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European Partnerships



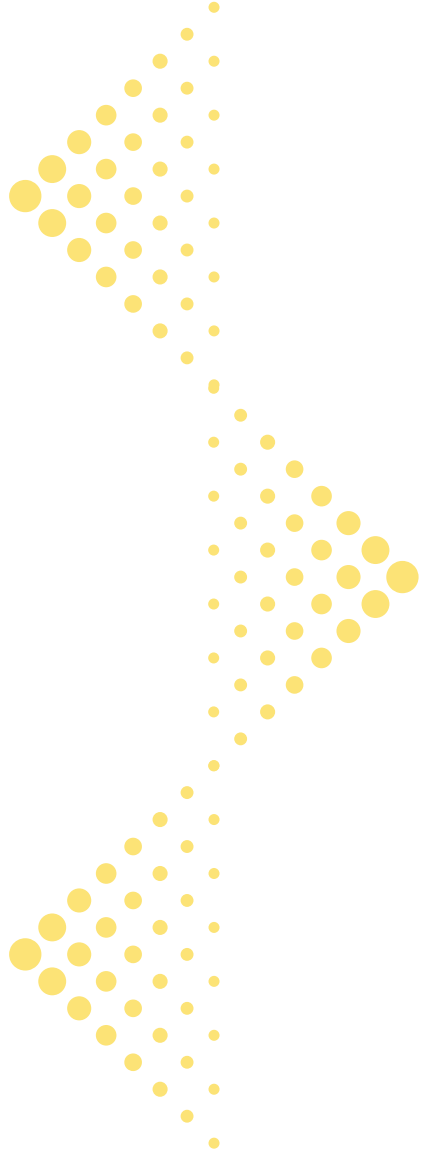
European Partnerships

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**UF Prodotti e Strumenti per la Comunicazione Istituzionale
e per gli Studenti**



European Partnerships

Research and Innovation Partnerships were introduced into the European research and innovation landscape as a result of the **Lisbon Strategy** with the aim of **developing the European Research Area (ERA)**.

These partnerships were originally designed and have been further developed to overcome fragmentation in the research and innovation landscape, avoid duplication of efforts, address economic crises, increase competitiveness and support innovation.

In recent years, however, there has been a proliferation of tools and initiatives dedicated to coordinating, collaborating, and aligning national strategies and programs, as the approach has been to launch new partnership tools while maintaining existing ones. This has led to a rather complex landscape of sometimes overlapping instruments, ranging from member state-led initiatives to instruments strongly supported by the European Commission and Horizon 2020, to partnerships between public agencies to alliances between the public and private sectors.

As part of **Horizon Europe's strategic planning**, the European Commission has implemented a process of reviewing and **streamlining existing European Partnerships** with the aim of reducing their number and improving their impact and effectiveness.

With Horizon Europe, the concept of European Partnerships has been transformed into a set of structured tools with a clear strategic vision, on which about 25% of the resources of the new European Framework Programme

will be channelled.

Horizon Europe therefore strongly supports, with an innovative vision, European partnerships to address global challenges and industrial modernization through joint research and innovation efforts with Member States, the private sector, foundations and other stakeholders.

Partnerships represent, in fact, effective mechanisms to aggregate research and innovation efforts in a coherent way and provide functional responses to EU policy needs, developing close synergies with national and regional programs, bringing together a wide range of actors around a common goal and transforming research and innovation into concrete socio-economic outcomes.

Structure

There are a total of **49 partnerships** and they are divided into **three types**:

Co-programmed partnerships

Established between the Commission and private and/or public partners. They are based on memoranda of understanding and/or contractual agreements, in which the objectives of the European partnership are specified, as well as the relative commitments of the Union and other partners in terms of financial or in-kind contributions, key performance and impact indicators, results to be achieved and reporting methods.

They stand in continuity with the Horizon 2020 contractual public-private partnerships (cPPPs).

Calls launched by these partnerships are published directly in the thematic sections of the Horizon Europe Work Program.

Co-funded partnerships

Established between the Commission and primarily public partners, placing national research funding agencies and other member state authorities at the center of the consortium.

They are based on a research and innovation agenda agreed by the partners - specifying objectives, key performance and impact indicators, results to be achieved, based on the partners' commitment to their financial and/or in-kind contributions and the integration of their relevant activities - and are triggered by a Horizon Europe co-funding action. They stand in continuity with the ERA-NETs and EJP Cofunds of Horizon 2020.

Institutionalized partnerships

Established between the Union and public and/or private entities, characterized by a long-term perspective and a high level of integration, implemented by structures created ad hoc.

It is the legislative acts establishing these partnerships that establish the objectives, key performance and impact indicators and results to be achieved, as well as the related commitments of the partners to make financial and/or in-kind contributions.

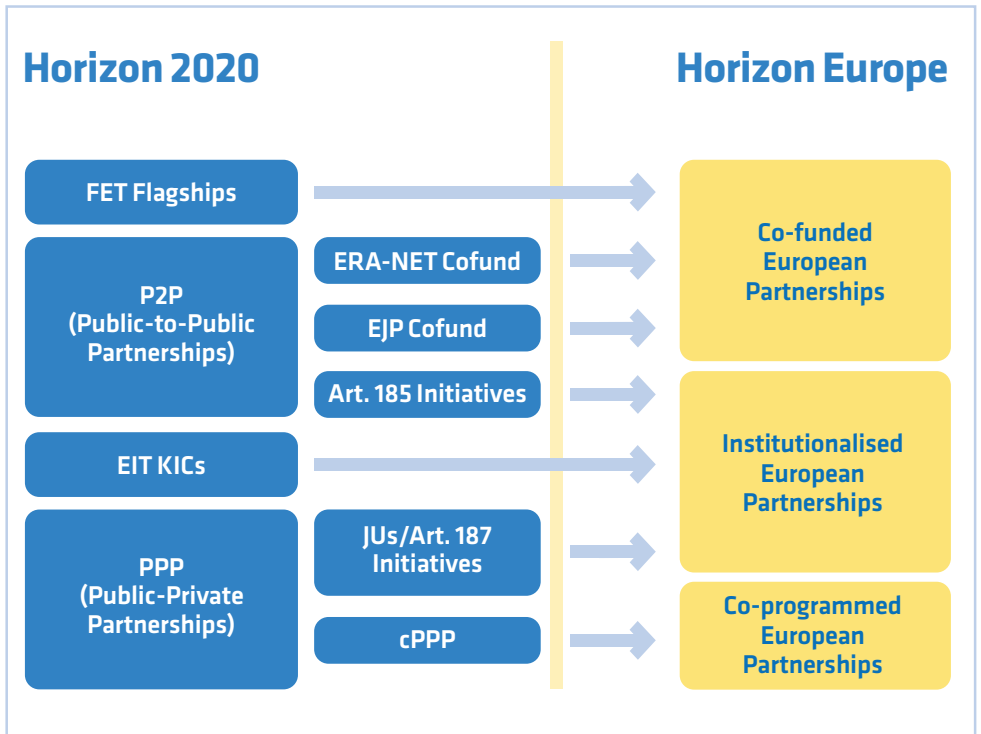
They can be based:

- On Article 185 of the Treaty on the Functioning of the European Union (TFEU) and are public-public partnerships between

the EU and Member States;

- on Article 187 of the TFEU and are public-private partnerships between the EU and industry (Joint Undertakings);
- on the regulation of the European Institute of Innovation and Technology (EIT) Knowledge and Innovation Community (KIC).

They stand in continuity with the Joint Technologies Initiatives and Public-Public Partnerships (P2P) based on Article 185 of the TFEU. The calls launched by these partnerships are published in separate work programs, usually on an annual basis.



Below the list of the **49 partnerships** divided by themes and their description.



European Partnership for EU-Africa Global Health

Institutionalized partnership ex art. 187, which aims to provide new solutions that reduce the burden of infectious diseases in Sub-Saharan Africa and strengthen research capacity for preparedness and response against re-emerging infectious diseases in Sub-Saharan Africa and the world.

This is a continuation of the previous EDCTP2 partnership. It is scheduled to launch in 2021-2022.

Innovative Health Initiative

Institutionalized partnership ex. art. 187, which aims to promote the integration of cross-sector technologies, know-how, products, services and workflows for people-centered healthcare. It is intended in particular to contribute to the overall objectives of the 'Health' cluster: to keep European citizens healthy, to reduce the burden of disease for patients, and to support health workers and professionals.

It is a continuation of the previous IMI-2 partnership.

It is scheduled to start in 2021-2022.

Risk Assessment of Chemicals (PARC)

Co-funded partnership supporting the assessment of chemical risks at the European and national level by risk management bodies through new data, knowledge, methods, networks, and capabilities appropriate to address current and emerging chemical security challenges.

It is a continuation of the previous HBM4EU partnership.

It is scheduled to launch in 2021-2022.

Fostering a European Research Area for Health Research (ERA for Health)

Co-funded partnership that aims to provide a platform for flexible joint programming of health research programs by effectively coordinating most national research funding organizations.

It is a continuation of the previous ERA-Nets and JPIs partnerships (JPND, NEURON, TRANSCAN, ERA-CVD, ERA-AMR, ERAcoSysMed, HDHL-INTIMIC, CORE Organic Plus.

Launch is planned for 2021-2022.

Transformation of Health Care Systems (THCS)

Co-funded partnership that aims to help transition to more sustainable, resilient, innovative, and high-quality people-centered health and care systems.

It is a continuation of the previous AAL, MYBL, EIP on AHA, and To-Reach partnerships.

It is scheduled to launch in 2021-2022.

Personalised Medicine

Co-funded partnership that aims to coordinate research in personalized medicine and create synergies between the Union, Member States and regions, more rapidly absorbing research and innovation results into clinical practice, ensuring Europe's position in the provision of cutting-edge healthcare.

It is a continuation of the previous ERA PerMed and ICPeMed partnerships.

It is scheduled to launch in 2023-2024.

Rare Diseases

Co-funded partnership aimed at coordinating national, local, and European research and innovation programs by combining research funding and implementation of supporting activities, such as training, data access infrastructure, and data standards. The main objective is to improve the lives of patients with rare diseases by developing diagnoses and treatments through multidisciplinary research and innovation programs involving all stakeholders.

It is a continuation of the previous EJP RD partnership.

It is scheduled to start in 2023-2024.

One Health/AMR Antimicrobial Resistance (AMR)

Co-funded partnership that aims to coordinate activities and funding on AMR between the Union and Member States, facilitating national alignment between the different services and ministries responsible for the various related aspects (human health, agriculture, environment, industry, finance).

It is a continuation of the previous partnerships JPI AMR, ERA-Net EXEDRA, One Health EJP.

It is expected to be launched in 2023-2024.

Pandemic Preparedness – BE READY

This partnership aims to improve the EU's preparedness to predict, prevent, and respond to emerging infectious health threats by better coordinating research and innovation funding.

Partnership still under development.

High Performance Computing (EuroHPC)

Institutionalized partnership ex art. 187 that intends to provide a hyperconnected supercomputing and quantum computing infrastructure and form the basis for a world-class HPC ecosystem in Europe, also through the Digital Europe program.

It is a continuation of the previous EuroHPC JU partnership.

It is scheduled to start in 2021-2022.

Key Digital Technologies (KDT)

Institutionalized partnership ex art. 187 that aims to support the digital transformation of all sectors of the

economy and society through the development and testing of electronic and photonic components in different application areas.

It is a continuation of the previous ECSEL JU partnership.

It is scheduled to start in 2021-2022.

Smart Networks and Services (SNS)

Institutionalized Article 187 partnership aimed at supporting technology sovereignty in smart grids and services,

in line with the European Industrial Strategy and the 5G cybersecurity toolkit. It will enable lead markets for 5G infrastructure and services to develop in Europe by coordinating 5G deployment with the Connecting Europe Facility Digital program.

It is a continuation of the previous 5G PPP contractual partnership.

It is scheduled to launch in 2021-2022.

Artificial Intelligence, Data and Robotics (DAIRO)

Co-programmed partnership that aims to drive research, development, and technology adoption so that Europe can take full advantage of artificial intelligence, the data economy, and robotics. It wants to stimulate new markets and applications and attract investment, to create technical, economic and social value for businesses, citizens and the environment. It is a continuation of the previous partnerships Bid Data Value, RoboticsEU. It is scheduled to start in 2021-2022.

Photonics

Co-programmed partnership that aims to accelerate photonic innovations, secure Europe's technological sovereignty, increase the competitiveness of the European economy, and ensure long-term employment and prosperity creation. It is a continuation of the previous Photonic21 partnership. It is scheduled to launch in 2021-2022

Clean Steel - Low Carbon Steelmaking

Co-programmed partnership that supports the transformation of the steel industry into a carbon neutral industry, serving as a catalyst for other strategic sectors. It aims to reduce CO2 emissions by 80-95% by 2050, achieving the carbon neutrality goal. It is a continuation of the previous SPIRE partnership. It is scheduled to launch in 2021.

Metrology

Institutionalized partnership that aims to accelerate Europe's global leadership in metrology research. The goal is to create by 2030 sustainable European networks in highly competitive and emerging metrology areas that can compete with China and the United States. It is a continuation of the previous EMPIR partnership. It is scheduled to start in 2021.

Made in Europe

Co-programmed partnership that aims to be the driving force for sustainable manufacturing in Europe. It intends to contribute to a competitive and resilient manufacturing industry and involve many value chains. Another goal is to promote the circular economy and follow a circular approach by design. It is a continuation of the previous Factories of the Future (FOF) partnership. It is scheduled to launch in 2021-2022.

Processes4Planet – Transforming the European Process Industry for a sustainable society

Co-programmed partnership targeting circularity and broad decarbonization of European process industries, with a strong focus on competitiveness. It intends to develop and implement the innovations needed for a profound transformation of process industries, e.g. cement, chemicals and steel. It is a continuation of the previous SPIRE partnership. It is scheduled to start in 2021-2022.

Globally competitive Space Systems

Co-programmed partnership aimed at pursuing the goals set by the European Space Strategy by promoting globally competitive and innovative European space sector and strengthening Europe's autonomy in accessing and using space in a safe and secure environment.

There is still uncertainty about the timing of the launch.

Transforming Europe's rail system

Institutionalised partnership oriented to develop technological and operational solutions, based on interoperability, capable of realising the full potential of the railway system, understood in an integrated manner and therefore including freight, urban, suburban, regional and mainline transport.

It is the continuation of the previous Shift2Rail Joint Undertaking partnership.

It is scheduled to start in 2021-2022.

Integrated Air Traffic Management (ATM)

Institutionalised partnership that aims to develop and validate technological solutions for integrated air traffic management that contribute to the realisation of the Digital European Sky, making European airspace the most efficient and environmentally sustainable in the world and supporting the competitiveness and recovery of the European aeronautics sector after the crisis caused by the COVID-19 pandemic.

It is a continuation of the previous SESAR Joint Undertaking partnership.

It is scheduled to launch in 2021-2022.

Clean Aviation

Institutionalized partnership that aims to develop clean sheet aircraft by 2030, capable of accelerating the transition to a climate neutral aviation system through the enablement of entirely new platforms and aircraft configurations.

It is a continuation of the previous Clean Sky 2 Joint Undertaking partnership.

It is scheduled to launch in 2021-2022.

Clean Hydrogen

Institutionalized partnership aimed at accelerating the development and deployment of clean hydrogen technologies, contributing to a sustainable, decarbonized and fully integrated energy system. It will focus on the production, distribution, and storage of clean hydrogen to supply hard-to-decarbonize sectors such as heavy industries and heavy transportation applications.

It is a continuation of the previous Fuel Cell and Hydrogen Joint Undertaking 3 partnership. It is scheduled to launch in 2021-2022.

People-centric sustainable built environment Built4People

Co-programmed partnership that aims to contribute to the creation of high-quality, low-carbon, low-energy, resource-efficient environments. The goals are scientific (generate holistic innovation for sustainability), economic (revitalize the industry through sustainable operations) and social (induce behavioral change toward sustainable living) and are to be achieved through a user-centered approach.

It is a continuation of the previous Energy-efficient Buildings cPPP partnership. It is scheduled to launch in 2021.

Towards zero-emission road transport 2ZERO

Co-programmed partnership that is committed to stimulating the use of 100% renewable energy carriers in on-road transportation through the introduction of zero tailpipe emission (BEV and FCEV) powertrains. The aspiration is to achieve

drastically less polluting road transport, especially in urban areas, by putting users first and providing them with more convenient, more accessible and cleaner alternatives to current mobility options. It is a continuation of the previous European Green Vehicle Initiative cPPP partnership. It is scheduled to launch in 2021.

Connected and Automated Driving - CCAM

Co-programmed partnership that promotes new mobility, design and development concepts by moving from a driver-centric to a user-centric approach, providing feasible alternatives to private vehicle ownership and increasing the inclusiveness of mobility systems. It is scheduled to launch in 2021.

Batteries: Towards a competitive European industrial battery value chain

Co-programmed partnership that aims to support in the short-to-medium term the development of a European battery research and innovation ecosystem with a view to establishing Europe's industrial leadership in battery design and manufacturing for the next generation of stationary and mobile applications. It is scheduled to launch in 2021.

Clean Energy Transition

Co-funded partnership that aims to accelerate the transition to a flexible, sustainable, reliable and affordable energy system as well as stimulate the development of related clean technologies through transnational research, innovation and demonstration actions. It is scheduled to launch in 2022.



Food, Bioeconomy, Natural Resources, Agriculture and Environment

Zero-emission waterborne transport

Co-programmed partnership that focuses on developing innovative solutions that reduce or eliminate harmful environmental emissions (including greenhouse gases and air and water pollutants) generated by waterborne transportation.

It is scheduled to launch in 2021.

Driving Urban Transitions to a sustainable future – DUT

Co-funded partnership that aims to support urban transitions for more efficient use of energy, sustainable and people-friendly mobility systems, circular and environmentally friendly use of resources, to ensure the well-being of citizens and the conservation of biodiversity.

It is a continuation of the previous JPI Urban Europe partnership.

It is scheduled to launch in 2021-2022

Accelerating farming systems transition: agroecology living labs and research infrastructures

Co-funded partnership that aims to structure and support a network of living labs and research infrastructures that accelerate the transition to agroecology across Europe.

It is scheduled to start in 2023-2024.

Animal health (PAH)

Co-funded partnership that aims to provide key knowledge, services, and products to significantly improve animal infectious disease control and animal welfare in a coordinated manner, with the goal of sustaining animal production and protecting public health.

It is a continuation of previous ERA-NETs in the area of animal health.

It is scheduled to launch in 2023-2024.

Agriculture of data

Co-funded partnership aimed at supporting sustainable agriculture in the EU, as well as policy monitoring and implementation using digital and data technologies in environmental observation.

It is a continuation of the previous EuroGEOSS partnership.

It is scheduled to start in 2023-2024.

Rescuing biodiversity to safeguard life on Earth (BiodivERsA)

Co-funded partnership that aims to establish a global platform linking national, local and European research and innovation programs and combining resources to support the ambitious goal of restoring biodiversity in

Europe by 2030.

It is a continuation of the previous ERA-NET Biodiversity, EKLIPSE, and ESMERALDA partnerships.

It is planned to start in 2021-2022.

Climate neutral, sustainable and productive Blue Economy

Co-funded partnership that aims to address the objectives of the Green Deal and EU blue policies towards a climate neutral, sustainable and productive blue economy that preserves biodiversity by 2030.

It is a continuation of the previous partnerships BONUS, MARTERA, JPI Oceans, BlueBio.

It is scheduled to launch in 2021-2022.

Safe and Sustainable Food Systems

Co-funded partnership that aims to establish a global platform and process to support the necessary transition to sustainable food systems, contribute to the Farm-to-Fork strategy by linking national, regional and European research and innovation programs and food systems actors for the benefit of nutrition, climate, circularity and the entire community.

It is a continuation of the previous FACCE Surplus, ICT Agri2, CoreOrganic, ERA GAS, SUSAN, ERA HDL, and SusFood2 partnerships.

It is scheduled to launch in 2023-2024.

Circular bio-based Europe

Institutionalized partnership to develop and expand sustainable sourcing and conversion of biomass into bioproducts, focusing on multiscale biorefinery processing and applying circular economy approaches such as utilizing

biowaste from the agricultural, industrial and municipal sectors.

It is a continuation of the previous Bio-based Industries JU partnership.

It is scheduled to launch in 2021-2022.

Water Security for the Planet (Water4All)

Co-funded partnership that aims to promote systemic transformations throughout the water research and innovation cycle by fostering matchmaking between problem bearers and solution providers. By 2030, it aims to achieve reduced water stress and increased protection of water resources and ecosystems.

It is a continuation of the previous Water JPI partnership.

It is scheduled to launch in 2021-2022.



Partnerships across Themes

Innovative SMEs

Co-funded partnership that aims to provide structured support to innovative SMEs in order to enable their sustainable growth and equip them with the necessary tools to play a leading role in global value chains and new markets.

It is a continuation of the previous Eurostars-2 partnership.

It is scheduled to start in 2021-2022.

European Open Science Cloud

Co-programmed partnership that aims to enhance data infrastructures, modernize the new European Research Area by building databases following the "FAIR-by-design" principle, and expand FAIR data values inside and outside Europe.

It is scheduled to start in 2021.

EIT Climate-KIC

Aims to bring together the R&I stakeholder community to accelerate the transition to a carbon-neutral, climate-neutral, and resilient society. It aspires to create a network of universities, businesses, and research organizations that develop solutions to mitigate the impact of climate change and improve citizen adaptation, while fostering disruptive innovations to the marketplace.

EIT InnoEnergy-KIC

It aims to create sustainable energy systems through the acceleration of energy innovations that help reduce climate impacts.

EIT Digital-KIC

It wants to strengthen Europe's position in the digital landscape, bringing disruptive digital innovations closer to the market and cultivating talent in entrepreneurship to ensure economic growth and a better way of life for citizens.

EIT Health-KIC

It intends to bring innovative solutions to improve the health and well-being of European citizens.

EIT Food-KIC

It aims to build food-related innovation communities that are inclusive and innovative, and in which consumers can be directly involved.

EIT Manufacturing-KIC

Aims at devising solutions to transform today's industrial production systems toward future manufacturing and processing technologies.

EIT Raw materials-KIC

It is designed to bring solutions that will give a renewed impetus to the competitiveness, growth and attractiveness of the raw materials sector in Europe.

EIT Urban Mobility-KIC

It aims to propose new solutions to develop greener, more inclusive and smarter urban transportation infrastructure.

EIT Cultural and Creative Industries-KIC

It intends to improve the competitiveness and promotion of innovation in the creative and cultural industries by cultivating future generations of talent, supporting the development of disruptive solutions, and accelerating high-potential innovative companies to bring new solutions to this sector.

EIT Water, Marine and Maritime-KIC

Intends to bring innovative solutions to market that ensure better use of water and marine resources. It is still being defined.



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