Digitising European Industry initiative and European Digital Innovation Hubs

Matthias Kuom
DG Connect A4: Digital transformation of industrial ecosystems

EU4Digital ICT Innovation 4th networking event | 22 April 2021
European companies are not making the most of all the opportunities digital has to offer.

Highly digitised companies across Europe:

<table>
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<tr>
<th>Countries</th>
<th>Sector</th>
<th>Size</th>
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<tr>
<td>53% of Danish companies</td>
<td>56% of computing companies</td>
<td>20% of SMEs</td>
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<td>8% of Romanian companies</td>
<td>6% of metal products companies</td>
<td>58% of large enterprises</td>
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Digital industrial platforms development with industry, PPP Factories of the Future (now Made in Europe) to implement joint industrial digital strategies across the EU, to tackle grand challenges, involving large industry and SMEs, startups, RTOs, and academia.

Aim: analysis of the role of several sources of EU, national, regional and private financing in scaling-up promising platform initiatives and pilot projects.

DEI stakeholder fora co-organised by DG CONNECT
Digitising European Industry Initiative (April, 2016)

Coordinated action plan with Member States:
Adopted on 7 December 2018

Industry Strategy April 2020
Digital technologies for business operations
(additive manufacturing, Cyber Physical Systems and IoT, robotics and HPC)

Integrating digital technologies into products and services
(Cyber-physical and embedded systems, customized low energy computing, etc.)

Phase 1: Creating a well-functioning ecosystem
Phase 2: Growing the ecosystem and its European dimension
Phase 3: Consolidating collaboration and widening the pan-European network of DIHs
How a DIH works – Example for a successful innovation experiment

CloudSME– Podoactiva

3D Scanner to design customised shoe insoles

2 Spanish SMEs teamed up and got help from a Digital Innovation Hub to design a scanner that processes data on HPC resources via the cloud, with no need for specialised knowledge or software licences.

Consortium

Supply

• INGECON (ES)

End-users

• Base Protection (IT)
• Podoactiva (ES)

Research - DIH

• BIFI (ES)

• This innovative solution also helped an Italian company, Base Protection, which tripled its turnover within 3 years.
• For customers, it provides faster availability and lower cost.

The main DIH collaboration space

DIHNET.EU Community

- Articles & Announcements
- Events
- Matchmaking
- Q&A
- Real-time chat
- Surveys, guidelines & templates

DIH champions (DIH awards)
I4MS Disruption (SME award)

Supporting Digital Innovation Hub Networks across Europe

Join the community
Up to 210 Hubs advising SMEs how to integrate digital innovations into their products, business models and processes and improve digital skills, in cooperation with EEN and clusters.

EDIH rollout

"I want European businesses and our many SMEs to access high quality data and create value for Europeans – including by developing Artificial Intelligence applications."

Thierry Breton, Commissioner for the Internal Market

European Digital Innovation Hubs provide technological expertise and experimentation facilities to enable the digital transformation of the industry and the public sector. Trans-regional collaboration supports shared use of expertise and strengthens Pan-EU value chains.

The plan is to have at least one EDIH per region.

Upgraded DIH help SMEs to become more digital.

Test before invest

Skills and training

Digital Innovation Hubs

Support to find investment

Innovation ecosystem & networking
EDIH means more than “DIH 2.0”

Digital Innovation Hubs in Horizon 2020
• Support to more than 2000 Start-ups, SMEs and mid-caps to test digital innovations

European Digital Innovation Hubs in the Digital Europe programme
• From support to capacity building
• Co-funding from Member States
• From 2000 to…?

We need a well-structured European network
Scope - services

Each EDIH

• will provide services based on a specific focus/expertise

• will make available the relevant experimentation facilities related to its specialisation

• will offer a seamless service with Enterprise Europe Network and Startup Europe

• will act as interface with the European Commission to support the implementation of specific sectorial, SME or eGovernment policies
Specialisms acting as attractor (lighthouse)

(with courtesy of the BOWI project)
Innovative and smart economic transformation through smart specialisation

Specific Objectives

- Enhancing R&I capacities + uptake of advanced technologies
- Digitisation for citizens, companies and governments
- Developing skills for S3, industrial transition and entrepreneurship
- Growth and competitiveness of SMEs start-up/scale-up

Enabling Condition

- Effective EDP
- Monitoring and evaluation
- Responsible body
- Innovation Diffusion
- International cooperation
- Links with R&I systems

Links with R&I systems
Initial Network of European Digital Innovation Hubs

Budget

• Fixed budget per country
• Every EDIH is expected to have a budget between 1-2 M€ per year (DIGITAL grant will cover 50%).
• MS are free to propose more smaller EDIHs or less larger ones.
• Cross-border trans-national hubs, serving different regions from different countries is possible

Timeline

• Call opening: 27 May, deadline for submission: 29 September
• Evaluation (fully remote): October-November
• Sending of letters: December
• Signature of contracts: Beginning of 2022
The fabric for EU-wide collaboration – and beyond

**Digital Innovation Hubs Catalogue**

- Yellow pages of DIHs
- Fact-sheets with profile, contact data, service examples for regional, national, and EU-supported DIHs
- Map-based search tool by technical competences, market sector, services

**More than 600 Digital Innovation Hubs:**
- 1 in Ukraine
- Mention programs like Erasmus+ Capacity building or Interreg

**Widening activates**

BOWI project
- Call for proposals to create long-term collaborations between two regions
- EaP countries among the eligible regions: Armenia, Georgia, Moldova, Ukraine


Some numbers

<table>
<thead>
<tr>
<th>Specialisation</th>
<th>AI</th>
<th>HPC</th>
<th>Cyber-security</th>
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<tbody>
<tr>
<td>27 countries</td>
<td>211</td>
<td>95</td>
<td>137</td>
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</table>

- **27 countries** have preselected their candidate entities (26 Member States + Norway)
- **331 EDIH candidates** pre-selected by the countries

### Other digital technologies

<table>
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<tr>
<th>Automation</th>
<th>Big Data</th>
<th>Blockchain</th>
<th>Cloud</th>
<th>Communication technologies / 5G</th>
<th>IOT</th>
<th>Micro-electronics / Photonics</th>
<th>Advanced materials</th>
<th>Robotics</th>
<th>Virtual Reality</th>
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### Sectors

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<th>Agri-food</th>
<th>Automotive</th>
<th>Construction</th>
<th>Creative industry</th>
<th>Health</th>
<th>Public sector</th>
<th>Life sciences</th>
<th>Logistics</th>
<th>Manufacturing</th>
<th>Maritime</th>
<th>Mobility</th>
<th>Skills</th>
<th>Social care</th>
<th>Sustainability</th>
<th>Tourism</th>
<th>Energy</th>
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Catalogue of candidate EDIHs

- New version of catalogue available
- Profiles can be updated directly by the candidate hubs

### Description of specialisation

#### Technology Areas

<table>
<thead>
<tr>
<th>Photonics</th>
<th>Nanotechnology and micro/nano electronics</th>
<th>Additive manufacturing</th>
<th>CPS and IoT</th>
<th>Communication networks</th>
<th>Robotics</th>
<th>Artificial intelligence</th>
<th>Cyber security</th>
<th>HPC and Cloud computing</th>
<th>Big data, data analytics, data handling</th>
<th>Virtual/augmented reality</th>
<th>Simulation, modelling and digital twins</th>
<th>Gamification</th>
<th>Software systems</th>
<th>Green ICT</th>
<th>Distributed Ledger Technology</th>
<th>Industry 4.0</th>
<th>Marine and aerospace</th>
<th>Aeronautics and aerospace</th>
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#### Application Areas (Sectors)

- Agriculture and food
- Maritime and fishery
- Energy and utilities
- Construction
- Wholesale and retail
- Tourism (incl. restaurants and hospitality)
- Transport and logistics
- Financial service sector
- Public administration
- Education
- Life sciences and healthcare
- Manufacturing consumer products
- Manufacturing basic materials
- Manufacturing machinery and equipment
- Culture and Creative industries
- Science and research
- Defence and security
- Telecommunication and ICT
- Aeronautics and aerospace
Networking - “EU-Local” approach

EDIHs will:

- act as an **access point to the European network** of EDIHs for local organisations
- **actively network with other hubs**, sharing best practices and specialist knowledge
- bring companies into **contact with other companies of their value chain**, and seek synergies with innovators
- broker between **public administrations and companies** providing e-government technologies.
The Local ecosystem and its networks

Synergy potentials:

- Local/regional embedding of the networks
- SME strategy – key focus on digitalisation
- Common commissioner for DG GROW and DG CNECT acting as Team Breton

EDIH
- Technological expertise
- Experimentation facilities
- Enable digital transformation of SMEs and public sector

EEN
- Internationalisation
- Innovation assessment
- Partnerships

Local ecosystem

Clusters
- Specialised expertise, services, resources, suppliers and skills
Benefits of EU-collaborations

- Easy access to **leading edge technologies**, at lower cost
- **New business opportunities** to broaden and reinforce innovation
- Exchange of experiences on **good practices**
- **Synergies complementary** technologies and knowledge
- **Pan-European value chains** for increasing competitiveness of the European industry
Materials available


- European Digital Innovation Hubs in Digital Europe Programme - Draft working document - 25-01-2021
- FAQs
- Practical Handbook on Digital Innovation Hubs as policy instruments to boost digitalisation of SMEs
Series of webinars

- **2 March 2021**: EDIH and collaboration with EEN and clusters
- **18 March 2021**: Overview of already existing tools and services that CSAs of H2020 have developed that EDIHs can use for the development of their own services
- **13 April 2021**: Collaboration between different EDIHs in the network, including trans-national cross-border hubs and corridors
- **27 April 2021**: Co-funding, eligible costs and state aid
- **18 May 2021**: Digital Maturity (Link TBC)

*postponed. A new date will be fixed soon and announced on this page.*
Support from the community

DIHNET

• Stakeholders can find good practices from the ‘DIH of the month’

• materials, webinars, news from DIH related initiatives, list of open calls, etc, published in the community,

• has initiated an informal and open precursor network, which aims to explore how (E)DIHs can collaborate. Currently the precursor network consists of over 60 member organizations.

• In the DIHNET community platform, interested stakeholders can create, lead and moderate a specific space on a topic of interest.

I4MS (ICT Innovation for Manufacturing SMEs)

• success stories of the SMEs having already benefitted from I4MS support

• Working groups, one on upskilling challenges of the industry and another on best practices on digital transformation

• For trends on manufacturing industry: I4MS online community

• Request for more I4MS Contact Points
Questions and remarks
Keep in touch

Matthias Kuom

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