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Digital Europe Programme

recap the main objectives

strategic autonomy

Compete globally
Other regions of the world invest huge amount of public capital in advanced technologies. For example, the US and China spend € 10-20 billion annually on AI alone

Achieve scale through collective co-investments
Given the size of investments needed, scale required and risks involved Europe needs to pool the resources together

Regain control over Europe's value chains
and ensure Europe's technological sovereignty

Better address Europe's economic and societal challenges
E.g. climate, health, mobility and public services

Ensure broad take-up of digital technologies across all regions of EU
In deploying latest technologies to offer best services to citizens and business

Support SMEs to acquire or access the latest technologies and skills
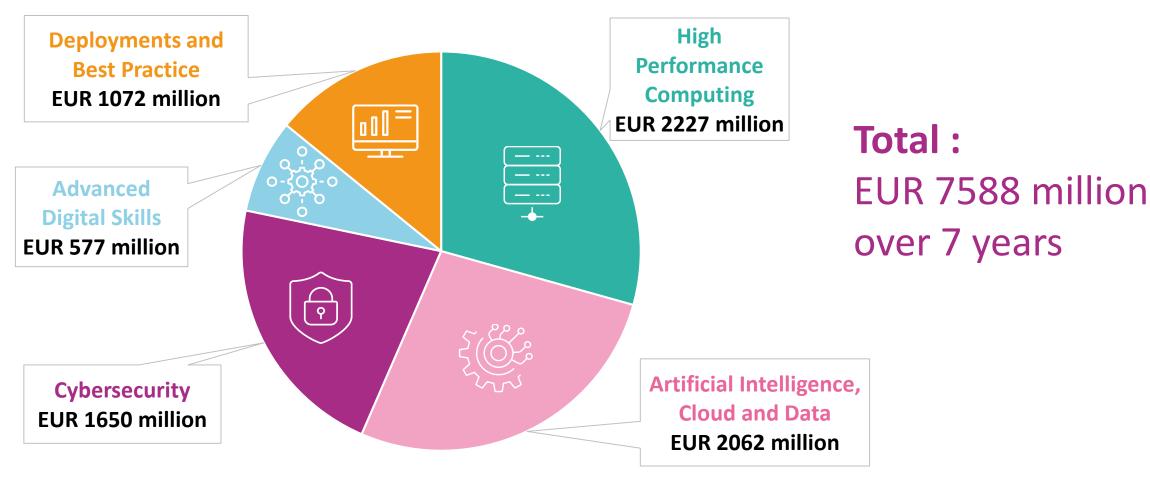More than 400,000 EU vacancies in these fields

Digital Europe is complementary to other programmes with investments in digital

	EU-wide collective effort				National regional and local			Financial instrument
Horizon Europe	Digital Europe	CEF	Creative Europe	Health	Cohesion	Agriculture Funds	RRF	InvestEU
Research Innovation	Strategic capacities: computing, data, testbeds, etc. Advanced digital skills EU-Wide deployment	Broadband and 5G roll out Connecting Communities	Creative industry Media	Telemedicine eHDSI	Digital connectivity in white and grey areas Support to enterprises in line with Smart specialisation Digital skills for all citizens	Making use of Big Data for CAP monitoring Broadband rollout in rural areas	Connect Scale-up Modernise Reskill and Upskill 20% digital	Leverage private capital for investments in SMEs, research, digital, infrastructure, skills…

Budget as in Regulation

Deployments and Best Practice
EUR 1072 million

High Performance Computing
EUR 2227 million

Advanced Digital Skills
EUR 577 million

Cybersecurity
EUR 1650 million

Artificial Intelligence, Cloud and Data
EUR 2062 million

Total :
EUR 7588 million over 7 years

Overall planning

- First Orientations July 2019 : public consultation until October 2019

- MFF Negotiation concluded in December 2020

- DEP Regulation adopted in March-April 2021 with an approx. budget of EUR 7.5 billion over 7 years

- Work programme content discussed with Member States Expert Group – in the meanwhile a formal Committee is being set-up

- Work programme expected to be ready in September 2021

- First call opens as soon as the work programme is adopted – Q3 2021

- Second call indicatively will open in Q2 2022

- Third call indicatively will open in Q3 2022

Digital Europe "deliverables"

- Focus is on <u>delivery actual results</u>. It will make use of the most recent research results, but <u>it will not support research</u>.

- For example, the programmes will support:

  - The <u>acquisition</u> of HPC machines

  - The <u>set-up</u> of sectorial data spaces, eg manufacturing

  - The <u>building or reinforcing</u> of Testing and Experimentation Facilities

  - The <u>set up and delivery</u> of Master courses in key advanced digital technologies

  - The <u>set-up, interoperability, operations and maintenance</u> of a number of services in the eGov area

For each topic to be funded :

- The <u>work programme</u> defines the objectives, the scope, the expected outcome, the type of action (e.g. grants, procurement) and if the topic is subject to participation restrictions

  - For Grants → The <u>Call Text</u>, published at call opening, defines all the technical details

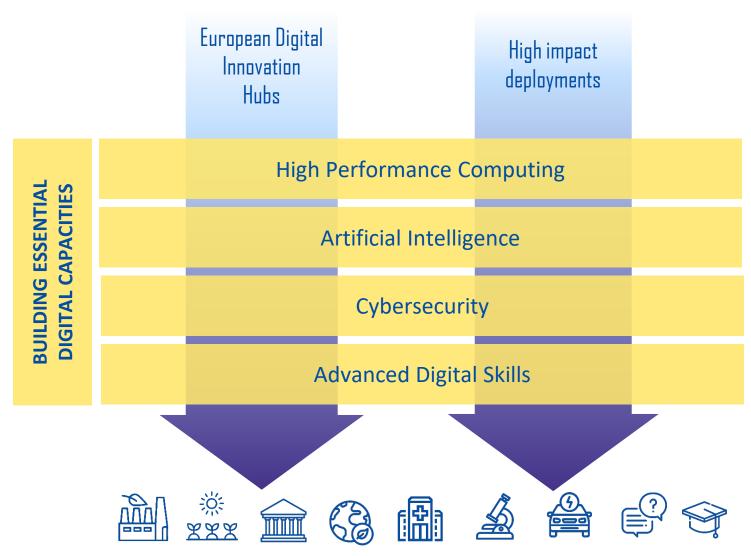 - For Procurements → the <u>Tender Specifications</u> will define the actions details

Funding schemes :

- Similar but not exactly the same to Horizon, e.g.

  - Grants with cost reimbursement 50% for everybody or with 75% for SMEs

  - CSA at 100%

Digital Europe programme structure

ACCELERATING THE BEST USE OF DIGITAL TECHNOLOGIES

European Digital Innovation Hubs

High impact deployments

BUILDING ESSENTIAL DIGITAL CAPACITIES

High Performance Computing

Artificial Intelligence

Cybersecurity

Advanced Digital Skills

High Performance Computing

- This action will be managed by the EuroHPC JU

    - Information below is only preliminary and will be finalised by the EuroHPC Governing Board

Procure exascale machines

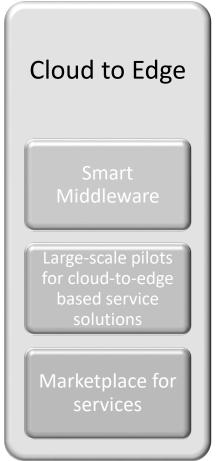Upgrade existing supercomputers

Quantum Computing

Widen the access to and use of supercomputing

Artificial intelligence, data and cloud

Data Spaces

- **Green Deal**
- **Smart communities**
- **Mobility**
- **Manufacturing**
- **Agriculture**
- **Cultural Content**
- **Health**
- **Media**
- **Finance**
- **Skills**
- **Languages**
- **Public Administrations**

Support to Data Spaces

- Support Centre
- Open Data Portal
- High Value Data Sets

Cloud to Edge

- Smart Middleware
- Large-scale pilots for cloud-to-edge based service solutions
- Marketplace for services

AI-on-demand Platform

- Central access point to AI resources

Testing and Experimentation Facilities

- Manufacturing
- Health
- Agri-Food
- Smart cities and communities
- Edge AI HW

Most of the actions will be managed directly by CNECT

Cybersecurity and trust

Most actions will be managed by the ECCC, once established, with the notable exception of QCI

- Quantum Communication Infrastructure

- Support to Implementation of relevant EU Legislation

- Deployment of cybersecurity infrastructures

- Support to market players and skills

Advanced digital skills

Actions will mostly be managed by HaDEA

Design and implementation of specialized education programmes and modules in key capacity areas (master classes)

Traineeships in key capacity areas

Short term trainings in advanced technologies (contribution to SME strategy)

Digital skills platform

Digital transformation of Education

Accelerating the best use of digital technologies

Actions will be managed through HaDEA, with the exception of the EDIH, which will be managed by CNECT

EDIH

European Digital Innovation Hubs:
one per region

Green Deal

Destination Earth

Urban digital twins for smart communities

Digital Product Passport

Blockchain

European Blockchain Service Infrastructure

European Digital Government Eco System

Core services from CEF and ISA2

Interop. Knowledge & Support Centre

Once only Principle

Digital Identity

GovTech

Justice and Consumer Protection

Law enforcement

Enhancing Confidence in Digital Transformation

Safer Internet

European Digital Media Observatory

The European Digital Innovation Hubs

- The plan is to have at least one EDIH per region during the programme

- Task of the hubs : focus on digital transformation of SMEs and public sector (Adopt AI)

- EDIH <u>will collaborate with all existing networks</u> funded by other programmes and avoid overlap, also thanks to

- Member States involvement in designating the entities (consortia) which can participate to the call for proposal (existing centres might be designated to take over this additional role)

EuroHPC JU and the ECCC

The EDIH

The use of the deployed services and infrastructures

- Testing and Experimentation Facilities

- Data Spaces

- Cloud-to-edge

Contributions to *missions*

In summary

High-performance computing

- Procure exascale machines
- Upgrade existing supercomputers
- Quantum computing
- Widen the access to and use of supercomputing

Artificial intelligence

- Data4EU : common Data Spaces, clouds, platforms and infrastructure
- Large Testing and Experimentation Facilities for Agriculture, health, mobility, manufacturing and AI edge HW
- AI-on-demand platform

Cybersecurity

- Deploy competence centers network
- Cybersecurity shield, quantum communication infrastructure - QCI
- Certification schemes
- Cybersecurity tools

Advanced digital skills

- Master courses
- Short term trainings
- Job placements
- Platform for Skills and Jobs

Deployments : emphasis on

- Destination Earth
- Actions in support to Green Deal
- New Digital Identity and further investments (CEF – ISA2) & Interoperability
- Blockchain
- Enhancing confidence in the digital transformation

European digital innovation hubs

- At least one per MS or associated country

More information

- [Digital Programme | Shaping Europe's digital future (europa.eu)](europa.eu)

- Participants portal - Funding & tender opportunities

  - https://ec.europa.eu/info/funding-tenders/opportunities/portal

Thank you – Questions?