

Horizon 2020

Period: 2014-2020

Budget: 71 billion

Brief description

Horizon 2020 will be an integrated Programme that will cover all research and innovation funding currently provided through the Framework Programme for Research and Technological Development, the Competitiveness and Innovation Framework Programme (CIP) and the European Institute of Innovation and Technology (EIT). The different types of funding provided by the existing Programmes will be brought together into a single coherent, flexible framework. It will provide funding for every stage of the innovation process from basic research to market uptake. Horizon 2020 is the financial instrument implementing the Innovation Union.

Website: http://ec.europa.eu/research/horizon2020/index_en.cfm

Objectives

EU funding for research and innovation will be focused on the following three objectives:

- Excellent science
- Competitive industries
- Better Society

The primary aim of Horizon 2020 is to strengthen the EU's position as a world leader in science, to help make Europe a more attractive location to invest in research and innovation and to bring excellent research results to market which will deliver direct benefits to citizens, such as affordable health-care, protection against cyber-crime, and the transition to a resource-efficient, low-carbon economy.

Implementation

The Horizon 2020 Programme consists of the following parts:

- “Excellent science”
- “Industrial leadership”
- “Societal challenges”

In addition, there is a specific Programme named “Non-nuclear direct actions of the Joint Research Centre (JRC)”.

“Excellent science”, “Industrial leadership” and “Societal challenges” will be implemented by the Commission, which will adopt annual work Programmes that contain descriptions of the actions

to be financed, an indication of the amount allocated to each action, indicative implementation timetables, as well as a multi-annual approach and strategic orientations for the essential evaluation criteria and the maximum rate of co-financing.

The priorities should be implemented by a specific Programme consisting of three Parts on indirect actions and one Part on the direct actions of the Joint Research Centre (JRC).

The specific objective “Strengthening Europe's science base in frontier research” under “Excellent science” will be implemented by the European Research Council (“ERC”).

Eligibility

Horizon 2020 will be open besides the 27EU countries to:

- acceding countries, candidate countries and potential candidates, in accordance with the general principles and general terms and conditions for the participation of those countries in Union Programmes established in the respective framework agreements and decisions of association councils or similar agreements;

- selected third countries that fulfill all of the following criteria:

(i) have a good capacity in science, technology and innovation;

(ii) have a good track record of participation in Union research and innovation programmes;

(iii) have close economic and geographical links to the Union;

Horizon 2020 groups the countries as:

1. Industrialized and emerging economies

2. Enlargement and neighboring countries

3. Developing countries

Special new eligibility rules are not expected.

Excellent Science

Budget: EUR 24 598 million

Objectives

The Excellent science Programme aims at supporting world leading scientists in blue sky research, providing training and career development opportunities, developing future and emerging technologies and EU research infrastructures.

The specific objectives are:

- strengthening frontier research, through the activities of the European Research Council (ERC);
- strengthening research in Future and Emerging Technologies;

- strengthening skills, training and career development, through the Marie Skłodowska-Curie actions ("Marie Curie actions");
- strengthening European research infrastructures, including e-infrastructures.

Supported activities

European Research Council (ERC) will provide substantial grants to top-level individual researchers working in Europe (€13.2 billion)

Future and emerging technologies (FET) opens up new fields of research and innovation. (€3.1 billion)

Marie Curie Actions develops research and innovation skills through the training, mobility and career development of researchers (€5.75 billion)

Funding of €2.4 billion will also be available for supporting access to, and networking of priority research infrastructures across Europe.

Eligibility

Independent researchers of any age, including starting researchers making the transition to being independent research leaders in their own right, from any country in the world will be supported.

Industrial leadership

Budget: EUR 17 938 million

Objectives

"Industrial leadership" should help make Europe a more attractive location to invest in research and innovation by supporting major investments in key industrial technologies, by facilitating access to risk finance for innovative companies and projects, and providing Union wide support for innovation in small and medium-sized enterprises.

The scopes are:

- Boosting job creation
- Support innovation, increase market uptake
- Stimulate private investment in R&I
- Strengthen participation of innovative SMEs

Supported activities

Leadership in enabling and industrial technologies (€13.7 billion) – the themes are the following:

- Information and Communication Technologies (ICT),
- Nanotechnologies,
- Advanced materials,
- Biotechnology,
- Advanced Manufacturing and Processing,
- Space

Access to risk finance (Debt facility, Equity facility and Specific implementation aspects) (€3.5 billion).

Innovation in SMEs (Mainstreaming SME support and Specific support)

Societal challenges

Budget: EUR 31 748 million

Objectives

The “Societal challenges” Programme aim is to tackle the major issues affecting the lives of European citizens. It should increase the effectiveness of research and innovation in responding to key societal challenges by supporting excellent research and innovation activities.

The scopes are:

- Longer and healthier lives
- Reliable, clean, efficient energy
- Efficient use of resources for protection of our planet
- Inclusive innovation and secure policy
- Safe, secure food supply
- Smart, green transport

Supported activities

- Health, demographic change and well-being;
- Food security, sustainable agriculture, marine and maritime research and the bio based economy;
- Secure, clean and efficient energy;
- Smart, green and integrated transport;
- Climate action, resource efficiency and raw materials;
- Inclusive, innovative and secure societies.