

6 June 2018

# INVESTING IN THE FUTURE DIGITAL TRANSFORMATION 2021-2027

# WHY IS THIS A PRIORITY?

Digital transformation holds the key to unlocking future growth in Europe. Through new funding projects, the next long-term EU budget – the European Multiannual Financial Framework - will help to bridge the EU's digital investment gap for the 2021-2027 period.

# WHAT'S NEW FOR 2021-2027?

The Digital Single Market strategy has put in place a robust framework, which must now be matched by an **equally robust investment programme** to make the most of many new opportunities digital transformation offers:



Investments in digital will be much higher than before



Focus on areas of public interest



Reinforce several ongoing cooperation projects with the Member States

The Commission has created a **new Digital Europe programme** with an overall budget of **€9.2 billion** to shape and support the digital transformation of Europe's societies and economies. The programme will boost frontline investments in supercomputing, artificial intelligence, cybersecurity and advanced digital skills.

## **FIVE FOCUS AREAS UNDER DIGITAL EUROPE PROGRAMME:**



Supercomputing



Artificial Intelligence



Cybersecurity and Trust



Advanced Digital Skills



Ensuring the wide use of digital technologies across the economy and society

# HOW ELSE WILL THE FUTURE EU BUDGET MAKE A DIFFERENCE IN THE DIGITAL AREA?

Digital transformation is also at the core of the Connecting Europe Facility to develop digital infrastructures, including broadband coverage.

Under its objectives "Smarter Europe" and "A more connected Europe", the European Regional Development and Cohesion Funds will support the digital transformation of the economy at regional level and create regional networks and systems to promote sustainable transport, smart energy grids, smart cities and high-speed digital access.

The new research and innovation programme, Horizon Europe, will boost the scientific, economic and societal impact of EU funding, ultimately increasing the well-being of Europeans. Together with the Digital Europe programme, it will ensure synergies in areas such as artificial intelligence, robotics, high-performance computing, and big data.

Investments in digital will be possible under the four strands of the future **InvestEU Fund**, particularly in digital infrastructures, digital transformation of small businesses, research on digital technologies and supporting the social economy in benefitting from the digital transformation.

The new European Social Fund+ will help to equip citizens with basic skills fit for the new digital world through projects in the Member States. Investments in digital upskilling are included also in the Global Adjustment Fund.

# **NEXT STEPS**

02/05 2018	06/06 2018	28-29/ 06/2018	12/09 2018	18-19/ 10/2018	13-14/ 12/2018	21-22/ 09/2019	09/05 2019
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Multiannual	Legislative	European	President	European	European	European	Sibiu
Financial	sectoral	Council	Juncker's	Council	Council	Council	Summit
Framework	proposals		State of				
beyond 2020	for spending		the Union				
package	programmes		Address				

# WHY ARE THESE AREAS A PRIORITY AND HOW WILL THE BUDGET BE USED?



#### SUPERCOMPUTING

High-performance computers, or supercomputers, are needed to process ever-larger amounts of data. The new Digital Europe Programme will strengthen the EU's high-performance computing and data-processing capacities, and ensure their wide use in areas such as fighting against climate change, improving healthcare, and security.

The Commission proposed in January 2018 a major initiative on supercomputing – the **EuroHPC Joint Undertaking** – to create with Member States an integrated world-class supercomputing and data infrastructure and encourage European contributions to this field. With already 15 Member States and Switzerland signed up, this European cooperation is expected to be operational before the end of 2018.



# €2.7 billion for supercomputing to:



Build up and strengthen the EU's high-performance computing and data processing capacities with world-class exascale capabilities by 2022/2023 (capable of at least a billion billion or 10<sup>18</sup> calculations per second) and post exascale facilities by 2026/2027;







Ensure a wide use of supercomputing both in areas of public interest such as health, environment and security, and by industry, notably small and medium-sized enterprises.



#### **ARTIFICIAL INTELLIGENCE**

Artificial intelligence is one of the most promising technologies for economic growth and addressing societal challenges in the years ahead. The new wave of artificial intelligence-based innovations will profoundly impact not only digital products and services, but also traditional industry and the non-ICT sector and will help to improve people's everyday lives.

The Commission presented in April 2018 a series of measures to increase public and private investment in artificial intelligence, to prepare for socio-economic changes, and ensure an appropriate ethical and legal framework.



### **€2.5 billion** for artificial intelligence to:



Build-up and reinforce the use of artificial intelligence by businesses and public administrations;



Facilitate safe access and storage of large sets of data and algorithms;



Strengthen and support existing artificial intelligence testing and experimentation facilities in Member States and encourage their cooperation.



#### **CYBERSECURITY AND TRUST**

While opening up new opportunities for citizens to connect and disseminate information, digital technologies have also brought about new risks. These include increasing cyber-attacks and fraud, stealing data, and attempts to destabilise our democracies. It is crucial to invest in cybersecurity, as trust and awareness are the foundation for a functioning Digital Single Market. The EU has responded to these challenges by adopting a wide range of cybersecurity measures, including the first EU-wide cybersecurity legislation (NIS).

Besides continuing investment in research and development with Horizon Europe, the Commission today proposed investments to reinforce capabilities and ensure that the Union has technological and industrial capacities to secure its economy, society and democracy.



#### **€2 billion** for cybersecurity to:



Support, together with Member States, the procurement of advanced cybersecurity equipment, tools and data infrastructures;



Support the best use of European knowledge, capacity and skills related to cybersecurity;



Ensure a wide deployment of the latest cybersecurity solutions across the economy;



Reinforce capabilities within Member States and private sector for a high common level of security of network and information systems across the Union.



Gains from investments in the digital technologies will only be reaped if there are enough skilled people able to use them. Only a EU highly-skilled workforce will bring these technologies in our economies. The Digital Europe programme will offer current and future students and technology experts good opportunities to pursue training and career in advanced digital technologies.

Currently, there are more than 350,000 vacancies in Europe for highly skilled technical experts in areas such as artificial intelligence, data analytics and cybersecurity.



### €700 million for digital skills to:



Support the design and delivery of short-term training and courses for entrepreneurs, small business leaders and the workforce;



Support the design and delivery of longterm training and courses for students, IT professionals and the workforce;



Support on-the-job training and traineeships for students, young entrepreneurs and graduates.



# ENSURING THE WIDE USE OF DIGITAL TECHNOLOGIES ACROSS THE ECONOMY AND SOCIETY

The Digital Europe programme will ensure the digitisation of public administrations and public services and their EU-wide interoperability, and facilitate access to technology and know-how for all businesses, notably SMEs.



#### **€1.3 billion** under Digital Europe to:



Ensure that the public sector and areas of public interest, such as health and care, education, transport, cultural and creative sectors, can deploy and access state-of-the-art digital technologies;



Provide more interoperable public services across the EU and on the EU-level;



Offer to public administrations access to testing and piloting of digital technologies, including their cross-border use:



Support the uptake of advanced digital and related technologies, by industry, notably small and medium-sized enterprises;



Build up and strengthen the network of Digital Innovation Hubs;



Support and follow closely the latest technical developments that have the potential to benefit Europe's economy and society.