



The EU Framework Programme for Research & Innovation

HORIZON 2020

Horizon 2020 is the biggest EU research and innovation programme ever. It will lead to more breakthroughs, discoveries and world-firsts by taking great ideas from the lab to the market. Almost €80 billion of funding is available over 7 years (2014 to 2020).

Horizon 2020 involves research and innovation, focusing on three key areas: excellent science, industrial leadership and societal challenges. The goal is to ensure Europe produces world-class science and technology that drives economic growth.

Horizon 2020 is open to the participation of researchers from across the world.



Programme structure

Excellent Science

- European Research Council (ERC)
- Future and Emerging Technologies (FET)
- Marie Skłodowska-Curie actions MSCA
- European Research Infrastructures

Industrial Leadership

- Leadership in Enabling and Industrial Technologies
 - ICT
 - Nanotechnologies, Advanced Materials, Advanced Manufacturing and Processing
 - Biotechnology
 - Space
- Access to risk finance
- Innovation in SMEs

Societal Challenges

- Health, Demographic Change and Wellbeing
- Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy
- Secure, Clean and Efficient Energy
- Smart, Green and Integrated Transport
- Climate Action, Environment, Resource Efficiency and Raw Materials
- Europe in a changing world - Inclusive, innovative and reflective societies
- Secure societies – Protecting freedom and security of Europe and its citizens



HOW IT WORKS

Horizon 2020 is open to everyone. Under Horizon 2020 there is only one set of simplified rules and procedures to follow. This means that participants can focus on what is really important: research, innovation and results.

This focused approach makes sure new projects get off the ground quickly – and achieve results faster.

The rules are designed to guarantee fairness, protect participants and ensure public money is spent appropriately.

Who may apply?

- ❖ For standard research projects – a consortium of at least three legal entities. Each entity must be established in an EU Member State or an Associated Country.
- ❖ For other programmes – European Research Council (ERC), SME Instrument, the co-funding of national or public sector calls or programmes, coordination and support, training and mobility – the minimum condition for participation is one legal entity established in a Member State or in an Associated Country.

Additional conditions may apply. Check the Work Programme for details.

In general, legal entities established in any country and international organisations, may participate.

Agreements between the EU and individual governments have created a number of associated countries, where legal entities can participate in Horizon 2020 on an equal footing to those of EU Member States. For a list of associated countries, see <http://bit.ly/H2020AC>.

Participating legal entities from other countries may also be able to get EU funding in certain circumstances. See <http://bit.ly/H2020IPC>.

Action types

Research and innovation actions

Funding for research projects tackling clearly defined challenges, which can lead to the development of new knowledge or a new technology.

Who? Consortia of partners from different countries, industry and academia.



Innovation actions

Funding is more focused on closer-to-the-market activities. For example, prototyping, testing, demonstrating, piloting, scaling-up etc. if they aim at producing new or improved products or services.

Who? Consortia of partners from different countries, industry and academia.

Coordination and support actions

Funding covers the coordination and networking of research and innovation projects, programmes and policies. Funding for research and innovation per se is covered elsewhere.

Who? Single entities or consortia of partners from different countries, industry and academia.

Frontier research grants – European Research Council

Funding for projects evaluated on the sole criterion of scientific excellence in any field of research, carried out by a single national or multinational research team led by a 'principal investigator'.

Who? The ERC funds excellent young, early-career researchers, already independent researchers and senior research leaders. Researchers can be of any nationality and their projects can be in any field of research.

Support for training and career development – Marie Skłodowska-Curie Actions

Funding for international research fellowships in the public or private sector, research training, staff exchanges.

Who? Early stage researchers or experienced researchers (of any nationality), technical staff, national/regional research mobility programmes.

SME Instrument

This instrument is aimed at highly innovative SMEs with the ambition to develop their growth potential. It offers lump sums for feasibility studies, grants for an innovation project's main phase (demonstration, prototyping, testing, application development...); lastly, the commercialisation phase is supported indirectly through facilitated access to debt and equity financial instruments.

Who? Only SMEs can participate. Either a single SME or a consortium of SMEs established in an EU or Associated Country.

Fast track to innovation



Funding is due to start in 2015 as a pilot action. Continuously open, innovator-driven calls will target innovation projects addressing any technology or societal challenge field. The pilot action will undergo an in-depth assessment half-way through Horizon 2020.

Who? Industry, including SMEs, with a minimum of three and maximum of five partners and a maximum EU contribution of €3 million per project.

Funding rates

In Horizon 2020 there is one single funding rate for all beneficiaries and all activities in the research grants. EU funding covers up to 100 % of all eligible costs for all research and innovation actions. For innovation actions, funding generally covers 70 % of eligible costs, but may increase to 100 % for non-profit organisations. Indirect eligible costs (e.g. administration, communication and infrastructure costs, office supplies) are reimbursed with a 25 % flat rate of the direct eligible costs (those costs directly linked to the action implementation).

Checks and audits

Only coordinators in projects requesting funding from the Union of €500 000 or more will be subject to a financial viability check, in which they must prove that they have the resources to implement the project.

The European Commission audits project participants up to two years after payment of the balance. The audit strategy is focused on risk and fraud prevention.

Access rights

Access rights are a right to use results or background of another participant in a project.

Access rights are enjoyed by participants to implement the project or exploit their results, by the EU for non-commercial policy purposes, and by Member States in the area of Secure Societies for non-commercial policy purposes.

Sharing results while protecting IPR

Each participant must disseminate the results it produces – and therefore owns – as early as possible. Exceptions only apply to protect intellectual property rights (IPR), security or legitimate interests.

When publishing results in scientific publications, open access to the publication must be ensured. This guarantees that research results funded by EU taxpayers are available for free to everyone.



IPR belongs to the team that generates the results. In very specific circumstances, joint-ownership may apply. Once results have been generated the joint owners may agree on a different ownership system.

Ethics and research

Ethics is an integral part of research and a driver for research excellence. All activities funded under Horizon 2020 shall comply with ethical principles and relevant national legislation. The ethical principles include the need to avoid breaches of research integrity, in particular any form of plagiarism, data fabrication or falsification.

Other sources of funding through Horizon 2020

Through partnerships, Horizon 2020 will develop closer synergies with national and regional programmes, encourage greater private investment in research and innovation, and pool Europe's resources to tackle the biggest challenges.

Over seven years, EU funding of €8 billion will attract €10 billion from the private sector and another €4 billion from EU countries. Most of the funding will go to Joint Technology Initiatives (JTIs). These are run as joint undertakings and organise their own research agenda. JTIs are active in a number of areas of strategic importance for the EU: innovative medicines; fuel cells and hydrogen; cleaner, quieter aircraft; bio-based industries; and electronics manufacturing. An updated list can be found on this webpage <http://bit.ly/H2020Partners>

Public-Public Partnerships also allow public sector organisations in EU Member States to draw up joint research programmes. Areas covered include: support for high-tech SMEs; new treatments for poverty-related diseases; new measurement technologies; and technologies empowering the elderly and disabled to live safely in their own homes.

Programme co-fund

The main purpose of Programme co-fund actions is to supplement individual calls or programmes. For example:

- ❖ Calls for proposals between national research programmes (ERA-NET co-fund);
- ❖ Calls for tenders for Pre-Commercial Public Procurements or Public Procurement of Innovative solutions (PCP-PPI co-fund);
- ❖ Mobility programmes (Marie Skłodowska-Curie co-fund).

European Institute of Innovation and Technology (EIT)



The EIT integrates higher education, research and innovation through the 'Knowledge and Innovation Communities' (KICs) to generate new approaches towards innovation, trigger sustainable growth and competitiveness and promote entrepreneurship. These innovative partnerships must have a long-term vision of at least seven years, and be run with business logic following a results-oriented approach with clear objectives and a focus on achieving economic and social impact to become global players.

For further information: <http://eit.europa.eu/>

Funding: €2.711 billion

Who? Consortia representing research, education and innovation/ business.

Thinking European – and globally

Borderless research

If Europe is to find solutions to societal challenges while boosting growth and competitiveness, it needs a fully functioning network of research excellence – a European Research Area (ERA). This single market for knowledge, research and innovation is being developed with the aid of EU funding and is helping researchers, their knowledge and results to circulate freely across Europe.

The ERA guarantees that knowledge and ideas are shared across Europe, reducing the risk of wasting money on duplicating research – scientists in different European labs carrying out the same research simultaneously. This coordinated approach – encouraged by Horizon 2020 – helps to ensure that every euro spent on research is invested strategically.

Open to the world

In line with the Union's strategy for international cooperation in research and innovation, Horizon 2020 is open to the participation of researchers from across the world. As more research and innovation is performed in international partner countries, it is crucial that Europe is able to access the best researchers and research centres worldwide.

Not only does this provide sources of new ideas and expertise, it is also important to ensure that European researchers are able to collaborate worldwide with the best in the field.

Targeted international cooperation activities are included in the societal challenges, enabling and industrial technologies and other relevant parts of Horizon 2020. The areas and partners for cooperation are identified in the relevant Work Programme.



How to apply

Work programmes announce the specific research and innovation areas that will be funded. They are accessible through the Participant Portal (<http://bit.ly/H2020PP>) and indicate the timing of forthcoming Calls for Proposals. When ready each Call gives more precise information on the research and innovation issues that applicants for funding should address in their proposals.

Although details on all Calls can also be found in the EU's Official Journal, the Participant Portal goes further. It provides easy-to-follow guidance and all the tools needed to apply for funding and manage projects throughout their lifecycle. It covers every type of research and innovation action.

National Contact Points (<http://bit.ly/H2020NCP>) also provide a wealth of information and individual guidance on Horizon 2020. There is at least one in every EU country and some in other countries.

Specific questions can also be sent to the online Research Enquiry Service <http://ec.europa.eu/research/enquiries>.

Submitting a proposal

Proposals must be submitted before the deadline of the relevant Call. The Participant Portal provides clear instructions. The system is simpler than ever – no more paper! All proposals must be submitted online only.

Finding partners

Many Calls require a team to have at least three partners. The Participant Portal partner search function helps to identify potential partners with particular competences, facilities or experience.

Evaluation by experts

After the deadline passes, each proposal is evaluated by a panel of independent experts in the areas covered by the Call. The expert panels score each proposal against a list of criteria (see <http://bit.ly/H2020Eval>). On that basis, the best proposals are selected for funding.

Grant agreement

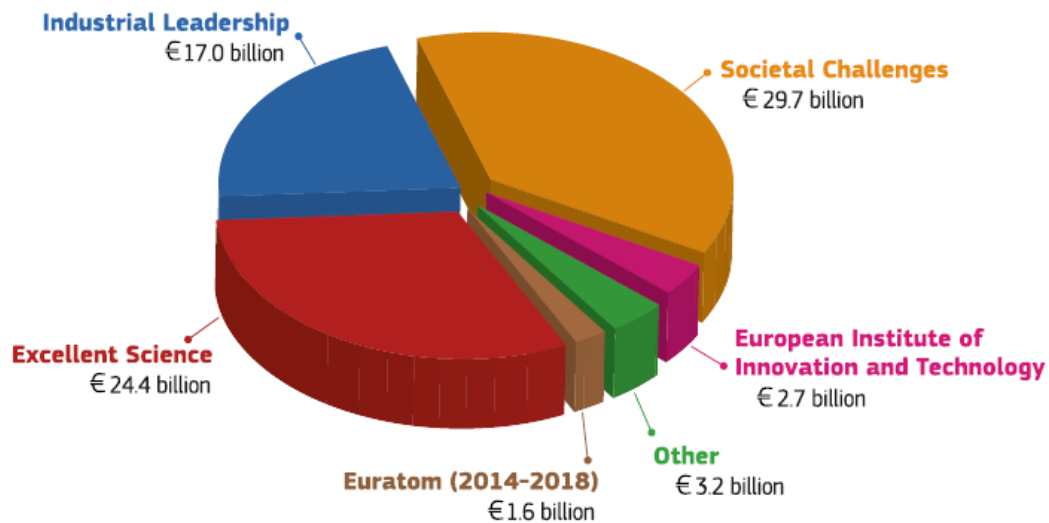
Once a proposal passes the scientific evaluation stage (duration five months), applicants are informed about the outcome. For the proposals which are selected for funding, the European Commission then draws up the grant agreement.



The time limit for signing the grant agreements is generally three months. The grant agreement confirms the description of the research and innovation activities that will be undertaken, the project duration and budget, rates and costs, rights and obligations, division of roles, rules on suspending and terminating projects, and more.

Then the project can begin!

Horizon 2020 Budget



Useful links:

- ❖ Participant Portal <http://bit.ly/H2020PP>
- ❖ Helpdesk <http://ec.europa.eu/research/enquiries>
- ❖ Learn more about Horizon 2020 <http://ec.europa.eu/horizon2020>
- ❖ National contact Points (NCPs): <http://bit.ly/H2020NCP>
- ❖ Enterprise Europe Network: <http://een.ec.europa.eu/>
- ❖ Register as an expert: <http://bit.ly/H2020Experts>