research_and_innovation/knowledge_publications_tools_and_data/documents/ec_rtd_ia-ip-horizontal-analysis-efficiency-coherence.pdf, p. 2118.

While the more ambitious European Partnerships have the potential to trigger EU-wide transformations towards sustainability, push the digital transformation, and gain more resilience, they are being implemented at a time of deep changes on world markets and multiple challenges. Given the unprecedented crisis brought about by the COVID-19 pandemic, the most recent security threats, and rapidly intensifying climate change¹⁴, it is more important than ever to ensure that partnerships step up and avoid business as usual.

The success of European Partnerships will depend on several factors – including a shared long-term vision and commitments from partners, the quality of the additional activities, establishing a meaningful cooperation with the Member States and Associated Countries¹⁵, and continuous monitoring of progress towards the objectives.

An important challenge for European Partnerships is their capacity to go beyond the traditional modalities of project funding and take a more systemic approach by covering a much wider set of activities needed for market, regulatory and societal uptake¹⁶. All of these must be carefully monitored to ensure that the ambitions regarding the European Green Deal become a reality.

BOX 1. ENSURING COMPLIANCE WITH THE CRITERIA DURING THE PREPARATION OF EUROPEAN PARTNERSHIPS

The Commission set up a coordinated process for preparing European Partnerships to ensure compliance with Horizon Europe's new ambition and criteria. Partnerships launched in the first two years of Horizon Europe were required to develop a draft proposal (published on the Commission website¹⁷) describing the measures to ensure compliance with these criteria, including:

- Demonstration that the partnership approach is more effective than traditional Framework Programme calls in achieving the related objectives (the so-called 'necessity test').
- Demonstration of a long-term vision, including a clear intervention logic with concrete objectives and targets to be achieved during the lifespan of the partnership and with a set of KPIs to match these.
- Demonstration of ex-ante long-term commitment by the partners other than the EU.
- Measures for increasing the openness and involvement of newcomers.
- Measures ensuring coherence and synergies within the EU R&I landscape.

Institutionalised European Partnerships (based on Articles 185 and 187) were subject to a coordinated impact assessment analysing alternative implementation modes to Article 185/187 (the so-called 'necessity test'). A stand-alone impact assessment was carried out for the purposes of the revision of the EIT Regulation¹⁸ and the EIT Strategic Innovation Agenda 2021–2027¹⁹.

14) <https://www.ipcc.ch/report/ar6/wg1/#SPM>

15) Third countries associated to Horizon Europe.

16) <https://www.technopolis-group.com/fr/increased-coherence-and-openness-of-european-union-research-and-innovation-Partnerships-2/>

17) https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/european-Partnerships-horizon-europe_en

18) REGULATION (EU) 2021/819 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 May 2021 on the European Institute of Innovation and Technology.

19) DECISION (EU) 2021/820 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 May 2021 on the Strategic Innovation Agenda of the European Institute of Innovation and Technology (EIT) 2021-2027.



European Partnerships continue to be a cornerstone of the ERA by aligning R&I agendas, improving skills, and increasing the absorption capacities of European businesses. This is supported by a dedicated action in the Horizon Europe Work Programme *Widening participation and strengthening the European Research Area* (see Box 2). Partnerships with Member State participation will be key for reaching the target set in the 2020 European Research Area Communication whereby Member States would commit 5% of national public R&D investments to joint programmes and European Partnerships by 2030. In terms of contributions, the private sector is expected to at least match every euro invested by the EU while the Participating States are expected to invest 2.3 euros for every 1 euro the EU invests²⁰. The broader impact and leverage (e.g. for jobs, carbon emissions, energy demand) through the partnerships are expected to be much greater.

BOX 2. SUPPORT FOR POLICYMAKERS – PROGRAMME-LEVEL COLLABORATION BETWEEN NATIONAL R&I PROGRAMMES

‘The new policy approach to European Partnerships limits co-funding to the collaboration of Member States and Associated Countries to Union and Horizon Europe priorities. Focus on strategic orientation leaves little room for bottom-up initiatives between national policymakers. For this reason, the ERA part of the Horizon Europe Work Programme provides the possibility for Member States, Associated Countries, and civil society organisations to align national and regional research funding programmes with the priorities of their choice and implement joint calls for transnational R&I projects.’²¹

Source: European Commission

1.1.3 RATIONALE OF EUROPEAN PARTNERSHIPS UNDER HORIZON EUROPE

EU R&I partnerships are strategic instruments which enable long-term collaborations to be established and economies of scale to be achieved to tackle common challenges²². Since their establishment in the early 2000s, the core activities of the partnerships have consisted of jointly developing common R&I agendas and building critical mass on common challenges. While this is still the core rationale of the European Partnerships, Horizon Europe goes beyond this and puts a much greater emphasis on their capacity to tackle complex cross-border challenges, such as those defined in the United Nations Sustainable Development Goals (UN SDGs).

Addressing these challenges requires more than the development of single (technological) solutions. It demands more profound and disruptive changes to the existing R&I systems. Partnerships are in a unique position to address such challenges and to support key EU policies because they are based on a common SRIA that is shared and committed to by all partners. This is a key feature that distinguishes all European Partnerships from other collaborative research instruments.

Secondly, the new generation of partnerships puts more focus on the better integration of sectoral R&I policies, notably through a more systematic and extended reach and the engagement of stakeholders, such as end-users and public authorities.

Finally, partnerships are more focused on cooperation and synergies with each other and other EU and Member-State programmes. Partnerships cannot act in isolation but must seek complementarities with other relevant initiatives or programmes to accelerate the development and diffusion of innovation. They enable systematic engagement with a variety of stakeholders and end-users, including standardisation bodies and international partners, to ensure that these solutions are taken up and can ultimately deliver on the ambitious goals. They act as dynamic change agents, strengthening linkages within their respective ecosystems and along the value chains. Finally, European Partnerships aspire to be more open and globally strategic.

20) Based on a standard scenario for the Co-funded Partnerships with 30% funding rate.

21) https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-11-widening-participation-and-strengthening-the-european-research-area_horizon-2021-2022_en.pdf

22) https://eur-lex.europa.eu/resource.html?uri=cellar:9f0e350e-75de-11eb-9ac9-01aa75ed71a1.0001.02/DOC_8&format=PDF

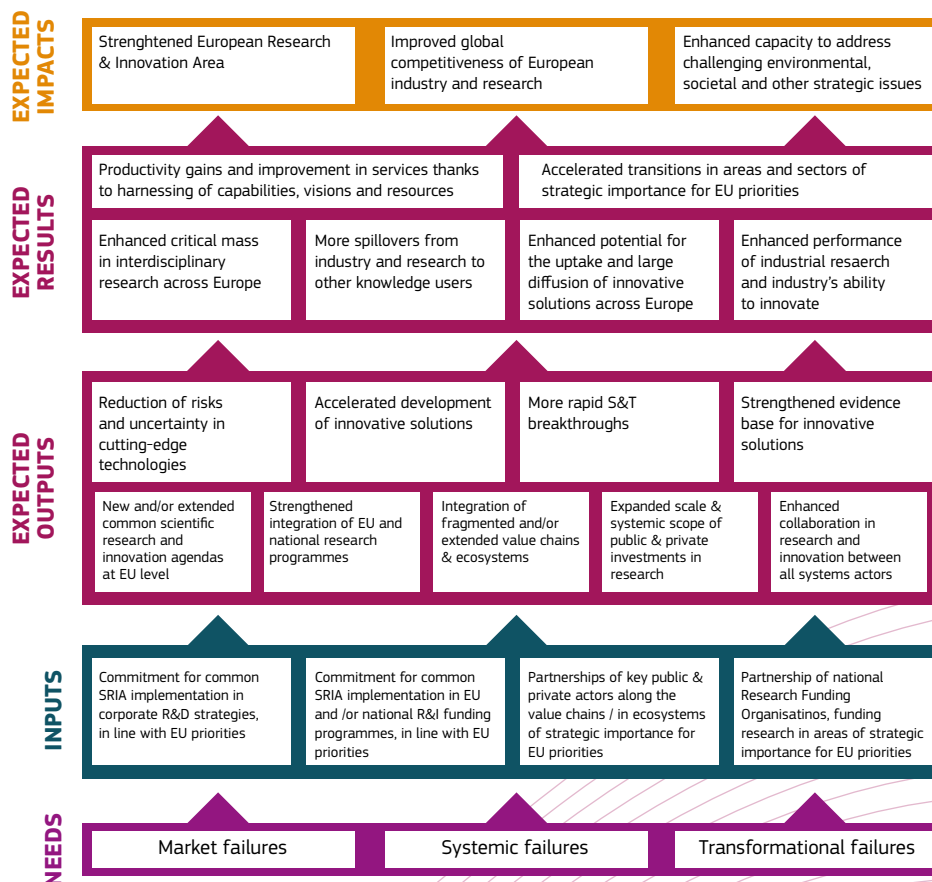
Creating a platform for strengthened collaboration and knowledge exchange between various actors in the European R&I system and an enhanced coordination of strategic research agendas and/or R&I funding programmes aims to address transformational failures to better align the agendas and policies of public and private funders, pool available resources, create critical mass, avoid unnecessary duplication of efforts, and leverage sufficiently large investments where needed but hardly achievable by individual countries.

The concentration of efforts and pooling of knowledge on common priorities to solve multi-faceted societal and economic challenges is at the core of these initiatives. Specifically, enhanced cross-disciplinary and cross-sectoral collaboration and a better integration of value chains and ecosystems are among the key objectives of these instruments.

In the light of Horizon Europe, the aim is to drive system transitions and transformations towards EU priorities. Especially in fast-growing technologies and sectors such as ICT, there is a need to react to emerging opportunities and address systemic failures, such as the shortage of skills or critical mass or cross-sectoral cooperation along the value chain that would hamper the attainment of future European leadership and/or strategic autonomy. Partnerships also aim to address market failures by enhancing industry investments thanks to the sharing of risks and providing investment predictability.

Figure 1 shows the most common failures which partnerships aim to address²³.

FIGURE 1. Intervention logic of the European Partnership Instrument



Source: Technopolis

23) https://ec.europa.eu/info/sites/default/files/research_and_innovation/knowledge_publications_tools_and_data/documents/ec_rtd_ia-ip-horizontal-analysis-efficiency-coherence.pdf

1.2 EUROPEAN PARTNERSHIP LANDSCAPE – HORIZON 2020 TO HORIZON EUROPE

European Partnerships have been identified as part of Horizon Europe Strategic Planning and the complementary strategic coordinating process for partnerships, involving the Member States closely. It involved a co-design exercise aiming to better align these initiatives with societal needs and policy priorities, while broadening the range of actors involved.

FIGURE 2. Overview of 49 European Partnerships in the structure of Horizon Europe

PILLAR II - Global challenges & European industrial competitiveness				PILLAR III - Innovative Europe	
Cluster 1: Health	Cluster 4: Digital, industry and space	Cluster 5: Climate, energy and mobility	Cluster 6: Food, bioeconomy, natural resources, agriculture and environment	EIT: The European Institute of Innovation and Technology	European innovation ecosystems
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe	EIT InnoEnergy	Innovative SMEs
Global Health EDCTP3	Smart Networks and Services	Clean Aviation	Biodiversa+	Climate-KIC	
Transformation of Health Care Systems	High Performance Computing	Single European Sky ATM Research 3	Blue Economy	EIT Digital	
Risk Assessment of Chemicals	European Metrology (Art. 185)	Europe's Rail	Water4All	EIT Food	
ERA for Health	AI-Data-Robotics	Connected, Cooperative and Automated Mobility	Animal Health and Welfare	EIT Health	
Rare Diseases	Photonics	Batteries	Accelerating Farming Systems Transitions	EIT Raw materials	
One-Health Antimicrobial Resistance	Made in Europe	Zero-emission Waterborne Transport	Agriculture of data	EIT Manufacturing	
Personalised Medicine	Clean Steel – Low-Carbon Steelmaking	Zero-emission Road Transport	Safe and Sustainable Food Systems	EIT Urban Mobility	
Pandemic Preparedness	Processes4Planet	Built4People		Cultural and Creative Sectors and Industries	
	Globally Competitive Space Systems	Clean Energy Transition			
		Driving Urban Transitions			
				CROSS-PILLARS II and III	
				European Open Science Cloud	

- Institutionalised partnerships (Art 185/7, EIT KICs)
- Co-programmed
- Co-funded
- Not covered in the BMR 2022 due to a later start date

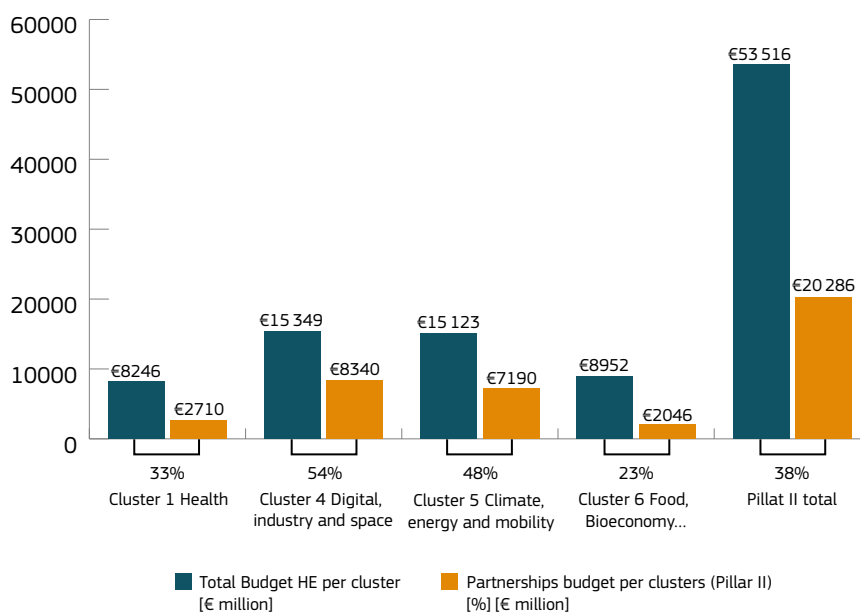
Source: European Commission



Considering the eight areas for institutionalised European Partnerships, based on Articles 185 and 187 TFEU and the budget cap for partnerships in pillar II set out in the Horizon Europe Regulation, the Commission services identified an initial list of 44 candidates for co-funded, co-programmed or institutionalised European Partnerships as part of the strategic planning process of Horizon Europe. The list was then expanded to 49 candidate initiatives following a co-design exercise with Member States²⁴.

European Partnerships are set within the context and structure of Horizon Europe and are positioned dominantly in Horizon Europe's Pillar II. The European Open Science Cloud partnership is part of Pillar I but serves research activities in all Pillars of the HE programme. The European Partnership on Innovative SMEs and EIT KICs are positioned in the pillar III of Horizon Europe. Figure 2 gives an overview of all co-funded, co-programmed and institutionalised European Partnerships according to their positioning in the Horizon Europe structure. When this report was published, 37 European Partnerships had been launched and 12 will be launched later in 2022-2024. This is because some need to complete the current cycle, with active networks ongoing until 2022-2023²⁵. Others are addressing entirely new priorities that require more preparation time²⁶.

FIGURE 3. European Partnerships' budgets in Horizon Europe cluster budgets



Source: European Commission

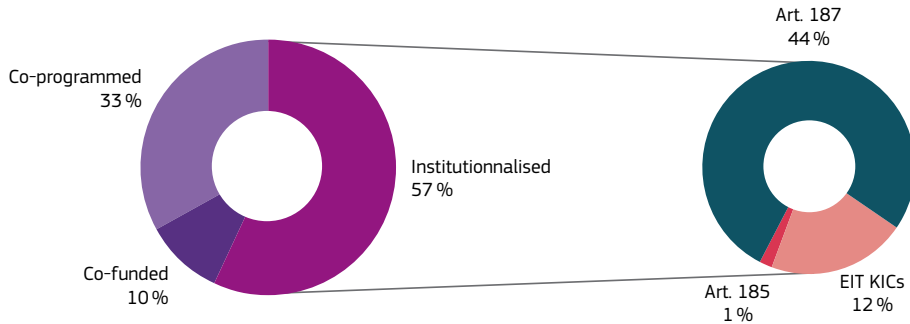
24) <https://www.era-learn.eu/news-events/news/european-Partnerships-under-horizon-europe-results-of-the-structured-consultation-of-member-states-1>

25) Rare diseases, Personalised Medicine, One Health AMR.

26) Accelerating farming systems transition, Animal health, Safe and Sustainable Food Systems, Environmental Observations, Pandemic Preparedness, Transforming Health and Care Systems, Globally competitive space systems.

The EU's contribution is defined for the full duration of all European Partnerships while there is flexibility to either decrease (e.g. if partners fail to meet their commitments) or increase the EU's contribution, provided it is at least matched by the partners. With the seven-year Multiannual Financial Framework and the additional NextGenerationEU budget, the budget proposed for partnerships would account for 37.7% of the Pillar II budget (i.e. EUR 20.3 billion) and 25% of the total Horizon Europe budget²⁷. Considering the budget cap for partnerships in Pillar II (up to 49.9%), the remaining budgetary margin is around 12% of the Pillar II budget (i.e. EUR 6.5 billion)²⁸.

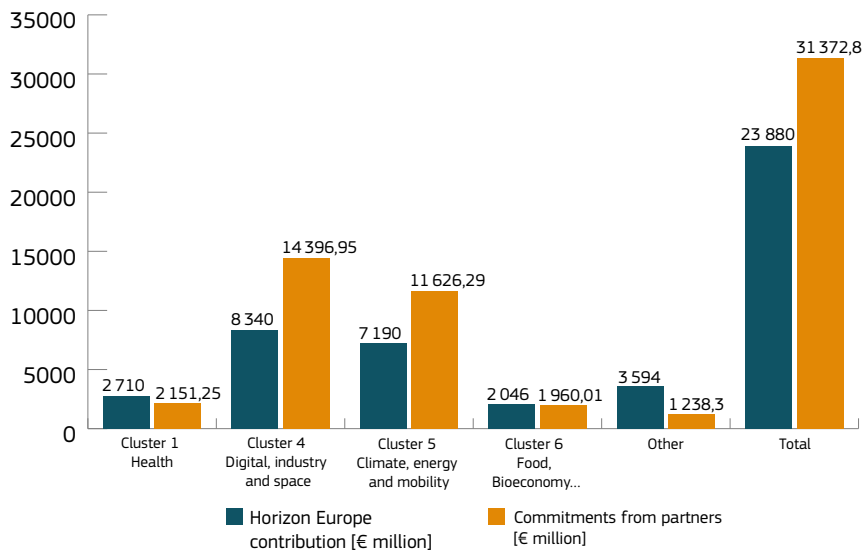
FIGURE 4. Horizon Europe budget share split based on the type of partnership



Source: European Commission

Institutionalised European Partnerships take up the biggest share of the Horizon Europe partnership budget (57%). Of the institutionalised partnerships, the largest share of the budget is dedicated to the 10 Joint Undertakings (JUs) (based on Article 187 of the TFEU) that are traditionally industry-led (with three exceptions: the Global Health EDCTP3, High Performance Computing and Key Digital Technologies Joint Undertaking). The co-programmed partnerships take up 33% of the Horizon Europe partnership budget. The European Partnerships, which are exclusively with Member States, Associated Countries, and their programmes, constitute 10% of the total budget allocated to partnerships under Horizon Europe.

FIGURE 5. European Partnership budget distribution



Source: European Commission. Commitments from partners = partners other than the European Union, Member States and Associated Countries combined, e.g. private companies, etc. The Other contains EOSC, Innovative SMEs and KICs, deviant Source: European Commission

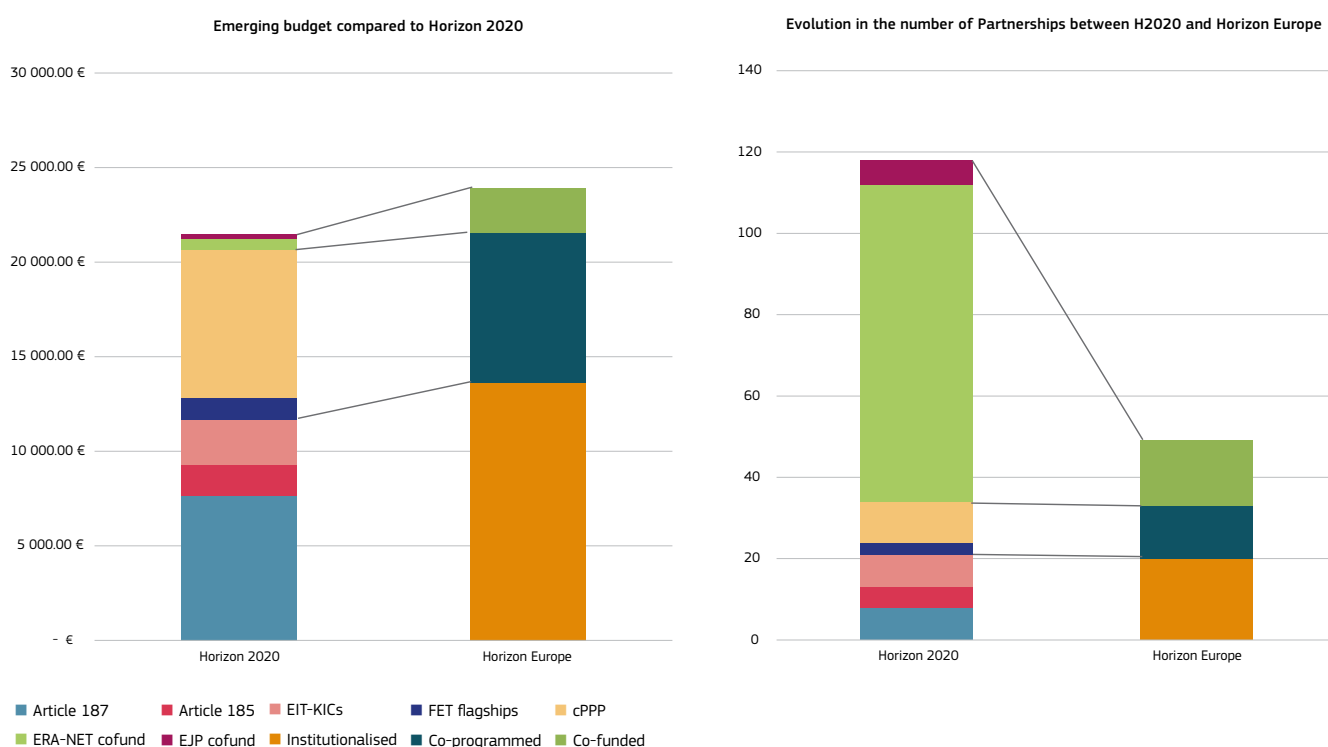
27) This does not include the budget for Pandemic Preparedness which is the only Partnership of the 49 for which there is no indication yet of the Union contribution.

28) This does not take into account the European Commission's recent proposal on European Chips Act

Under Horizon Europe, a precondition for setting up a partnership is the ex-ante commitment from partners. The total commitments from partners other than the Union amount to EUR 31.373 billion, of which EUR 9 041.75 billion are commitments from the Member States and Associated Countries²⁹. The reason for the slightly lower commitments in Cluster 1 compared to the contribution from Horizon Europe is because for the Innovative Health Initiative, only EUR 1 billion is counted, while the JU expects to secure an additional EUR 200 million from contributing partners to match the EU contribution set out in the Single Basic Act. Moreover, several partnerships in Cluster 1 will only start in 2023 for which commitments will only be requested by summer 2022. The 'Other' category includes EOSC, Innovative SMEs and the KICs. The data on commitments from partners includes only those made for EOSC and Innovative SMEs due to the policy for partners' contributions which was changed under the new EIT Regulation³⁰.

As shown in Figures 6 and 7, an extensive reform and rationalisation of the landscape was carried out which entailed reducing the number to 49 European Partnerships, compared to more than 120 partnerships under Horizon 2020. In addition, the number of partnership instruments was rationalised under Horizon Europe by merging ERA-NET and European Joint Programme (EJP) Cofunds that had the same basic rationale into a single flexible co-funded European Partnership, as well as by bringing Article 185 and 187 TFEU initiatives and KICs under a single umbrella of institutionalised European Partnerships. The overall budget for European Partnerships under Horizon Europe increased by around 11% compared to Horizon 2020, which is quite moderate considering that Horizon Europe, with a total budget of EUR 95.5 billion, is around 22% larger than the Horizon 2020 budget (EUR 77 billion).

FIGURE 6. Partnership portfolio in H2020 and HE



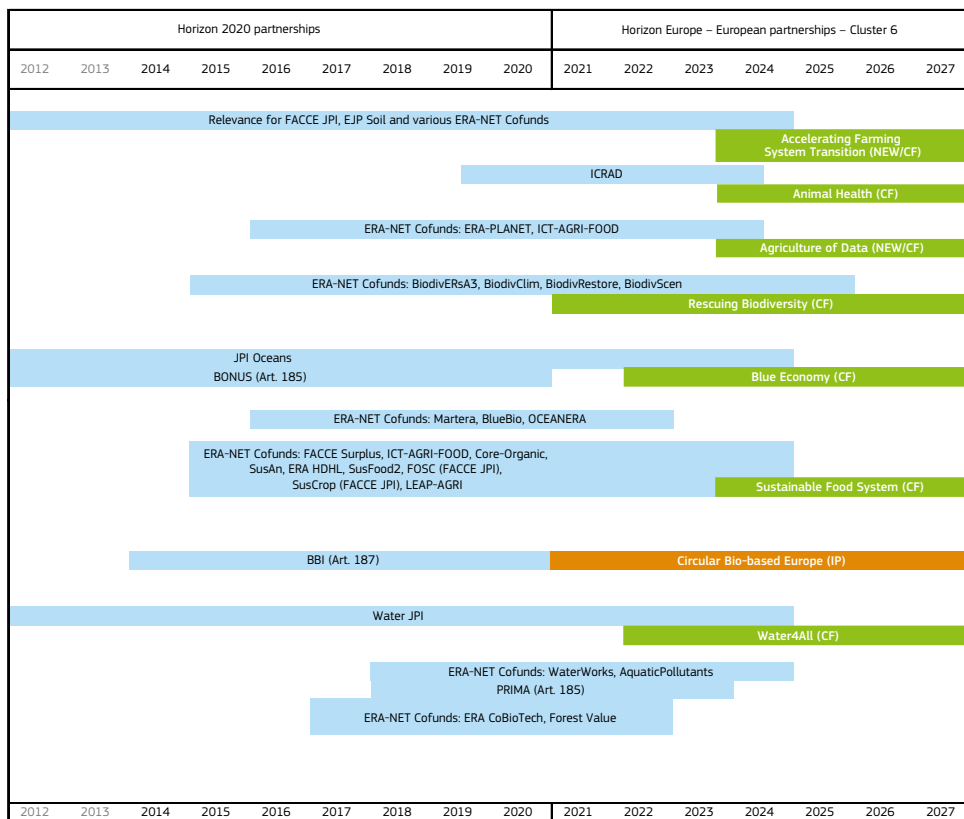
Source: European Commission

29) This only includes commitments made to Partnerships that start in 2021/2. The next round of requests for commitment for the remaining Partnerships starting in 2023/4 will be launched in 1Q 2022.

30) <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R0819>

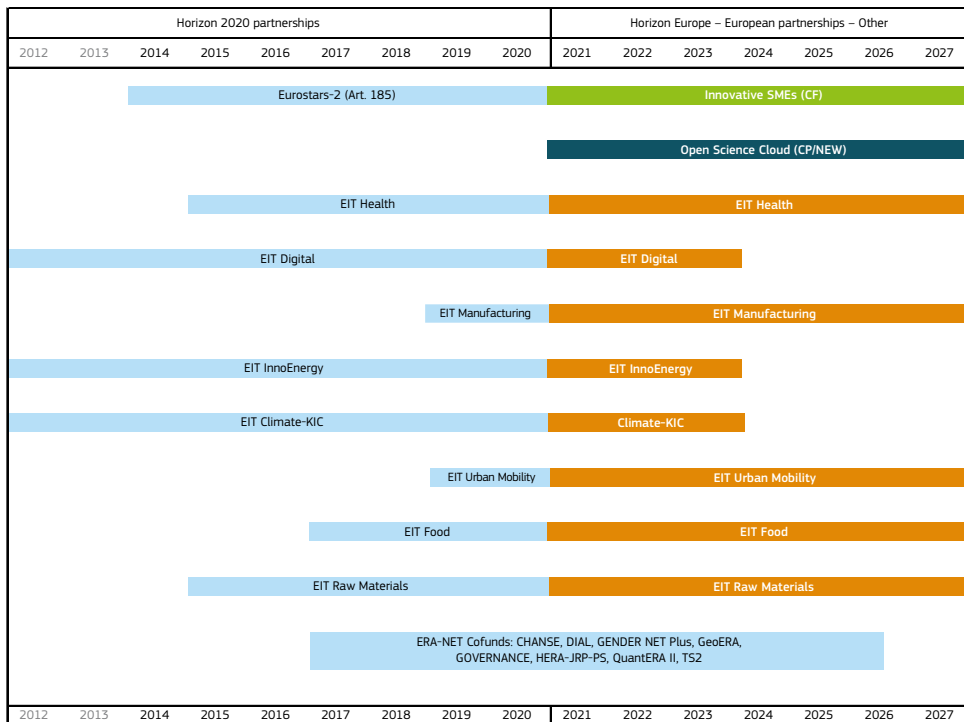


(D) CLUSTER 6 Food, bioeconomy, natural resources, agriculture and environment



..... Horizon Europe partnerships' duration may go beyond 2027

(E) OTHER European Partnerships in Pillars I and III of Horizon Europe



..... Horizon Europe partnerships' duration may go beyond 2027



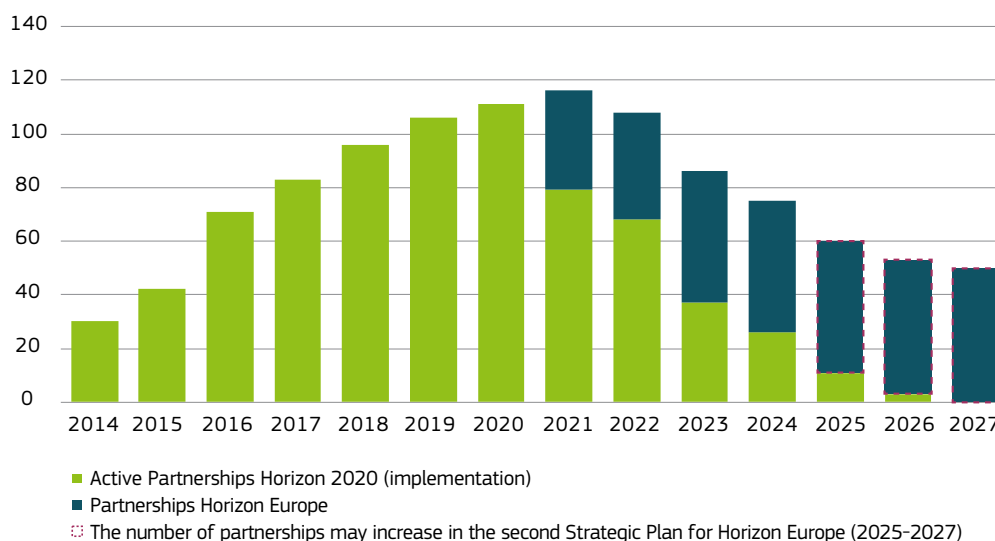
The rationalisation has come almost exclusively from the merging or discontinuation of public-public partnerships. While in clusters 1, 5 and 6 the focus has been on merging the numerous small networks into a single and larger co-funded European Partnerships, it is noteworthy that all P2Ps linked to the priorities of Cluster 4 have been discontinued under Horizon Europe³².

Less rationalisation has been achieved in the case of industry partnerships as the number of initiatives based on Article 187 TFEU has increased from 8 to 10 and the number of co-programmed partnerships from 10 to 13. That said, those industry-led partnerships with a predecessor in Horizon 2020 have undertaken important reforms by changing the scope and partner composition – notably to include the whole value chain and better address the demand side.

For example, the Innovative Health Initiative has broadened its scope to include diagnostics, medical devices, imaging and digital, as well as the pharmaceutical sector. Similarly, for the Circular Bio-based Europe Joint Undertaking, it is stated that it 'is not a direct continuation of the Bio-Based Industries Joint Undertaking' and the JU aims to change the scope to 'involve a wider range of stakeholders, including the primary sector (namely agriculture, aquaculture, fisheries, and forestry) as well as providers of waste, residues and side streams, regional authorities and investors to prevent market failures and unsustainable bio-based processes'³³.

In addition, there are 10 partnerships addressing completely new priorities: Transformation of Health Care Systems; Clean Steel; Globally Competitive Space Systems; Connected, Cooperative and Automated Mobility; Zero-emission Waterborne Transport; BATT4EU; Accelerating Farming Systems Transition; Agriculture of Data; Sustainable Food Systems; Pandemic Preparedness; and the European Open Science Cloud.

FIGURE 8. Numbers of European Partnerships during the H2020-Horizon Europe transition



Source: European Commission supported by ERA-LEARN

32) E.g. ERA-NET for materials R&I; ERA-NET for R&I on materials and battery technologies, supporting the European Green Deal; ERA-NET Photonics-based sensing; ERA-NET implements European-wide coordination of R&I programmes on raw materials to strengthen the industry competitiveness and the shift to a circular economy; ERA-NET Raw Materials for the Sustainable Development and the Circular Economy.

33) <https://eur-lex.europa.eu/eli/reg/2021/2085/oj>



It should be noted that many partnerships funded under Horizon 2020 continue their activities beyond the end of Horizon 2020 – e.g. many ERA-NETs, JPIs and PRIMA will implement calls until 2024. Others, even though no longer launching calls, will still be ending their activities (funding projects) and winding down operations. Consequently – as shown in Figure 8 – the total number of active partnerships (in both Horizon 2020 and Horizon Europe) peaked with the launch of European Partnerships in 2021 and a significant decrease will only happen towards the middle of Horizon Europe. It should be considered that while the number of European Partnerships is known for 2021-2024, it may increase from 2025 onwards, depending on discussions on the second Strategic Plan for Horizon Europe.

1.3 STRATEGIC COORDINATING PROCESS

1.3.1 A NEW GOVERNANCE FRAMEWORK – THE STRATEGIC COORDINATING PROCESS

A new governance framework realising the strategic approach to EU R&I partnerships has been included in the Horizon Europe legal base and is referred to as the Strategic Coordinating Process.

*'The strategic planning process shall be complemented by a strategic coordinating process for European Partnerships, with participation of Member States and the Commission on equal footing. It shall function as an entry point for foresight analysis, analysis and advice on the portfolio development, possible setup, implementation, monitoring and phasing out of R&I Partnerships and be guided by a comprehensive criteria framework, based on Annex III of the Horizon Europe Regulation.'*³⁴

A key cornerstone of the Strategic Coordinating Process is to provide policymakers with evidence on the impacts and added value of the partnership approach. It should also provide feedback and advice to partnerships themselves on cross-cutting issues, such as implementing synergies and increasing the visibility and transparency of information regarding the partnership landscape.

The main vehicle of this process is the BMR. It will provide the necessary evidence base to inform strategic discussions on the partnerships, including how they fit with the overall R&I system and development of the ERA. At the heart of this effort is the aim to radically improve the understanding and tracking of the added value and impacts generated by partnerships to support the achievement of common EU objectives, at both EU and Member State level.

To implement the strategic coordinating process, the Commission has set up the Partnership Knowledge Hub³⁵, a formal structure for collaboration between the Commission and the authorities responsible for national coordination and participation in EU R&I partnerships from Member States, Iceland, Norway and Turkey³⁶. Since October 2021, the elected Member State co-chair of the Partnership Knowledge Hub for the next three years is the German representative Alexander Grablowitz. The Commission co-chair is the Director of the Common Policy Centre.

1.3.2 PARTNERSHIPS IN HORIZON EUROPE MONITORING AND EVALUATION

Previously, partnership monitoring was outside of the overall Framework Programme monitoring and evaluation strategy. Since 2021, the monitoring and evaluation of European Partnerships has been fully integrated into the Horizon Europe monitoring and evaluation framework³⁷. A harmonised monitoring and evaluation system ensures that progress is analysed in the wider context of achieving Horizon Europe objectives and EU priorities.

34) Article 6(4) of the specific programme implementing Horizon Europe

35) <https://ec.europa.eu/transparency/expert-groups-register/screen/expert-groups/consult?lang=en&groupId=3783&fromMeetings=true&meetingId=26959>

36) In line with the Terms of Reference, other Associated Countries may join the group by expressing their interest. Turkey has already joined the Partnership Knowledge Hub.

37) Article 50 of Horizon Europe requires reporting annually on the progress of the Programme towards achieving the objectives referred to in Article 3 and set out in Annex V along the Key Impact Pathways (KIPs).



Consequently, the different monitoring mechanisms must be better harmonised across partnerships and between the partnerships and the overall Horizon Europe monitoring framework. This means many significant improvements when compared to Horizon 2020. For example, at the project level, monitoring and reporting will be integrated into the Commission's IT systems and the information will feed into the Horizon Dashboard. This will significantly improve transparency on partnerships' performance at the project level, providing data on implementation on the go, and comparable with the rest of the programme, without an additional reporting burden on beneficiaries.

But the added value of partnerships must surely go beyond individual projects. To verify this, each partnership must report and monitor the progress towards their general, specific and operational objectives. During the preparation of this report, all European Partnerships were working on operationalising their specific partnership monitoring frameworks – i.e. setting baselines, methodologies, identifying data sources, etc. These monitoring frameworks will be added to the SRIAs or adopted by the Partnership Governing Board and published separately.

To enable monitoring across the partnerships landscape, the Commission – with the support of the Expert Group – has developed a set of common indicators on the functioning of all European Partnerships. These are closely linked to the new policy approach and added value generated by partnerships, as compared to other Horizon Europe modalities such as traditional calls. The common indicators also capture other aspects of ERA, such as the structuring effect, improvements in the national R&I systems/fabric, etc.

Eventually, all partnerships will be evaluated as an integral component of the Framework Programme and put into perspective with other Horizon Europe modalities and instruments. This will allow to assess European Partnerships and their impact in their proper policy context. The BMRs and data collected for them may act as valuable sources of information in these evaluations.

1.4 STRUCTURE OF THE REPORT

This first edition of the BMR focuses on the new partnership landscape in relation to EU and Horizon Europe priorities, including the composition of partnerships, overall planned budget allocations, and comparison with Horizon 2020.

Future editions of the BMR will build on the framework developed for this BMR by providing updates on progress on the key indicators and analysing the dynamics of implementation through the various data sources and anecdotal evidence, such as success stories and case studies collected from the partnerships and countries. Over time, the BMRs will build a robust body of evidence on the functioning, added value, and impact of the partnership policies, processes and outcomes.

Chapter 1 discusses the purpose and objectives of the European Partnerships as a policy tool. It explains where the instruments originate, how the partnership landscape has evolved and what the greater ambition for the partnerships under Horizon Europe means.

Chapter 2 discusses the difficult task of establishing baselines and benchmarks for the partnerships based on available Horizon 2020 data. It then provides an analysis of the aggregated contribution of the full portfolio of partnerships (to the extent data was available) to the green and digital transitions and resilience and the Key Impact Pathways of Horizon Europe. This is followed by an analysis of six common indicators designed to monitor the performance of European Partnerships against the policy objectives set for European Partnerships as a policy instrument. The chapter closes with a discussion on the added value of partnerships compared to other Horizon Europe modalities such as traditional calls.



Chapter 3 provides a snapshot of country performance in partnerships across 27 EU Member States, Iceland and Norway³⁸. The chapter begins with short summaries of past Horizon 2020 performance, anecdotal evidence of past impacts, data collection challenges, and declared Horizon Europe intentions. The core of the chapter consists of standardised country fiches containing factual information on partnership intensity index per country, country-level points of reference, and ambitions for participation in European Partnerships, and anecdotal evidence on country-level impacts and synergies.

Chapter 4 provides a snapshot of individual European Partnership performance through standardised fiches containing factual information on their vision, mission, strategy map, main KPIs. For ease of reference, the fiches are colour coded according to their positioning in the Horizon Europe structure³⁹.

Each chapter includes key highlights and a selection of monitoring questions that invite readers to reflect on progress, gaps, and challenges in their own specific contexts.

38) This first report includes the countries that are members of the Partnership Knowledge Hub (as of end 2021).

39) Cluster 1 – **blue**, Cluster 4 – **violet**, Cluster 5 – **green**, Cluster 6 – **red**, cross-pillar – **orange**