Digital Innovation Hubs in Horizon Europe and the Digital Europe Programme

CLORA
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The Digital Europe Programme is currently under negotiation with Council and Parliament.
“ensure that Europe fully grasps the potential of the digital age and strengthens its industry and innovation capacity”

Political guidelines
President-Elect Ursula von der Leyen
Internal Market, and much more…

Commissioner-designate Thierry Breton for Internal Market

- **A future-ready European industry and single market**
  - All parts of European industry should contribute fully to the objective of a climate-neutral economy by 2050.

- **Enhancing Europe’s technological sovereignty in key value chains**
  - including in the defence and space sectors, common standards and future trends.

- **Investing in the next frontier of technologies,**

- **A coordinated European approach on artificial intelligence and on the new Digital Services Act**
The European approach to digitalisation

- Worldwide wave of digitalisation, increasingly critical for SMEs
- European approach to build critical mass is joining forces
- 2016 strategy for Digitising European Industry
- 2018 an Artificial Intelligence for Europe
- Unfolding implementation of the digitalisation of the economy
  - Ambitious mobilisation of at least 50 billion by 2020
- Artificial Intelligence: a balance of leadership and European values
A Europe fit for the digital age
The network of Digital Innovation Hubs so far

- From a concept to a pan-European network of over 240 operational Digital Innovation Hubs
- 500 Start-ups, SMEs and mid-caps tested digital innovations in collaboration with more than 150 DIHs in 370 innovation experiments
- €500 million EU investments from Horizon 2020 (2016-2020)
- Dedicated coaching for 64 Digital Innovation Hubs in the EU13 and in regions with slower adoption of digital technologies
- A pilot risk-coverage scheme under COSME launched in October 2019 for loans to SME for their digital transformation.
- Proposed Digital Europe Programme: a systematic approach to building the strategic digital capacities of the EU and on facilitating the wide deployment of digital technologies
DIH in next MFF (2021-2027)

Allocated at European level

Horizon Europe: Support to SMEs and mid-caps to experiment with innovative digital technologies in a cross-border setting.

Digital Europe: Support to facilities and personnel - focus on broad roll-out of the latest digital innovations across SMEs and administrations.

InvestEU: Incentives and risk reduction programmes to help companies find follow-up investment to further complete their digital transformation.

Allocated at national level

European Regional Development Fund: Investments to strengthen local operations of DIH – can be used for co-financing EDIH

Continuation of H2020 actions like I4MS
Horizon Europe

evolution not revolution

Pillar 1
Excellent Science
- European Research Council
- Marie Skłodowska-Curie Actions
- Research Infrastructures

Pillar 2
Global Challenges and European Industrial Competitiveness
- Clusters
  - Health
  - Culture, Creativity and Inclusive Society
  - Civil Security for Society
  - Digital, Industry and Space
  - Climate, Energy and Mobility
  - Food, Bioeconomy, Natural Resources, Agriculture and Environment
- Joint Research Centre

Pillar 3
Innovative Europe
- European Innovation Council
- European innovation ecosystems
- European Institute of Innovation and Technology

Widening Participation and Strengthening the European Research Area
- Widening participation and spreading excellence
- Reforming and Enhancing the European R&I system
2021: a Digital Europe Programme

€9.2 billion in total

- Artificial Intelligence: €2.5 billion
- Cybersecurity & trust: €2 billion
- High Performance Computing: €2.7 billion
- Advanced digital skills: €0.7 billion
- Digital transformation & Interoperability: €1.3 billion

* Funding programme focused on building the strategic digital capacities of the EU and on facilitating the wide deployment of digital technologies, to be used by Europe’s citizens and businesses (proposed by the European Commission subject to agreement with Council and Parliament)

Document “European DIHs in Digital Europe Programme”
European Digital Innovation Hubs

Provide technological expertise and experimentation facilities to enable the digital transformation of the industry and the public sector

- Typical participants:
  - RTOs, Technical Universities, …
  - Competences from industry associations & clusters, innovation agencies, incubators, …
- DIH have minimum 50 % co-investment from Member States and/or Regions
  - Structural Funds can be used for MS part
  - Contribution can be in-kind or in-cash
2-step selection process

Expression of Interest by EC directed to MSs

MS designate a list of entities that:
- Fulfil the criteria
- Will get or already got co-investment

Based on open and competitive process

Commission Decision on initial network

EC issues a restricted Call to entities of the initial network. Designated entities submit proposals that are evaluated by the Commission with the support of external experts.

EC selects taking utmost account of opinion of MS from those proposals exceeding the pre-defined quality threshold balancing
- regional coverage
- technology coverage
- sector coverage

[Endorsement by MS committee]
Based on existing strengths and addressing future needs of the local industry or public sector organisations

<table>
<thead>
<tr>
<th>DEP</th>
<th>Other Technologies</th>
<th>Application areas</th>
<th>Sector</th>
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</thead>
<tbody>
<tr>
<td>AI, HPC, or Cybersecurity</td>
<td>Simulation, Supply chain integration, Blockchain, Advanced Materials, ...</td>
<td>Industry 4.0, Circular economy</td>
<td>Manufacturing</td>
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<td></td>
<td>Remote sensing, Photonics, Life-Science Technologies, ...</td>
<td>Precision farming</td>
<td>Agri-food</td>
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<td></td>
<td>Robotics, Simulation, ...</td>
<td>Exo-skeletons, Automated building</td>
<td>Construction</td>
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<td></td>
<td>Digital solutions for governments, Blockchain, ...</td>
<td>Services for citizens, once only principle</td>
<td>Public administration</td>
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Knowledge transfer in Digital Europe Programme

SO1: High Performance Computing
SO2: Artificial Intelligence
SO3: Cybersecurity and Trust
SO4: Advanced Digital Skills
SO5: Deployment, best use of digital capacity and interoperability

Train the Trainer
Request Specialised Support

Networking Transfer of Expertise

European DIH X Region A Specialisation 1
European DIH Y Region B Specialisation 2
European DIH Z Region C Specialisation 3

Public Administrations
SMEs/Midcaps
Exporting / Importing DIH excellence:
• Based on complementary competence and infrastructure
• Help SMEs with expertise and facilities not locally available
• Help SMEs tap into other markets, develop EU value chains

DIH capacity building:
• Exchange of experience, good practice, mirroring successful set-ups
• A more mature DIH helps a less mature DIH (cohesion)
• Learning from specialists in HPC, Cybersecurity, AI, Advanced training, areas of public interest through the DEP train-the-trainer approach
• Making use of the new solutions developed by the HPC, Cybersecurity Competence Centres and AI world class reference sites

EU funding will bring European added value to locally funded hubs and it will trigger local investments
Next steps

- Decision on the budget of the MFF and Digital Europe Programme
- Communication campaign in Member States, hopefully with the help of the NCP’s?
- MS designation of European DIHs: August 2020, Restricted Call September 2020.
The size of the EU budget as GNI percentage (The 1%)

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<tr>
<th>Year</th>
<th>Commitments ceiling in % EU GNI</th>
<th>European Development Fund</th>
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<tbody>
<tr>
<td>Average 1993-1999</td>
<td>1.25%</td>
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<tr>
<td>Average 2000-2006</td>
<td>1.09%</td>
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<tr>
<td>Average 2007-2013</td>
<td>1.12%</td>
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<td>Average 2014-2020 EU-28</td>
<td>1.00%</td>
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<td>Average 2014-2020 EU-27*</td>
<td>1.13%</td>
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<tr>
<td>2021-2027**</td>
<td>1.11%</td>
<td>0.03%</td>
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*2014-2020 estimated commitments (UK expenditure excluded) in % EU27 GNI
** European Development Fund integrated (‘budgetised’)

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*Commitments ceiling in % EU GNI
European Development Fund*