Overview on Digital Strategy with focus on EDIH

Smart Anything Everywhere - Vision, Opportunities and Success Stories

15 October 2020

Addressing the shifted needs

SHAPING EUROPE'S DIGITAL FUTURE

Digital technologies are crucial for the EU to become climate neutral by 2050, the goal set in the European Green Deal.

Energy networks | Precision farming | Mobility and transport | Smart buildings | Green data spaces | The power of data

Today the ICT sector accounts for:

5-9% of electricity use more than 2% of global greenhouse gas emissions (as much as all air traffic).

If unchecked, the ICT footprint could increase to 14% of global emissions by 2040.

Reducing the carbon footprint of the ICT

But at the same time technologies could help:
reduce emission by 7 times more than the amount created by the ICT sector;
reduce global emissions by up to 15%.

Artificial Intelligence, supercomputing and pooled data will allow better analysis and decision-making on climate crisis and the environment. This will lead to better policy making.

SUPPORTING THE GREEN TRANSITION

Investing in a green, digital and resilient Europe

Supporting Member States to recover

- Recovery and Resilience Facility
- Recovery Assistance for Cohesion and the Territories of Europe - REACT-EU
- Reinforced rural development programmes
- Reinforced Just Transition Mechanism

Within European Semester framework

- Supporting reforms and public investments
- Supporting a just transition

Kick-starting the economy and helping private investment

- Solvency Support Instrument
- Strategic Investment Facility
- Strengthened InvestEU programme

- Supporting key sectors and technologies
- Investing in key value chains
- Solvency support for viable companies

Learning the lessons from the crisis

- New Health programme
- Reinforced rescEU
- Reinforced programmes for research, innovation and external action

- Supporting key programmes for future crises
- Supporting global partners

European Commission

Strengthening the ecosystems though the implementation of the SME Strategy

SMEs

SMEs are central to the recovery: in total 99.8% of all enterprises are SMEs and they are the fabric of the **ecosystems.**

| Ecosystems' needs in the recovery phase | Sustainability | Digitalisation | Resilience | Liquidity support |

Green
Digital
Resilient

Solutions offered by the SME Strategy

Capacity-building and support for the twin transition (green/digital):
- EEN advisory services
- EIC innovations
- Digital Innovation Hubs
- Equity financing in areas of special EU policy interests

- Combatting late payment
- Cutting red tape
- Better access to markets
- Rapid alert function for supply chain disruptions

Better access to finance:
- ESCALAR
- InvestEU
- Horizon Funds

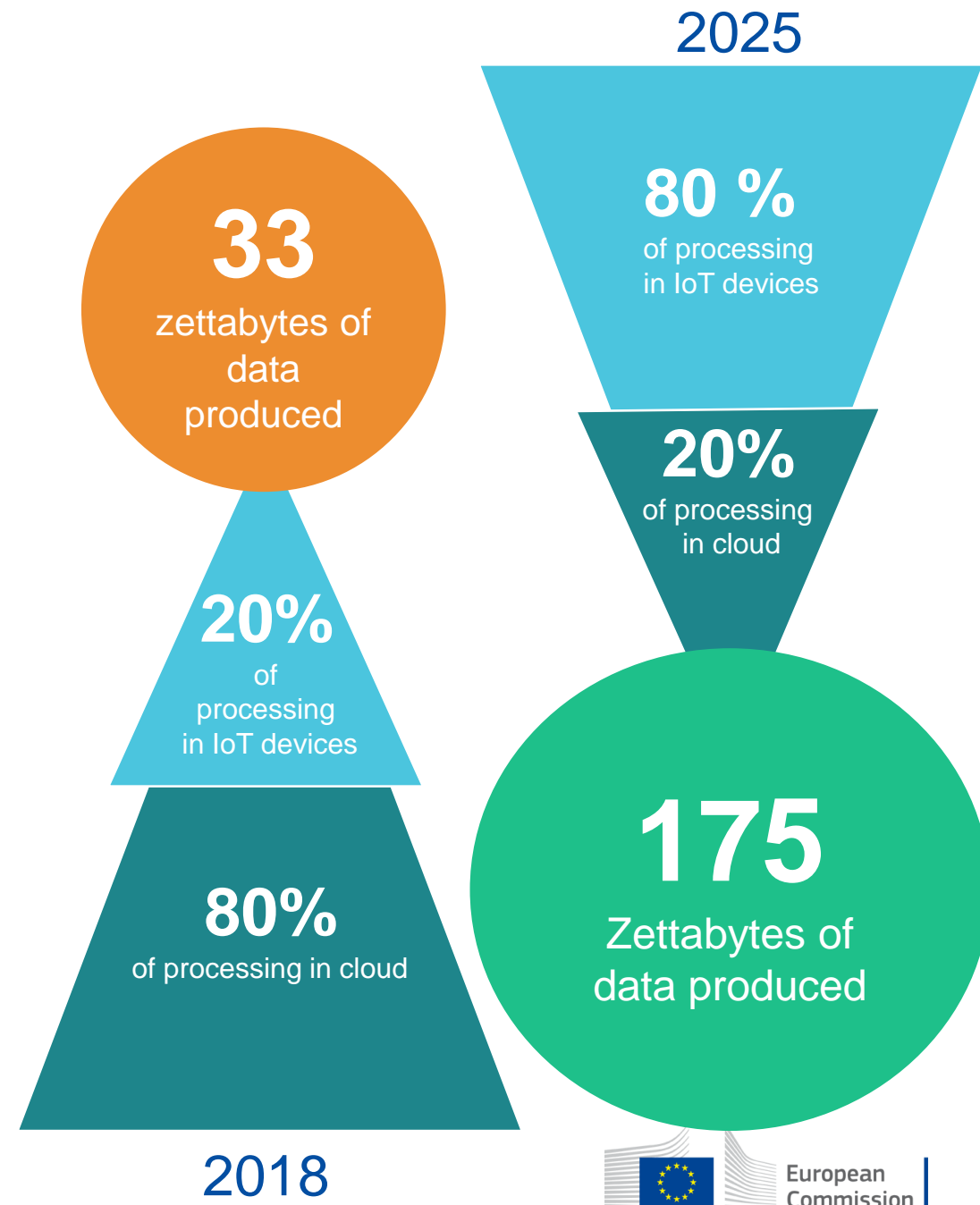**Clusters and EEN to ensure SMEs access to ecosystem**

European Commission

"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

Europe has everything to play for

- Data can transform all sectors of the economy and is crucial for AI

- Personal and non-personal data can be a source of innovation for new products and services

- Data can contribute to tackle societal challenges such as climate change, health, mobility, etc.

- Data can make our lives and work easier and better

33 zettabytes of data produced

20% of processing in IoT devices

80% of processing in cloud

2018

2025

80 % of processing in IoT devices

20% of processing in cloud

175 Zettabytes of data produced

European Commission

Deploying the strategy through 4 Pillars
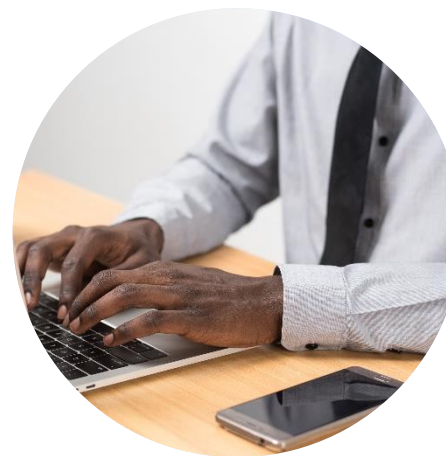
A cross-sectoral governance framework for data access and use

including a legislative framework for the governance of European data spaces and other cross- sectoral measures for data access and use

Enablers

Total investments of € 4-6 billion in a High Impact Project on European data spaces and federated cloud infrastructures

Competences

Empowering individuals, investing in digital skills & data literacy and in dedicated capacity building for SMEs.

Rollout of common European data spaces

in crucial economic sectors and domains of public interest, looking at data governance and practical arrangements.

International Aspects

European Commission

Digital Europe Programme: why?

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
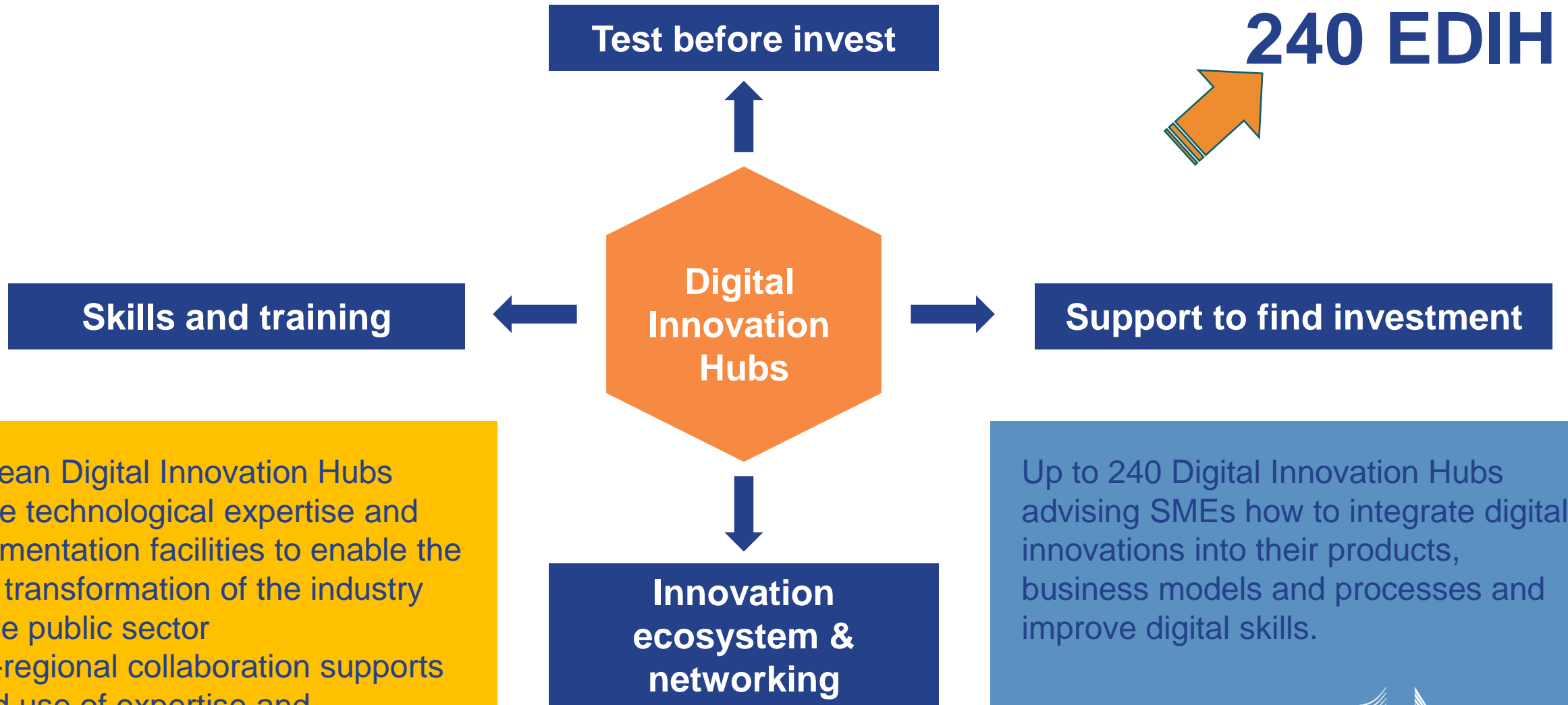
European Commission
European Commission

Revised Orientations

- In full respect of the priorities identified by the Regulation

- Revised to better reflect main Commission priorities:

  - Digital Strategy for Data and AI

  - Green Deal

  - Industrial and SME strategy

  - Recovery plan

- Focus on big tickets which have an impact

- Co-investment with Member States

European Commission

European Digital Innovation Hubs
as part of the SME Strategy

Test before invest

240 EDIH

Skills and training

Digital Innovation Hubs

Support to find investment

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

Innovation ecosystem & networking

Up to 240 Digital Innovation Hubs advising SMEs how to integrate digital innovations into their products, business models and processes and improve digital skills.

European Commission

Reduction in budget

- **Reduction of 17,5% is the most likely option** (after discussions with Council and German Presidency).

- Option 1: Reduce the number of hubs to be paid from DEP linearly over all countries. Fund the gap by using national RRF funds, using the Seal of Excellence. These hubs can have the label "EDIH" as well and would be full members of the network and be equal to the others.

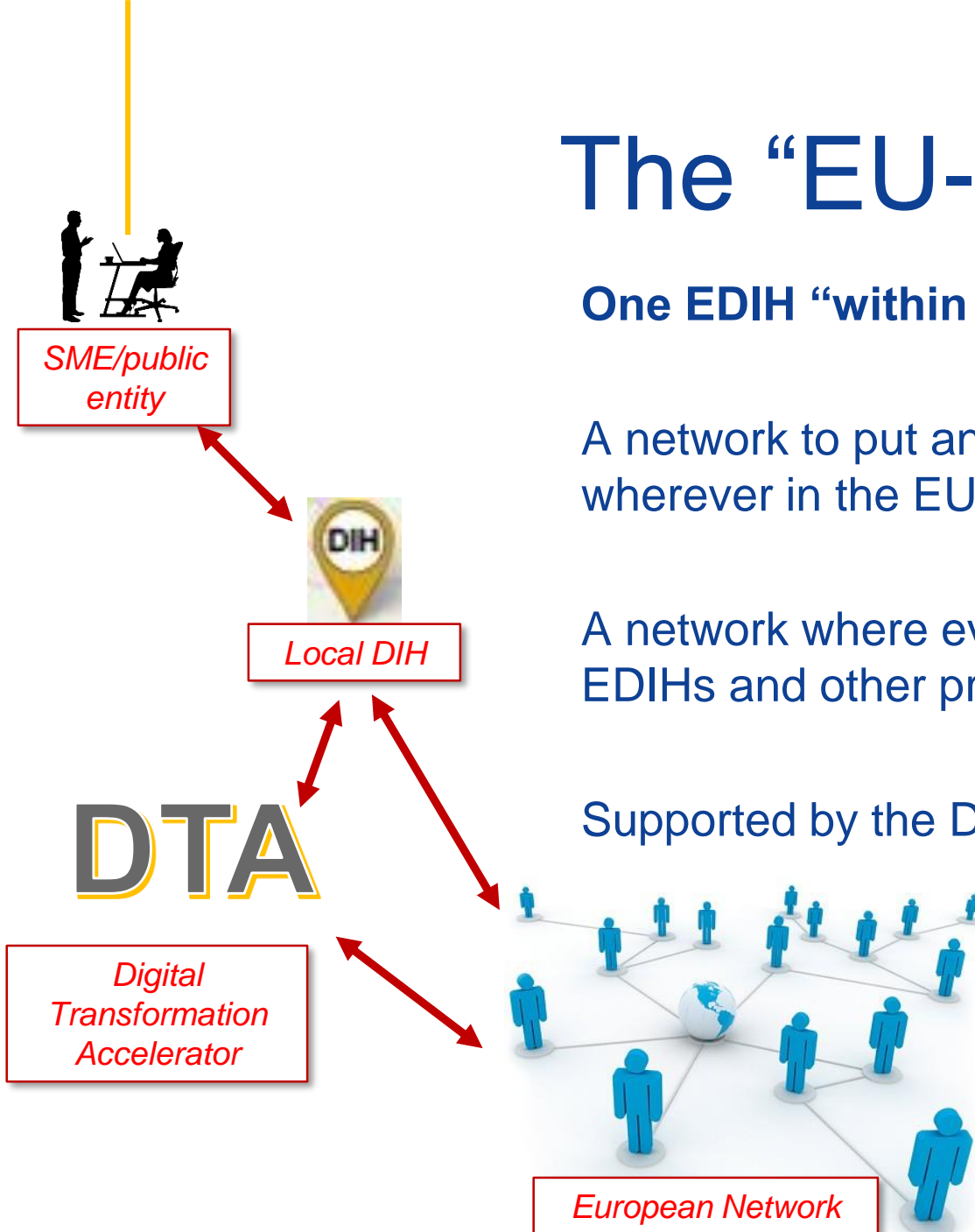- Option 2: Less hubs

- Option 3: Less funding per hub

European Commission

The "EU-local" approach

One EDIH "within working distance" for every business in EU

A network to put any company in contact with the competence they need, wherever in the EU

A network where every EDIH can learn from and collaborate with other EDIHs and other projects supported under Digital Europe Programme

Supported by the Digital Transformation Accelerator

SME/public entity

Local DIH

DTA

Digital Transformation Accelerator

European Network

European Commission

EDIH Focus

DEP	Other Technologies	Application areas	Sector
AI, HPC, or Cybersecurity	Simulation Supply chain integration Blockchain, Advanced Materials, …	Industry 4.0 Circular economy	Manufacturing
	Remote sensing, Photonics, Life-Science Technologies, …	Precision farming	Agri-food
	Robotics, Simulation, …	Exo-skeletons, Automated building	Construction
	Digital solutions for governments Blockchain, …	Services for citizens, once-only principle	Public administration
	…	…	…

Given the importance of Artificial Intelligence and its wide applicability in all sectors, at least one of the hubs selected in each country will be specialised in AI.

European Commission

European added value

Local added value	European added value
Hub will improve competitiveness of local economy by stimulating digital transformation	Hubs will improve their offer by acquiring new knowledge and capacities through their participation in Digital Europe on HPC, AI, Cybersecurity, Advanced digital skills and public sector solutions
Hub has specialisation which is based on local strengths and addresses local needs	Networking of the hubs will stimulate knowledge transfer between hubs and rationalisation of investments because facilities are opened up for use outside the local boundaries. It reduces duplication and optimises investments in infrastructure
Hub is near their customers and they speak the same language	Hubs will learn from other hubs by sharing best practices, and by collaboration of hubs in case of missing expertise/facilities.
	The hub network will be a means to promote excellence developed locally to other regions in Europe; it will open new markets for the companies involved in the innovations

Exporting / Importing EDIH excellence

EDIH capacity building:

- Exchange of experience, good practices

- A more mature DIH helps a less mature

- Learning from specialists in HPC, Cy, AI

- Advanced training, train-the-trainer

- Use new solutions developed by the HPC & Cyber Competence Centres and AI world class reference sites

European Commission

New draft timeline Digital Europe Programme

Adoption of the next MFF	Mid-November
List of candidate EDIHs from Member States	1 December 2020
Adoption of the Digital Europe Programme Regulation	Mid-December
First Workprogramme adopted Expression of interest and restricted call launched	28 January 2021
Deadline for submission	27 April 2021
Signatures of contracts	From October 2021 onwards
Second restricted call launched	Q4 December 2021

These dates are NOT official

European Commission

GEARING UP TOWARDS EUROPEAN DIGITAL INNOVATION HUBS – on-line event

postponed to mid-January 2021

Objectives:

- Explain the role of European Digital Innovation Hubs for Europe's economic recovery

- For regions and Member States: Understand how they can co-finance the hubs and ensure that regional and national needs are satisfied. Member States and Regions may decide to invest together in common EDIHs serving different regions in different countries.

- For individual hubs

  - Understand how they can fulfil the 4 functions of an EDIH.

  - To learn on how to set up an EDIH, practical questions

  - To understand and shape the cooperation models possible between EDIH

  - The role of EDIHs in Digital Europe Programme

- Understand the role of the Digital Transformation Accelerator to animate the network of EDIHs – first of all between EDIHs, but also with other ecosystems

European Commission

Keep in touch

Matthias Kuom

European Commission
Directorate-General for Communication Networks, Content and Technology
Artificial Intelligence & Digital Industry – Technologies & Systems for Digitising Industry Unit

Matthias.Kuom@ec.europa.eu

@DigIndEU

European
Commission

Thank you

European Commission