

Basic information	
2018/0224(COD) COD - Ordinary legislative procedure (ex-codecision procedure) Regulation Horizon Europe framework programme for research and innovation 2021–2027 Repealing Regulation (EU) No 1290/2013 2011/0399(COD) Repealing Regulation (EU) No 1291/2013 2011/0401(COD) See also 2018/0225(CNS) Amended by 2023/0199(COD) Amended by 2025/0040(COD) Amended by 2025/0103(COD) See also 2018/0226(NLE) Subject 3.50.02.01 EC, EU framework programme 3.50.04 Innovation	Procedure completed 19/03/2019: MFF 2021-2027/ Progress report - state of play in the Council

Key players			
European Parliament	Committee responsible	Rapporteur	Appointed
	ITRE Industry, Research and Energy	NICA Dan (S&D)	13/06/2018
		Shadow rapporteur EHLER Christian (EPP) DLABAJOVÁ Martina (Renew) NIINISTÖ Ville (Greens/EFA) TOŠENOVSKÝ Evžen (ECR) LIZZI Elena (ID)	
	Former committee responsible	Former rapporteur	Appointed
	ITRE Industry, Research and Energy	NICA Dan (S&D)	13/06/2018
	Former committee for opinion	Former rapporteur for opinion	Appointed
	AFET Foreign Affairs	The committee decided not to give an opinion.	
	DEVE Development	SÁNCHEZ CALDENTEY Lola (GUE/NGL)	04/09/2018

	BUDG Budgets	TORVALDS Nils (ALDE)	28/06/2018	
	CONT Budgetary Control	DLABAJOVÁ Martina (ALDE)	17/09/2018	
	ENVI Environment, Public Health and Food Safety	BUȘOI Cristian-Silviu (PPE)	22/06/2018	
	TRAN Transport and Tourism	VIRKKUNEN Henna (PPE)	03/07/2018	
	REGI Regional Development	VAN NISTELROOIJ Lambert (PPE)	20/06/2018	
	AGRI Agriculture and Rural Development	KATAINEN Elsi (ALDE)	04/07/2018	
	PECH Fisheries	The committee decided not to give an opinion.		
	CULT Culture and Education	MORGANO Luigi (S&D)	29/05/2018	
	Committee for opinion on the legal basis		Rapporteur for opinion	Appointed
JURI Legal Affairs	The committee decided not to give an opinion.			
Council of the European Union	Council configuration		Meetings	Date
	Competitiveness (Internal Market, Industry, Research and Space)		3655	2018-11-29
European Commission	Commission DG		Commissioner	
	Research and Innovation		MOEDAS Carlos	
European Economic and Social Committee				

Key events			
Date	Event	Reference	Summary
07/06/2018	Legislative proposal published	COM(2018)0435 	Summary
14/06/2018	Committee referral announced in Parliament, 1st reading		

21/11/2018	Vote in committee, 1st reading		
27/11/2018	Committee report tabled for plenary, 1st reading	A8-0401/2018	Summary
11/12/2018	Debate in Parliament		
12/12/2018	Decision by Parliament, 1st reading	T8-0509/2018	Summary
12/12/2018	Results of vote in Parliament		
12/12/2018	Matter referred back to the committee responsible for interinstitutional negotiations		
16/04/2019	Debate in Parliament		
17/04/2019	Decision by Parliament, 1st reading	T8-0395/2019	Summary
17/04/2019	Results of vote in Parliament		
04/06/2020	Committee decision to open interinstitutional negotiations after 1st reading in Parliament		
17/06/2020	Committee decision to enter into interinstitutional negotiations announced in plenary (Rule 73)		
17/12/2020	Approval in committee of the text agreed at early 2nd reading interinstitutional negotiations	PE662.110	
19/03/2021	Council position published	07064/2/2020	Summary
25/03/2021	Committee referral announced in Parliament, 2nd reading		
13/04/2021	Vote in committee, 2nd reading		
15/04/2021	Committee recommendation tabled for plenary, 2nd reading	A9-0122/2021	
26/04/2021	Debate in Parliament		
27/04/2021	Decision by Parliament, 2nd reading	T9-0124/2021	Summary
28/04/2021	Final act signed		
28/04/2021	End of procedure in Parliament		
12/05/2021	Final act published in Official Journal		

Technical information	
Procedure reference	2018/0224(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Regulation
Amendments and repeals	Repealing Regulation (EU) No 1290/2013 2011/0399(COD) Repealing Regulation (EU) No 1291/2013 2011/0401(COD) See also 2018/0225(CNS) Amended by 2023/0199(COD) Amended by 2025/0040(COD) Amended by 2025/0103(COD) See also 2018/0226(NLE)
Legal basis	Rules of Procedure EP 61 Rules of Procedure EP 41 Treaty on the Functioning of the European Union TFEU 183

	Treaty on the Functioning of the European Union TFEU 182-p1 Treaty on the Functioning of the European Union TFEU 173-p3
Other legal basis	Rules of Procedure EP 165
Mandatory consultation of other institutions	European Economic and Social Committee
Stage reached in procedure	Procedure completed
Committee dossier	ITRE/9/03005

Documentation gateway

European Parliament

Document type	Committee	Reference	Date	Summary
Committee draft report		PE625.305	13/07/2018	
Amendments tabled in committee		PE625.575	11/09/2018	
Amendments tabled in committee		PE625.576	11/09/2018	
Amendments tabled in committee		PE625.577	11/09/2018	
Amendments tabled in committee		PE627.734	11/09/2018	
Amendments tabled in committee		PE627.735	12/09/2018	
Committee opinion	BUDG	PE625.567	11/10/2018	
Committee opinion	CULT	PE625.393	12/10/2018	
Committee opinion	ENVI	PE625.441	17/10/2018	
Committee opinion	AGRI	PE623.918	29/10/2018	
Committee opinion	REGI	PE626.845	09/11/2018	
Committee opinion	DEVE	PE627.590	14/11/2018	
Committee opinion	TRAN	PE625.453	19/11/2018	
Committee opinion	CONT	PE627.878	19/11/2018	
Committee report tabled for plenary, 1st reading/single reading		A8-0401/2018	27/11/2018	Summary
Text adopted by Parliament, partial vote at 1st reading /single reading		T8-0509/2018	12/12/2018	Summary
Text adopted by Parliament, 1st reading/single reading		T8-0395/2019	17/04/2019	Summary
Committee letter confirming interinstitutional agreement		PE662.110	19/01/2021	
Committee draft report		PE689.670	23/03/2021	
Committee recommendation tabled for plenary, 2nd reading		A9-0122/2021	15/04/2021	
Text adopted by Parliament, 2nd reading		T9-0124/2021	27/04/2021	Summary

Council of the EU

Document type	Reference	Date	Summary
Council position	07064/2/2020	19/03/2021	Summary

Draft final act		00012/2021/LEX	28/04/2021	
European Commission				
Document type	Reference	Date	Summary	
Legislative proposal	COM(2018)0435 	07/06/2018	Summary	
Document attached to the procedure	SWD(2018)0307 	07/06/2018		
Document attached to the procedure	SWD(2018)0308 	07/06/2018		
Document attached to the procedure	SWD(2018)0309 	07/06/2018		
Commission response to text adopted in plenary	SP(2019)440	08/08/2019		
Supplementary legislative basic document	COM(2020)0459 	29/05/2020	Summary	
Commission communication on Council's position	COM(2021)0133 	17/03/2021		
Follow-up document	COM(2022)0389 	05/08/2022		
Follow-up document	COM(2023)0277 	31/05/2023		
Follow-up document	COM(2024)0231 	05/06/2024		
National parliaments				
Document type	Parliament /Chamber	Reference	Date	Summary
Contribution	PT_PARLIAMENT	COM(2018)0435	07/09/2018	
Contribution	DE_BUNDESRAT	COM(2018)0435	25/09/2018	
Contribution	ES_PARLIAMENT	COM(2018)0435	28/09/2018	
Contribution	RO_SENATE	COM(2018)0435	04/10/2018	
Contribution	CZ_SENATE	COM(2018)0435	26/10/2018	
Contribution	FR_SENATE	COM(2018)0435	16/01/2019	
Other institutions and bodies				
Institution/body	Document type	Reference	Date	Summary
CofR	Committee of the Regions: opinion	CDR3891/2018	09/10/2018	
EESC	Economic and Social Committee: opinion, report	CES3007/2018	17/10/2018	

EESC	Economic and Social Committee: opinion, report	CES2886/2020	15/07/2020	
Additional information				
Source	Document		Date	
EP Research Service	Briefing			
EP Research Service	Briefing		22/11/2018	
European Commission	EUR-Lex			
Final act				
Regulation 2021/0695 OJ L 170 12.05.2021, p. 0001				

Horizon Europe framework programme for research and innovation 2021–2027

2018/0224(COD) - 29/05/2020 - Supplementary legislative basic document

The Commission has presented an amended proposal for a Regulation of the European Parliament and of the Council establishing the Framework Programme for Research and Innovation 'Horizon Europe' for the period 2021-2027 to support the recovery from the COVID-19 pandemic.

BACKGROUND: in order to contain the 'COVID-19' outbreak, Member States and third countries have adopted an unprecedented set of measures. These measures have significantly disrupted economic activities.

A sharp contraction of growth in the Union is now forecast for 2020 and is likely to continue into 2021. Recovery risks being very uneven in the different Member States, increasing the divergence between national economies. The different fiscal ability of Member States to provide financial support where it is needed most for recovery and the divergence of national measures endangers the single market.

This exceptional situation calls for a coherent and unified approach at the level of the Union to prevent further deterioration of the economy and to boost a balanced recovery of the economic activity, ensuring continuity and increase in investments for the green and digital transition.

A comprehensive set of measures for economic recovery are needed, requiring substantial amounts of public and private investment to energise the economy, create high-quality jobs and invest in repairing the immediate damage brought by the COVID-19 pandemic.

Targeted changes to the Framework Programme for Research and Innovation and its implementing Specific Programme Horizon Europe, – the Neighbourhood, Development and International Cooperation Instrument ([NDICI](#)) – the European Agricultural Fund for Rural Development ([EAFRD](#)) interventions under the CAP strategic plans are proposed by the Commission as part of the revised proposal for the Multiannual Financial Framework (MFF) for the period 2021-2027, which includes the [EU Recovery Instrument](#).

This new instrument shall make it possible to finance these programmes for a limited period above the ceilings for commitment and payment appropriations set by the MFF, as external assigned revenue.

CONTENT: the main amendments to the Regulation establishing the framework programme for research and innovation 'Horizon Europe' are intended to:

- enable the implementation of the measures laid down in the proposal for a Regulation establishing an EU Recovery Instrument through the mechanisms for implementing the framework programme for research and innovation;
- enable financing from the EU Recovery Instrument as external assigned revenues in accordance with Article 21(5) of the Financial Regulation.

The EU Instrument for Recovery shall reinforce the support, via Horizon Europe, to health and climate related research and innovation activities. This will contribute to strengthened preparedness to effectively and rapidly respond to emergencies and investment in science-driven solutions as well as ensuring consistency with the European Green Deal goals.

Budgetary implications

The Commission proposes to make a total of **EUR 14 647 million** available for the research and innovation framework programme 'Horizon Europe'. The additional funding shall be made available through the European Instrument for Recovery on the basis of the empowerment provided for in the new Own Resources Decision.

As a general rule, the financial support and the relevant actions carried out by the Commission should be frontloaded by the end of 2024 and, as regards the non-repayable financial support, for at least 60 % of the total, be undertaken by the end of 2022.

The remaining years after 2024 until the end of the MFF should therefore be used by the Commission to foster the implementation of the relevant actions on the ground and to achieve the expected recovery in the relevant economic and social sectors and promoting resilience and convergence.

Horizon Europe framework programme for research and innovation 2021–2027

2018/0224(COD) - 27/04/2021 - Text adopted by Parliament, 2nd reading

The European Parliament adopted a legislative resolution approving the Council position at first reading with a view to the adoption of a regulation of the European Parliament and of the Council establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013.

'Horizon Europe'

The regulation lays down the structure and objective of the framework programme, sets out the budget for the period 2021-2027 and the forms of Union funding and the rules for the granting of such funding. It provides that 35% of the expenditure on actions financed under the programme must contribute to the climate objectives.

The objective of the new programme is to:

- deliver scientific, technological, economic and societal impact from EU investment in research and innovation, in order to strengthen the Union's scientific and technological bases and to foster the development of the Union's competitiveness in all Member States, including that of its industry;
- deliver on the EU's strategic priorities and tackle global challenges, in particular by pursuing the objectives of sustainable development in accordance with the principles of the 2030 Agenda and the Paris Agreement on climate change;
- strengthen the European Research Area (ERA), encourage excellence-based participation in the programme from all Member States, including countries with low R&I performance, and facilitate collaborative links in European R&I.

The programme introduces:

- a cluster approach to address societal issues in the following areas: (i) 'Health'; (ii) 'Culture, Creativity and Inclusive Society'; (iii) 'Civil Security for Society'; (iv) 'Digital, Industry and Space'; (v) 'Climate, Energy and Mobility'; (vi) 'Food, Bio-Economy, Natural Resources, Agriculture and Environment'; (vii) the non-nuclear direct actions of the Joint Research Centre (JRC);
- a streamlined approach to European partnerships;
- a mission-oriented approach to research;
- the creation of a European Innovation Council (EIC), focusing primarily on radical and disruptive innovation, which will encourage innovation primarily in SMEs, including start-ups;
- greater openness to new partners while maintaining excellence as the main selection criterion;
- simplified rules, greater legal certainty and reduced administrative burden for beneficiaries and programme managers.

Declarations

Parliament also approved a statement on association agreements recalling that the conditions for the association of a third country to the Horizon Europe framework programme are often provided for in these association agreements. In order to give its approval, the European Parliament will have to be immediately and fully informed at all stages of the procedure. Furthermore, in order to ensure proper parliamentary scrutiny, these agreements must cover all relevant aspects of the Union's relationship with a given third country concerning Horizon Europe.

In addition, Parliament took note of a joint political statement on the re-use of funds decommitted in Horizon Europe as well as a series of statements by the Council and the Commission.

In a statement on ethics/stem cell research, the Commission clarifies that the Framework Programme Decision explicitly excludes three areas of research from any EU funding: (i) research activity aiming at human cloning for reproductive purposes; (ii) research activity intended to modify the genetic heritage of human beings which could make such changes heritable; (iii) research activity intended to create human embryos solely for the purpose of research or for the purpose of stem cell procurement.

Horizon Europe framework programme for research and innovation 2021–2027

2018/0224(COD) - 19/03/2021 - Council position

The Council adopted its position at first reading with a view to the adoption of a regulation of the European Parliament and of the Council establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013.

The proposed Regulation aims to establish the 'Horizon Europe' Programme for Research and Innovation for the duration of the Multiannual Financial Framework (MFF) 2021-2027 and to define the rules for participation and dissemination of results applicable to indirect actions under the programme.

Overall objective

The objective of the new programme is to:

- deliver scientific, technological, economic and societal impact from EU investment in research and innovation, in order to strengthen the Union's scientific and technological bases and to foster the development of the Union's competitiveness in all Member States, including that of its industry
- deliver on the EU's strategic priorities and tackle global challenges, in particular by pursuing the objectives of sustainable development in accordance with the principles of the 2030 Agenda and the Paris Agreement on climate change;
- strengthen the European Research Area (ERA) in which researchers, scientific knowledge and technologies circulate freely.

The programme would thus maximise the EU's added value by focusing on objectives and activities that can be achieved effectively not by Member States acting alone, but in cooperation. It should contribute to achieving an overall investment target of at least 3% of the Union's Gross Domestic Product (GDP) in research and development.

Structure of the programme

The new programme would be structured around the following pillars:

- **Pillar I 'Science for excellence'** would continue to foster scientific excellence through the European Research Council (ERC), Marie Skłodowska-Curie fellowships and exchanges and research infrastructures;
- **Pillar II 'Global Issues and Industrial Competitiveness'**, grouping the following clusters: (i) 'Health'; (ii) 'Culture, Creativity and Inclusive Society'; (iii) 'Civil Security for Society'; (iv) 'Digital, Industry and Space'; (v) 'Climate, Energy and Mobility'; (vi) 'Food, Bioeconomy, Natural Resources, Agriculture and Environment'; (vii) the non-nuclear direct actions of the Joint Research Centre (JRC). Social sciences and humanities would play an important role in all clusters;
- **Pillar III 'Innovative Europe'** would encourage innovation primarily in SMEs, including start-ups, through the creation of a European Innovation Council (EIC) focusing on radical and disruptive innovation, promote the strengthening of European innovation ecosystems and support the European Institute of Innovation and Technology (EIT);
- **Pillar IV 'Widening participation, spreading excellence and strengthening the ERA'** would support activities that contribute to attracting talent and preventing brain drain, as well as activities to improve the quality of proposals from legal entities in countries with low R&I performance.

Cross-cutting elements

The Council's position also provides for:

- the encouragement of 'open science' as an approach to the scientific process based on collaborative work and the dissemination of knowledge;
- strengthening international cooperation and opening up to new partners, while maintaining excellence as the main selection criterion;
- a streamlined approach to European partnerships;
- limiting or excluding the participation of legal entities in order to protect the EU's strategic assets, interests, autonomy or security;
- a mission-oriented approach to organising large-scale, high-ambition initiatives that enable the programme to have a transformative and systemic impact on society;
- simplified rules, greater legal certainty and reduced administrative burden for beneficiaries and programme managers;
- greater synergy with other EU programmes to promote faster dissemination and uptake of research and innovation results.

Budget

The financial envelope for the implementation of the framework programme for the period 2021-2027 should amount to **EUR 95.5 billion** in current prices. This amount includes revenue from fines, EU funds from the European Recovery Instrument (Next Generation EU) and replenishment from decommitments.

For the 'regular' financial envelope, the indicative breakdown of this amount would be as follows:

- EUR 23.5 billion for Pillar I 'Science for Excellence';
- EUR 47.4 billion for Pillar II 'Global Issues and European Industrial Competitiveness';
- EUR 11.9 billion for Pillar III 'Innovative Europe';
- EUR 3.2 billion for 'Widening Participation and Strengthening the ERA' part of the Programme'.

Horizon Europe framework programme for research and innovation 2021–2027

2018/0224(COD) - 27/11/2018 - Committee report tabled for plenary, 1st reading/single reading

The Committee on Industry, Research and Energy has adopted the report by Dan NICA (S&D, RO) the proposal for a regulation of the European Parliament and of the Council establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination.

The committee recommended that the European Parliament's position adopted at first reading under the ordinary legislative procedure should amend the Commission's proposal as follows.

As a reminder, Horizon 2020 aims to bring together all existing EU research and innovation funding currently provided through the 7th Framework Programme for Research and Technological Development (FP7), the Competitiveness and Innovation Framework Programme (CIP) and the European Institute of Innovation and Technology (EIT).

Although synergies between Horizon Europe and the European Defence Fund could be encouraged while avoiding duplication, actions under Horizon Europe should have an exclusive focus on **civilian applications**.

Subject matter: the proposed Regulation seeks to **establish Horizon Europe - the Framework Programme for Research and Innovation** and the rules for participation and dissemination in indirect actions under the Programme and determines the framework governing Union support to research and innovation activities. It lays down the objectives of the Programme, the budget for the period 2021 – 2027, the forms of Union funding and the rules for providing such funding.

Objectives: the Programme's general objective is to deliver scientific, technological, economic and societal impact from the Union's investments in research and innovation so as to strengthen the scientific and technological bases of the Union as a whole, to strengthen the European Research Area and foster its competitiveness. Research and industry shall deliver on the Union strategic priorities and policies, contribute to addressing global challenges, including the Sustainable Development Goals and the Paris Agreement as well as contribute to achieving an overall investment of 3% of the GDP invested in research and development, in line with the commitment made by the Union Heads of State and Governments.

The Programme has the following specific objectives:

- develop, promote and spread **scientific and technological excellence**;
- support the creation and diffusion of high-quality knowledge, skills, technologies and solutions, based on both fundamental and applied research, in order to tackle global challenges, including climate change and Sustainable Development goals;
- significantly reduce the research and innovation divide within the Union, in particular by increasing participation in Horizon Europe of low R&I performing Member States as compared to the previous Framework Programme;
- strengthen the Union added value of research, development and innovation (RDI) funding, the impact of research and innovation in developing, supporting and implementing Union policies, and support the access to and uptake of innovative solutions in society and European industry;
- foster all forms of innovation and strengthen market deployment and exploitation of RDI results especially within the Union;
- optimise the Programme's delivery for strengthening and increasing the impact and RDI attractiveness of the European Research Area.

Budget: the proposed financial envelope for the implementation of the Framework Programme for the period 2021-2027 shall be **EUR 120 billion** in 2018 prices. This shall be distributed as follows:

- **Pillar I: Excellent and Open Science:** 27.42%;
- **Pillar II: Global Challenges and European Industrial Competitiveness:** 55.48%;
- **Pillar III: Innovative Europe:** 12.71%. 4.39% for the Part 'Strengthening the European Research Area'.

In order to respond to unforeseen situations or to **new developments and needs**, the Commission may, within the annual budgetary procedure, deviate from the amounts referred to above up to a maximum of 10%, including the allocation of the contributions from associated countries.

As part of the general Union objective of mainstreaming climate actions and of spending **30% of the Union budget in support of climate objectives**, actions under the Programme shall contribute at least 35% of the expenditure under the Programme to climate objectives where appropriate.

At least EUR 2.5 billion shall be dedicated to grants for incremental innovation in SMEs.

45% of the budget of cluster 'Inclusive and Creative Society' shall support research on cultural and creative sectors, including the Union's cultural heritage, that shall include EUR 300 million to be earmarked for the creation of a **European Cultural Heritage Cloud**.

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 Skłodowska-Curie Actions and the Research Infrastructures component in the current framework programme.
- **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'.

Horizon Europe framework programme for research and innovation 2021–2027

2018/0224(COD) - 12/12/2018 - Text adopted by Parliament, partial vote at 1st reading/single reading

The European Parliament adopted by 548 votes to 70, with 49 abstentions, **amendments** to the proposal for a regulation of the European Parliament and of the Council establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination.

The issue was referred back to the committee for interinstitutional negotiations.

The main amendments adopted in plenary concern the following points:

Objective

Following on from the Horizon 2020 programme, the proposed Regulation seeks to establish the **Horizon Europe** - Framework Programme for Research and Innovation for the period 2021-2027. It lays down the rules for participation and dissemination of results applicable to indirect actions carried out under the programme and establish the framework for EU support for research and innovation activities.

The Programme's general objective is to **deliver scientific, technological, economic and societal impact** from the Union's investments in research and innovation so as to strengthen the scientific and technological bases of the Union as a whole, to strengthen the European Research Area and foster its competitiveness. Research and industry shall deliver on the Union strategic priorities and policies, contribute to addressing global challenges, including the Sustainable Development Goals and the Paris Agreement as well as contribute to achieving an overall investment of **3% of the GDP** invested in research and development, in line with the commitment made by the Union Heads of State and Governments.

The Programme has the following **specific objectives**:

- develop, promote and spread scientific and technological excellence;
- support the creation and diffusion of high-quality knowledge, skills, technologies and solutions, based on both fundamental and applied research, in order to tackle global challenges, including climate change and Sustainable Development goals;
- significantly reduce the research and innovation divide within the Union, in particular by increasing participation in Horizon Europe of low R&I performing Member States as compared to the previous Framework Programme;
- strengthen the Union added value of research, development and innovation (RDI) funding, the impact of research and innovation in developing, supporting and implementing Union policies, and support the access to and uptake of innovative solutions in society and European industry;
- foster all forms of innovation and strengthen market deployment and exploitation of RDI results especially within the Union;
- optimise the Programme's delivery for strengthening and increasing the impact and RDI attractiveness of the European Research Area.

Budget

The proposed financial envelope for the implementation of the Framework Programme for the period 2021-2027 shall be **EUR 120 million in 2018 prices**. This shall be distributed as follows:

Pillar I: Excellent and Open Science (European Research Council, Marie Skłodowska-Curie Actions): 27.42%;

Pillar II: Global Challenges and European Industrial Competitiveness: 55.48%;

Pillar III: Innovative Europe: 12.71%. 4.39% for the Part 'Strengthening the European Research Area'.

In order to respond to unforeseen situations or to new developments and needs, the Commission may, within the annual budgetary procedure, deviate from the amounts referred to above up to a maximum of 10%, including the allocation of the contributions from associated countries.

As part of the general Union objective of mainstreaming climate actions and of spending **30% of the Union budget in support of climate objectives**, actions under the Programme shall contribute at least 35% of the expenditure under the Programme to climate objectives where appropriate.

At least **EUR 2.5 billion** shall be dedicated to grants for incremental innovation in SMEs.

45% of the budget of cluster 'Inclusive and Creative Society' shall support research on cultural and creative sectors, including the Union's cultural heritage, that shall include EUR 300 million to be earmarked for the creation of a European Cultural Heritage Cloud.

At least EUR 1 billion should be spent on quantum research.

EU funding principles

Research and innovation activities carried out under Horizon Europe shall: (i) have an exclusive focus on civil applications. Budgetary transfers between the Programme and the European Defence Fund shall not be permitted; (ii) ensure a multidisciplinary approach; (iii) aim to significantly reduce the RDI divide within the Union and to promote broad geographical coverage in collaborative projects; (iv) ensure the effective promotion of gender equality and the gender dimension in research and innovation content.

Horizon Europe framework programme for research and innovation 2021–2027

2018/0224(COD) - 17/04/2019 - Text adopted by Parliament, 1st reading/single reading

The European Parliament adopted by 578 votes to 40, with 41 abstentions, a legislative resolution on the proposal for a regulation of the European Parliament and of the Council establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination.

The European Parliament's position adopted at first reading under the ordinary legislative procedure amended the Commission's proposal.

Objective

Following on from the Horizon 2020 programme, the proposed Regulation seeks to establish the Horizon Europe - Framework Programme for Research and Innovation for the period 2021-2027. Its general objective is to:

- deliver scientific, technological, economic and societal impact from the Union's investments in research and innovation so as to strengthen the scientific and technological bases of the Union as a whole, to strengthen the European Research Area and foster its competitiveness in all Member States;
- contribute to the realisation of EU objectives and policies, contribute to tackling global challenges, including the Sustainable Development Goals by following the principles of the Agenda 2030 and the Paris Agreement;
- strengthen the European Research Area.

The Programme shall thus maximise Union added value by focusing on objectives and activities that cannot be effectively realised by Member States acting alone, but in cooperation.

It has the following specific objectives:

- to develop, promote and advance scientific excellence, support the creation and diffusion of high-quality new fundamental and applied knowledge, skills, technologies and solutions, training and mobility of researchers, attract talent at all levels and contribute to full engagement of Union's talent pool in actions supported under this Programme;
- to generate knowledge, strengthen the impact of research and innovation in developing, supporting and implementing Union policies and support the access to and uptake of innovative solutions in European industry, notably in SMEs, and society to address global challenges, including climate change and the Sustainable Development Goals;
- to foster all forms of innovation, facilitate technological development, demonstration and knowledge and technology transfer, strengthen deployment and exploitation of innovative solutions;
- to optimise the Programme's delivery for strengthening and increasing the impact and attractiveness of the European Research Area, to foster the excellence-based participations from all Member States, including low R&I performing Member States, in Horizon Europe and to facilitate collaborative links in European research and innovation.

Principles of the Programme

The Programme shall:

- ensure a multidisciplinary approach and shall foresee, where appropriate, the integration of social sciences and humanities across all clusters and activities developed under the Programme;
- ensure the effective promotion and integration of cooperation with third countries and international organisations and initiatives based on mutual benefits, EU interests, international commitments and, where appropriate, reciprocity;
- assist widening countries to increase participation in Horizon Europe and to promote broad geographical coverage in collaborative projects ;
- ensure the effective promotion of equal opportunities for all, and the implementation of gender mainstreaming, and of the gender dimension in the research and innovation content and shall aim to address the causes of gender imbalance;
- ensure to the extent possible gender balance, in evaluation panels and in other relevant advisory bodies such as boards and expert groups;
- be implemented in synergy with other Union funding programmes while seeking maximal administrative simplification;
- contribute to increasing public and private investment in R&I in Member States thereby helping to reach an overall investment of at least 3% of Union gross domestic product (GDP) in research and development;
- promote co-creation and co-design through engagement of citizens and civil society.

The Commission when implementing the programme shall aim at continuous administrative simplification and reduction of the burden for the applicants and beneficiaries.

Budget

Parliament proposed to set the financial envelope for the implementation of the Framework Programme for the period 2021-2027 at **EUR 120 million in 2018 prices**. This shall be distributed as follows:

- Pillar I: Excellent and Open Science (European Research Council, Marie Skłodowska-Curie Actions): 27.42%;
- Pillar II: Global Challenges and European Industrial Competitiveness: 55.48%;
- Pillar III: Innovative Europe: 12.71%. 4.39% for the Part 'Strengthening the European Research Area'.

In order to respond to unforeseen situations or to new developments and needs, the Commission may, within the annual budgetary procedure, deviate from the amounts referred to above up to a maximum of 10%, including the allocation of the contributions from associated countries.

As part of the general Union objective of mainstreaming climate actions into EU sectoral policies and EU funds, actions under this Programme shall contribute at least 35% of the expenditure to climate objectives where appropriate. Climate mainstreaming shall be adequately integrated in research and innovation content.

45% of the budget of cluster 'Inclusive and Creative Society' shall support research on cultural and creative sectors, including the Union's cultural heritage, that shall include EUR 300 million to be earmarked for the creation of a European Cultural Heritage Cloud.

At least EUR 1 billion should be spent on quantum research.

The European Innovation Council

The Commission shall establish a European Innovation Council (EIC) as a centrally-managed "one stop shop" for implementing actions under Pillar III 'Innovative Europe' which relate to the EIC. At least 70% of EIC budget shall be dedicated to SMEs, including start-ups.