Horizon Europe framework programme for research and innovation 2021–2027

2018/0224(COD) - 07/06/2018 - Legislative proposal

PURPOSE: to establish Horizon Europe - the framework programme for research and innovation for the period 2021-2027.

PROPOSED ACT: Regulation of the European Parliament and of the Council.

ROLE OF THE EUROPEAN PARLIAMENT: the European Parliament decides in accordance with the ordinary legislative procedure and on an equal footing with the Council.

BACKGROUND: research and innovation (R&I) delivers on citizens' priorities, boosts the Union's productivity and competitiveness, and is crucial for sustaining our socio-economic model and values.

The proposed new **Horizon Europe** programme builds on the success of the previous framework programme, Horizon 2020. Horizon 2020 has already attracted the world's best research institutions and researchers, supported **340 000 researchers**, and developed Europe's skilled human capital. Scientific publications from Horizon 2020 are world class and have contributed to major scientific breakthroughs.

Specifically, Horizon Europe shall **strengthen the EU's scientific and technological bases** in order to help tackle the major global challenges of our time and contribute to achieving the Sustainable Development Goals (SDGs). At the same time, the programme shall boost the Union's competitiveness and help deliver on the Union's strategic priorities.

According to the Commission, the new programme is expected to **increase GDP on average by 0.08% to 0.19% over 25 years** and directly generate an estimated gain of up to 100 000 jobs in R&I activities in the 'investment phase' (2021-2027). The economic activity generated by the Programme is expected to foster an indirect gain of up to 200 000 jobs over 2027-2036, of which 40% will be highly skilled.

The proposal is in line with the headline target of investing **3% of the EU's GDP** on research and development.

CONTENT: the proposal for a Regulation - presented for a Union of 27 Member States - seeks to establish the **Horizon Europe research and innovation framework programme** for the period 2021-2027 and lays down the rules for participation and dissemination of results applicable to indirect actions carried out under the programme.

The programme's general objective is to **deliver scientific, economic and societal impact** from the Union's investments in research and innovation in order to: (i) strengthen the scientific and technological bases of the Union and foster its competitiveness, including in its industry; (ii) to deliver on the Union strategic priorities; (iii) contribute to tackling global challenges, including the Sustainable Development Goals.

Horizon Europe is comprised of 3 pillars, namely:

- **Pillar I 'Open Science'** which builds on the success of the European Research Council, the Marie Skodowska-Curie Actions and the Research Infrastructures component in the current framework programme.
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- **Pillar II 'Global issues and industrial competitiveness'** has a more 'top down' directed approach addressing Union and global policy and competitiveness challenges and opportunities. These are integrated into **five clusters** (i) **health**; (ii) **inclusive and secure society**; (iii) **digital and industry**; (iv) **climate, energy and mobility**; (v) **food and natural resources**. Alongside the regular calls for proposals, a limited set of highly visible missions shall be introduced. These will be designed in the context of a strategic planning process. Missions, with ambitious but time-bound and achievable goals, should speak to the public and engage it where relevant. They will be **co-designed** with Member States, the European Parliament, stakeholders and citizens.
- **Pillar III 'Open Innovation'** shall essentially focus on scaling up **breakthrough and market-creating innovation** by establishing a European Innovation Council, support the enhancement of European ecosystems of innovation and continued support to the European Institute of Innovation and Technology (EIT). The **European Innovation Council** shall offer a one-stop-shop to high-potential innovators. The European Institute of Innovation and Technology shall complement the European Innovation Council by promoting sustainable innovation ecosystems and developing entrepreneurial and innovation skills in priority areas through its knowledge and innovation communities.

The three pillars shall be underpinned by activities to strengthening the **European Research Area**, specifically: sharing excellence to fully exploit the potential in less R&I performing countries.

Cross-cutting elements: the Commission proposes to:

- significantly strengthen **international cooperation** by extending association agreements to include countries with excellent science, technology and innovation capacities;
- make the **principle of open science** the modus operandi of the new programme by requiring open access to publications and data which shall accelerate the commercialisation and diffusion of innovation;
- **rationalise the current plethora of European partnerships** so that they can continue in simplified forms that are open to all (such as academia, industry, Member States, and philanthropic foundations). These partnerships shall be designed on the basis of Union added value, transparency, openness, impact, leverage effect;
- enhance **synergies** with other EU programmes to promote faster dissemination and uptake of research and innovation results.

Rules for participation and dissemination: these shall have the following new features: (i) continuation of the principle of a single set of rules for participation and dissemination through further improvements; (ii) maintenance of 'Horizon 2020' funding rates; (iii) simplification of the cost reimbursement scheme, in particular the actual costs scheme for personnel costs; (vi) increased emphasis on exploitation and dissemination of results, particularly in the Union; (vi) communication by beneficiaries of Union funds, including to the public and the media.

For Horizon Europe, the **award criteria** shall be excellence; impact; and quality and efficiency of the implementation.

Proposed budget: the financial envelope for the implementation of the Framework Programme for the period 2021-2027 shall amount to **EUR 94.10 billion in current prices**. The indicative distribution of this amount shall be:

- EUR 25.80 billion for pillar I 'Open Science';
- EUR 52.70 billion for Pillar II 'Global issues and industrial competitiveness';
- EUR 13.50 billion for pillar III 'Open innovation';
- EUR 2.10 billion for the part 'Strengthening the European Research Area'.