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Basic information	
COD - Ordinary legislative procedure (ex-codecision procedure) Regulation	2018/0227(COD) Procedure completed 19/03/2019: MFF 2021-2027/ Progress report - state of play in the Council
Digital Europe programme 2021?2027 Repealing Decision (EU) 2015/2240 2014/0185(COD)	
Subject 3.30.06 Information and communication technologies, digital technologies 3.30.07 Cybersecurity, cyberspace policy	
Legislative priorities Multiannual Financial Framework 2021-2027	

Key players			
European Parliament	Committee responsible	Rapporteur	Appointed
	 Industry, Research and Energy	 FLEGO Valter	23/07/2019
		Shadow rapporteur	
		 DEL CASTILLO VERA	
		 Pilar	
		 ZORRINHO Carlos	
		 BOESELAGER Damian	
		 ROOS Robert	
		 KOUNTOURA Elena	
	Former committee responsible		
	 Industry, Research and Energy (Associated committee)		13/06/2018
		 MLINAR Angelika	
	Former committee for opinion		
	 Culture and Education (Associated committee)		01/06/2018
		 WENTA Bogdan  Brunon	
	 Budgets		28/06/2018
		 RÜBIG Paul	
	 Environment, Public Health and Food Safety		21/06/2018
		 VĂLEAN Adina-Ioana	

Council of the European Union European Commission European Economic and Social Committee European Committee of the Regions	IMCO Internal Market and Consumer Protection	19/06/2018	 GEBHARDT Evelyne
	TRAN Transport and Tourism	02/07/2018	 CLUNE Deirdre
	JURI Legal Affairs	09/07/2018	 GEBHARDT Evelyne
	LIBE Civil Liberties, Justice and Home Affairs	09/07/2018	 LENAERS Jeroen
	Commission DG Communication	Commissioner GABRIEL Mariya	

Key events			
14/06/2018	Committee referral announced in Parliament, 1st reading		
05/07/2018	Referral to associated committees announced in Parliament		
21/11/2018	Vote in committee, 1st reading		
28/11/2018	Committee report tabled for plenary, 1st reading	A8-0408/2018	Summary
12/12/2018	Debate in Parliament		
13/12/2018	Results of vote in Parliament		
13/12/2018	Decision by Parliament, 1st reading	T8-0521/2018	Summary
13/12/2018	Matter referred back to the committee responsible		
17/04/2019	Decision by Parliament, 1st reading	T8-0403/2019	Summary
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 72)		
14/01/2021	Approval in committee of the text agreed at early 2nd reading interinstitutional negotiations	PE662.135 PE662.136	
25/03/2021	Committee referral announced in Parliament, 2nd reading		
13/04/2021	Vote in committee, 2nd reading		
29/04/2021	Debate in Parliament		

29/04/2021	Decision by Parliament, 2nd reading	T9-0152/2021	Summary
29/04/2021	Final act signed		
11/05/2021	Final act published in Official Journal		

Technical information

Procedure reference	2018/0227(COD)
Procedure type	COD - Ordinary legislative procedure (ex-codecision procedure)
Procedure subtype	Legislation
Legislative instrument	Regulation
	Repealing Decision (EU) 2015/2240 2014/0185(COD)
Legal basis	Treaty on the Functioning of the EU TFEU 172; Rules of Procedure EP 59-p4; Treaty on the Functioning of the EU TFEU 173-p3
Other legal basis	Rules of Procedure EP 159
Mandatory consultation of other institutions	European Economic and Social Committee European Committee of the Regions
Stage reached in procedure	Procedure completed
Committee dossier	ITRE/9/03009

Documentation gateway

Legislative proposal		COM(2018)0434	06/06/2018	EC	Summary
Document attached to the procedure		SWD(2018)0305	08/06/2018	EC	
Document attached to the procedure		SWD(2018)0306	08/06/2018	EC	
Committee draft report		PE625.457	13/07/2018	EP	
Amendments tabled in committee		PE627.808	13/09/2018	EP	
Committee opinion	CULT	PE625.319	12/10/2018	EP	
Economic and Social Committee: opinion, report		CES3902/2018	17/10/2018	ESC	
Committee opinion	BUDG	PE626.925	07/11/2018	EP	
Committee opinion	IMCO	PE627.039	07/11/2018	EP	
Committee opinion	LIBE	PE627.774	09/11/2018	EP	
Committee opinion	ENVI	PE629.529	13/11/2018	EP	
Committee opinion	TRAN	PE627.011	15/11/2018	EP	
Committee opinion	JURI	PE627.030	21/11/2018	EP	
Committee report tabled for plenary, 1st reading/single reading		A8-0408/2018	28/11/2018	EP	Summary
Committee of the Regions: opinion		CDR3951/2018	05/12/2018	CofR	
Text adopted by Parliament, partial vote at 1st reading/single reading		T8-0521/2018	13/12/2018	EP	Summary

Text adopted by Parliament, 1st reading/single reading		T8-0403/2019	17/04/2019	EP	Summary
Commission response to text adopted in plenary		SP(2019)440	08/08/2019	EC	
Committee draft report		PE689.673	19/03/2021	EP	
Commission communication on Council's position		COM(2021)0146	19/03/2021	EC	
Council position		06789/1/2020	19/03/2021	CSL	Summary
Committee recommendation tabled for plenary, 2nd reading		A9-0119/2021	14/04/2021	EP	
Text adopted by Parliament, 2nd reading		T9-0152/2021	29/04/2021	EP	Summary
Draft final act		00013/2021/LEX	29/04/2021	CSL	

Additional information

Research document

[Briefing](#)

Final act

[Regulation 2021/694](#)
[OJ L 166 11.05.2021, p. 0001](#)

Final legislative act with provisions for delegated acts

Digital Europe programme 2021-2027

PURPOSE: to establish a digital Europe programme 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: the [digital single market strategy](#) established a robust framework which must now be matched with an equally ambitious investment programme to increase the EU's international competitiveness, as well as to develop and strengthen Europe's strategic digital capacities.

European Heads of State and Government identified the main pillars of a strong digital economy: cybersecurity, artificial intelligence, a world class infrastructure that includes high performance computing, digital skills, and the digital transformation of the public sector.

In its [resolution](#) of 1 June 2017 on the digitising European industry, the European Parliament highlighted the importance of a common European cybersecurity approach, recognising the need to raise awareness and considered cyber-resilience as a crucial responsibility for business leaders and national and European industrial security policymakers.

The digital Europe programme is a central element of the Commission's comprehensive response to the challenge of digital transformation, part of the Multiannual Financial Framework (MFF) proposal for 2021-2027.

CONTENT: the proposal for a Regulation - presented for a Union of 27 Member States - seeks to establish the digital Europe programme. It lays down the objectives of the programme, the budget for the period 2021 - 2027, the forms of European Union funding and the rules for providing such funding.

The overall objective of the proposed programme is to support the digital transformation of the European economy and society and bring its benefits to European citizens and businesses. It shall reinforce Europe's capacities in key digital technology areas through large-scale deployment and widen their diffusion and uptake in areas of public interest and the private sector.

The programme has five specific objectives:

1. high-performance computing: funding aims to build-up and strengthen the EU's high performance computing (HPC) and data processing capacities, and ensure their wide use both in areas of public interest such as health, environment and security, and by industry, notably SMEs.

At EU level, in March 2017, 29 countries engaged to cooperate on connected mobility, and 16 Member States have committed so far to work together and with the Commission to acquire and deploy an integrated world-class high performance computing infrastructure. In January 2018, the Commission proposed a Council Regulation to establish the European High Performance Computing Joint Undertaking [EuroHPC](#). The continuation of the Joint Undertaking is deemed to be the most effective instrument to implement the objectives of the EuroHPC initiative, in particular to coordinate national and European Union strategies and investments in high performance computing infrastructure and R&D;

2. cybersecurity: the programme shall contribute to the protection of the EU digital economy, society and democracies by promoting the EU cyber defence and cyber security industry, financing advanced cyber security equipment and infrastructure, and supporting the development of the necessary skills and knowledge.

3. artificial intelligence: the aim is to build-up and reinforce core artificial intelligence (AI) capacities such as a data resources and libraries of artificial intelligence algorithms and make them accessible to all businesses and public administrations, as well as reinforce and foster links between existing artificial intelligence testing and experimentation facilities in Member States;

4. advanced digital skills: the programme shall ensure that the current and future labour force can easily acquire advanced digital skills, notably in high performance computing, artificial intelligence and cybersecurity, by offering students, graduates, and existing workers the means to acquire and develop these skills, no matter where they are situated;

5. deployment, better use of digital capacities and interoperability: the objective is to expand the best use of digital capacities, notably high performance computing, artificial intelligence and cybersecurity, across the economy, in areas of public interest and society, including the deployment of interoperable solutions in areas of public interest and facilitate access to technology and knowhow for all businesses, notably SMEs.

Digital innovation hubs: the proposal foresees a central role for digital innovation hubs in the implementation of the programme. A network of digital innovation hubs shall ensure the widest geographical coverage across Europe.

The digital innovation hubs shall serve as access points to the latest digital capacities, including high performance computing (HPC), artificial intelligence, cybersecurity, as well as other innovative technologies such as key enabling technologies, also available also in fablabs or citylabs. They shall act as single-entry points in accessing tested and validated technologies and promote open innovation.

Proposed budget: the financial envelope for the programme is set at EUR 9.2 billion in current prices for the period 2021-2027, its indicative distribution shall be as follows:

- high performance computing: up to EUR 2.7 billion;
- cybersecurity: up to EUR 2.5 billion;
- artificial intelligence: up to EUR 2 billion;
- advanced digital skills: up to EUR 700 million;
- digital capacity utilisation and interoperability: up to EUR 1.3 billion.

Digital Europe programme 2021-2027

The Committee on Industry, Research and Energy adopted the report by Angelika MLINAR (ALDE, AT) on the proposal for a regulation of the European Parliament and of the Council establishing the Digital Europe programme for the period 2021-2027.

The Committee on Culture and Education, exercising its prerogative as an associated committee in accordance with [Article 54 of the Rules of Procedure](#), also gave its opinion on the report.

The current state of digitalisation of EU economy, industry and society is not sufficient to answer to the political ambition of the Digital Single Market. There is still an important gap to cover through substantial and better European investment, in order to achieve the common goal and fully benefit from the EU added value.

This proposal is the first pan-European digital programme; it should be seen as a major step for strengthening and improving Europe leading position.

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.

Aim: this aim of this proposed Regulation is to establish the Digital Europe programme, which shall be implemented for the period of 1 January 2021 to 31 December 2027.

Definition: the amended text defines what a 'European Digital Innovation Hub' means. It is an existing or new legal entity or a consortium of legal entities designated or selected in an open, transparent and competitive procedure in order to fulfil the tasks under the Programme. European Digital Innovation Hubs shall act as one-stop-shops where companies - especially SMEs, start-ups and mid-caps - can get help to improve their business, production processes, products and services by means of digital technology that could result in added value.

General objective: the Programme shall seek to support and to accelerate the digital transformation of the European economy, industry and society and to bring its benefits to European citizens, public services and businesses, as well as to reinforce the strategic autonomy and cohesion of the Union while securing competitiveness and reducing the digital divide.

Budget: the financial envelope for the implementation of the Programme for the period 2021-2027 shall be EUR 8.2 billion in 2018 prices (compared to EUR 9.2 billion as proposed by the Commission).

Specific objectives: the Programme shall be structured into five specific objectives reflecting key policy areas, namely:

1. high-performance computing with a budget up to EUR 2.4 billion;
2. artificial intelligence and distributed ledger technologies with a budget up to EUR 2.2 billion;
3. cybersecurity with a budget up to EUR 1.8 billion;
4. advanced digital skills with a budget up to EUR 623 million;
5. deployment, best use of digital capacities and interoperability with a budget up to EUR 1.1 billion.

For all these areas, the Programme shall also aim at better aligning Union, Member States and regional policies, and pooling of private and industrial resources in order to increase investment and develop stronger synergies. The Commission shall ensure that when leveraging the complementary character of the programme with other European funding programmes, in particular ESIF, the European Regional Development Fund (ERDF), Horizon Europe and Connecting Europe Facility (CEF-2), investEU, Erasmus, European Agricultural Fund for Rural Development (EAFRD) the achievement of Specific objectives are not hampered.

Monitoring and reporting: the Commission shall ensure regular monitoring and external evaluation of the Programme. The evaluations shall also provide for a qualitative assessment of the progress towards achieving the general objectives. In addition to regularly monitoring the Programme, the Commission shall establish an interim evaluation report no later than 31 December 2024. The interim evaluation shall present the findings necessary to make a decision about a follow-up to the Programme beyond 2027 and its objectives. The interim evaluation shall be submitted to the European Parliament.

Digital Europe programme 2021-2027

The European Parliament adopted by 491 votes to 38, with 51 abstentions, amendments to the proposal for a regulation of the European Parliament and of the Council establishing the Digital Europe programme for the period 2021-2027.

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

The main amendments adopted in plenary concern the following points:

Objective

This aim of this proposed Regulation is to establish the first Digital Europe programme, which shall be implemented for the period of 1 January 2021 to 31 December 2027.

The general objective shall:

- seek to support and to accelerate the digital transformation of the European economy, industry and society and to bring its benefits to European citizens, public services and businesses;
- reinforce the strategic autonomy and cohesion of the Union while securing competitiveness and reducing the digital divide.

A central role in the implementation of the Programme should be attributed to European Digital Innovation Hubs, which should stimulate the broad adoption of advanced digital technologies by industry including SMEs, by public organisations and academia.

Members have stated that European Digital Innovation Hubs shall act as one-stop-shops where companies - especially SMEs, start-ups and mid-caps - can get help to improve their business, production processes, products and services by means of digital technology that could result in added value.

Budget

The financial envelope for the implementation of the Programme for the period 2021-2027 shall be EUR 8.2 billion in 2018 prices (compared to EUR 9.2 billion as proposed by the Commission).

Specific objectives

The Programme shall be structured into five specific objectives reflecting key policy areas, namely:

- high-performance computing (Objective 1) with a budget up to EUR 2.4 billion;
- artificial intelligence (Objective 2) with a budget up to EUR 2.2 billion;
- cybersecurity (Objective 3) with a budget up to EUR 1.8 billion;
- advanced digital skills (Objective 4) with a budget up to EUR 623 million;
- deployment, best use of digital capacities and interoperability (Objective 6) with a budget up to EUR 1.1 billion.

Implementation

The actions under specific objective 1 shall be primarily implemented through the Joint Undertaking proposed by the Commission and endorsed by the Council of Ministers on 25 of June 2018.

The actions under specific objective 2 shall be implemented exclusively through direct management by the Commission or an executive agency on the basis of a cost-benefit analysis. They shall comply with ethical principles and relevant national, Union and international laws, including the Charter of Fundamental Rights of the European Union and the European Convention of Human Rights and the Protocol thereto.

The actions under objective 3 shall be primarily implemented through the European Cybersecurity Industrial, Technology and Research Competence Centre and the Cybersecurity Competence Network.

The actions under Objectives 4 and 5 shall be mainly implemented through direct management by the European Commission.

For all these areas, the Programme shall also aim at better aligning Union, Member States and regional policies, and pooling of private and industrial resources in order to increase investment and develop stronger synergies.

The Commission shall ensure that when leveraging the complementary character of the programme with other European funding programmes, in particular ESIF, the European Regional Development Fund (ERDF), Horizon Europe and Connecting Europe Facility (CEF-2), InvestEU, Erasmus, European Agricultural Fund for Rural Development (EAFRD) the achievement of Specific objectives are not hampered.

Digital Europe programme 2021-2027

The European Parliament adopted by 561 votes to 39, with 50 abstentions, a legislative resolution on the proposal for a regulation of the European Parliament and of the Council establishing the Digital Europe Programme for the period 2021-2027.

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

Subject matter

The objective of the proposed Regulation shall be to establish the first Digital Europe Programme, which will be implemented for the period from 1 January 2021 to 31 December 2027.

The general objective of the programme shall be:

- to support and accelerate the digital transformation of the European economy, industry and society and to bring its benefits to European citizens, public administrations and businesses across the Union;
- to strengthen Europe's competitiveness in the global digital economy while contributing to bridging the digital divide across the Union and reinforcing the Unions strategic autonomy.

European Digital Innovation Hubs

During the first year of the programme, an initial network of European Digital Innovation Hubs shall be established through an open and competitive process from entities designated by Member States.

A central role in the implementation of the Programme shall be attributed to European Digital Innovation Hubs, which should stimulate the broad adoption of advanced digital technologies by industry, in particular SMEs and entities employing up to 3 000 employees that are not SMEs (midcaps), by public organisations and academia.

European Digital Innovation Hubs shall have substantial overall autonomy to define their organisation, composition, and working methods. They shall act as facilitator to bring together industry, businesses and administrations which are in need of new technological solutions on one side, with companies, notably start-ups and SMEs, that have market-ready solutions on the other side.

They shall develop synergies with Digital Innovation Hubs funded by Horizon Europe programme or other R&I programmes.

Budget

Parliament proposed that the financial envelope for the implementation of the Programme for the period 2021-2027 be set at EUR 8.2 billion in 2018 prices.

The Programme shall be structured into 5 specific objectives corresponding to the main areas of intervention, namely:

- up to EUR 2.4 billion for Specific Objective 1, High Performance Computing;
- up to EUR 2.2 billion for Specific Objective 2, Artificial Intelligence;
- up to EUR 1.8 billion for Specific Objective 3, Cybersecurity and Trust;
- up to EUR 623 million for Specific Objective 4, Advanced Digital skills;
- up to EUR 1.1 billion for Specific Objective 5, Deployment, best use of digital capacities and Interoperability.

Implementation of the project

- Actions under Specific Objective 1 shall be primarily implemented through the Joint Undertaking established by [Council Regulation \(EU\) 2018/1488](#) establishing the European High Performance Computing Joint Undertaking;

- Actions under Specific Objective 2 'Artificial intelligence' shall be implemented exclusively through direct management. The Commission shall specify, in accordance with relevant European and international legislation, including the Charter of Fundamental Rights of the European Union, the conditions relating to ethical issues in the work programmes under this objective. Funding for actions that do not comply with the conditions relating to ethical issues may be suspended, withdrawn or reduced at any time.

- Actions under Objective 3 Cybersecurity and Trust shall be mainly implemented through the European Cybersecurity Industrial, Technology and Research Competence Centre and the Cybersecurity Competence Network.

- Actions under Objectives 4 'Advanced e-Skills' and 5 'Deployment, best use of digital capabilities and interoperability' shall be mainly implemented through direct management by the European Commission.

Third countries associated with the programme

Parliament has requested that the programme be open to the participation of members of the European Free Trade Association which are members of the European Economic Area (EEA). Full or partial association with the programme of other third countries would be based on a case-by-case assessment of the specific objectives, in accordance with the conditions laid down in a specific agreement on the participation of the third country in any EU programme, provided that this specific agreement meets a number of criteria.

Digital Europe programme 2021-2027

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 the Digital Europe Programme and repealing decision (EU) 2015/2240.

The proposed regulation aims at establishing the Digital Agenda for the duration of the multiannual financial framework (MFF) 2021-2027.

Programmes objectives

The overall objectives of the proposed programme are to:

- support and accelerate the digital transformation of Europe's economy, industry and society, bringing its benefits to citizens, public administrations and businesses across the EU;
- strengthen Europe's competitiveness in the global digital economy while helping to bridge the digital divide across the Union;

- strengthen the Union's strategic autonomy, through comprehensive, cross-sectoral and cross-border support and an enhanced EU contribution.

The programme has five specific interrelated objectives:

- 1) High Performance Computing;
- 2) Artificial Intelligence (AI);
- 3) Cybersecurity and trust;
- 4) Advanced digital skills;
- 5) Deployment and best use of digital capabilities and interoperability.

European Digital Innovation Hubs

In the implementation of the programme, a central role should be attributed to European Digital Innovation Hubs, which should stimulate the broad adoption of advanced digital technologies by industry, in particular by SMEs and by other entities that employ up to 3 000 people ('mid-caps'), by public organisations and by the academic community.

An initial network of European Digital Innovation Hubs, consisting of at least one hub for each Member State, would be set up in the first year of the programme. The designation of digital innovation clusters should be done through an open and competitive process.

Digital Innovation Hubs would serve as access points to the latest digital resources, including high performance computing (HPC), artificial intelligence, cybersecurity, and other innovative technologies such as key enabling technologies, also available in available also in fablabs or citylabs. They should act as single-entry points in accessing tested and validated technologies and should promote open innovation.

Security restrictions

Actions carried out under the Programme should comply with applicable security rules, including with Union and national law and in particular in relation to the protection of the classified information against unauthorised disclosure.

As regards participation in actions under Artificial Intelligence and High Performance Computing, the Council position provides that entities controlled from third countries may be eligible for participating in actions under those two specific objectives only if they comply with conditions related to security set out in the work programme.

Ethics

AI-based solutions and data made available shall respect the principle of privacy and security by design and shall fully comply with data protection legislation.

The Council position provides for the possibility for the Commission to carry out ethical reviews and the possibility to suspend, reduce or terminate funding in case of non-compliance with ethical requirements.

Third countries involved in the programme

The programme would be open to the participation of the following third countries through association or partial association, i.e. the association of third countries to a limited number of specific objective pursued under the programme.

Work programmes

The programme would be implemented through the work programmes. The Council's position foresees the use of implementing acts for the adoption of work programmes for directly managed actions.

Budget

The programme would have an overall budget of EUR 7 588 000 000 in current prices for the period 2021-2027, with the following indicative breakdown:

- high performance computer: EUR 2 226 914 000
- artificial intelligence: EUR 2 061 956 000;
- cybersecurity and trust: EUR 1 649 566 000;
- advanced digital skills: EUR 577 347 000;
- digital capacity and interoperability: EUR 1 072 217 000.

The amounts under the programme could cover up to 100% of the eligible costs, without prejudice to the principle of co-financing.

Digital Europe programme 2021?2027

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 the Digital Europe Programme and repealing Decision (EU) 2015/2240.

The regulation establishes the Digital Agenda for the duration of the multiannual financial framework (MFF) 2021-2027.

Objectives

The proposed Regulation aims to establish an expenditure instrument to maximise the benefits of digital transformation for EU citizens, businesses and public administrations by enhancing the EU's digital capabilities in five key areas: (1) High Performance Computing, (2) Artificial Intelligence, (3) Cybersecurity and Trust, (4) Advanced Digital Skills and Deployment, (5) Better use of digital capabilities and interoperability.

The Digital Europe Programme is an investment programme to strengthen the EU's strategic digital capabilities and to facilitate the large-scale deployment of digital technologies for use by Europe's citizens and businesses. It takes into account key EU priorities, including the green and digital transition and the resilience of the single market.

The programme should focus on areas where no single Member State can achieve the level of digital success required. It will also focus on areas where public spending has the greatest impact.

Ethical principles should be taken into account in the various actions under artificial intelligence.

Budget

The overall agreed financial envelope amounts to EUR 7 588 000 000 (in current prices) for the period 2021-2027.

The amounts under the programme may cover up to 100% of the eligible costs, without prejudice to the principle of co-financing.