

## **Digitising European Industry**

**Working Group Digital Innovation Hubs Brussels, 9 December 2016** 



Max Lemke, Head of Unit CNECT A2; Dana Eleftheriadou, GROW F3 **European Commission DG CONNECT and DG GROW** 



### European Commission

## Setting the scene

- Reflections on the role of the group
  - Provide the overview of DIH initiatives across the EU
  - Network MSs and regional DIH initiatives
  - Stimulate national and regional DIH initiatives
  - Advise the EC on how to use EU schemes to support networking
  - Identify best practices:
    - Successful DIHs
    - Successful co-funding mechanisms
    - Successful digital transformation experiments (I4MS, Landkarte 4.0, ...)
  - Not: proposal preparation under H2020
- Update on activities
  - Catalogue of competences: Call for tender and agreement under preparation on link to S3
  - EU DIH programmes
    - Status Work Programme 2016-17
    - Plans for Work Programme 2018-20
- Stakeholder Forum



# Organic growth of Europe's digital innovation infrastructure

- big or small, wherever situated, whatever sector - has access to advanced digital technologies and competences

**Member states and regions:** build-up and strengthening of national and regional structures of digital innovation hubs

- Innovation programme (e.g. German Mittelstand-Digital, Bayern Innovativ, ...)
- Structural funds (e.g. ESIF)
- Funding programmes (e.g. KfW, EFSI Juncker Plan)
- Regional and urban ecosystems for digital transformation

#### **European Commission:** Complementary added-value oriented measures

- Map of competences, best practices, demonstrators,...
- Pan-European network of Digital Innovation Hubs (DIH), other technology centres and regional/urban ecosystems for digital transformation
- Support for cross-border innovation experiments
- Frameworks for pooling of resources (H2020, COSME, ESIF, EFSI, ...)
- Preparatory measures for DIHs in less developed regions

### Financing – Reaching a leveraging factor of 10 through H2020

500 M€ for networks of Innovation Hubs in Horizon 2020
 → 5 B€ regional and national funding, including when possible ESIF, EFSI, ...
 (500M€ in H2020 = 200M€ in WP2016/17 + 300M€ in WP2018-20)



# Digital Innovation Hubs across Europe – status quo

# Variable geometry of the innovation infrastructure in Europe

- Competence Centers and Innovation Hubs
- Sector- and application oriented
- Technology oriented
- User oriented
- Location oriented













#### **Netherlands Field Labs**



#### **Regional Innovation Hubs:**

- Digital Hub Cologne
- Bayern Innovativ

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### Challenges of DIH actions under WP 2018-20

**European Factories** of the Future PPP

- Support EU networks of DIH (envisaged +-300M€)
  - Continuation of schemes such as











- Focus EU ICT H2020 actions on EU-added valued
  - Use EU funds to better network EU, national and regional infrastructures
  - Convergence of EU-schemes under the DEI umbrella
  - Focus EU schemes on highly innovative x-border experiments
  - Root EU supported hubs in national and regional infrastructures
  - Bring industry hubs/labs into the structure
  - Make EU models better sustainable
  - Consider a platform-based approach where appropriate (e.g. FoF I4MS)
- Use EU funds to pool resources across programmes:
  - EU ICT H2020 initiatives to become the linking pin
  - ESIF, EFSI, national, regional
  - Consider making EU funding conditional on other investments





Essen, DE 31 January – 1 February 2017



# Digital Transformation Monitor (DTM): national policy initiatives



- Provide concise information on national policy initiatives of EU countries for the digitalization of industries and enterprises covering:
  - ✓ policy objectives,
  - ✓ budget,
  - ✓ implementation,
- √ drivers,
- √ challenges,
- ✓ lessons learnt, etc.
- Provide policy-makers with hints and priorities for future gaps that are likely to emerge
- Highlight synergies between national policies of EU countries to support the digitalization of industries and enterprises
- Provide information on the set of measures of the "Digitising European Industry initiative" (DEI)
- 1 set of policy reports:









# Focus on investments: Smart Specialisation Platform for Industrial Modernisation

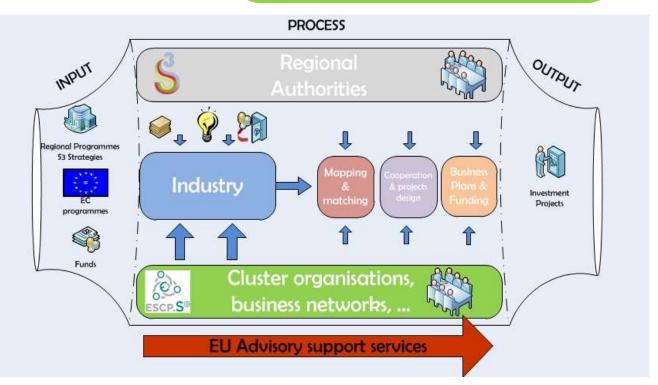
### 14 EoI from Leading Regions

#### **5 Thematic Areas:**

- ✓ Bio-Economy
- ✓ Efficient and Sustainable Manufacturing (ESM)
- √ 3D-printing
- ✓ Components for Marine renewables and offshore energy applications
- ✓ New nano-enabled products

## Potential Thematic Areas:

- ✓ Innovative textiles
- ✓ Industry 4.0
- ✓ Smart tooling
- Circular economy
- ✓ Defence
- ✓ Sustainable chemicals



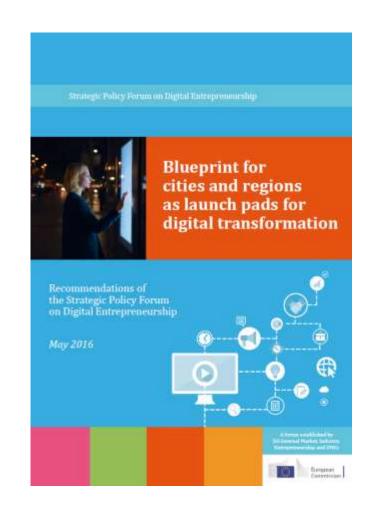
#### **Examples**

- Projects across and between regional value chains
- ✓ Important Projects of Common European Interest
- ✓ Development of new or sharing of existing infrastructures (testing facilities, pilot lines, data centres...)



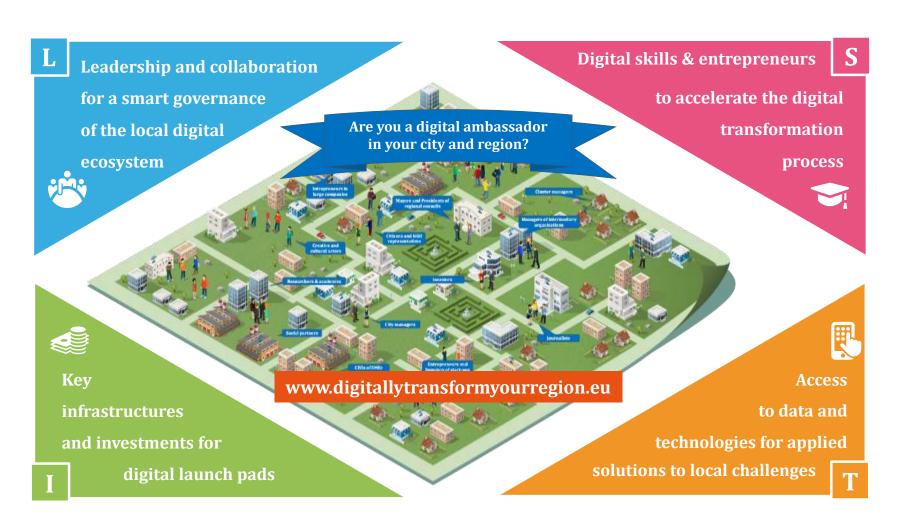
# Blueprint for cities and regions for digital transformation

- ✓ How to create innovative vibrant ecosystems to accelerate the digital transformation of businesses and organisations
- ✓ Regions and cities share four attributes
  which local stakeholders can leverage to
  truly help the modernisation of their
  territories
- ✓ Based on the thorough analysis of qualitative data collected from different city stakeholders acting in different contexts and in territories with uneven levels of digital maturity





## Blueprint for cities and regions: four key attributes





# The game changer: Combination of advanced technologies

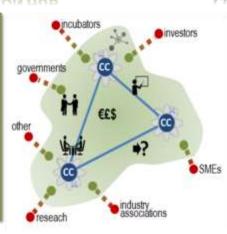
### **Technology/competence centres in Europe**

## Competence Centres are the core of Digital Innovation Hubs

#### DIGITAL INNOVATION HUB

#### Organised to provide services to industry

- Access to competence centres
- Development of innovation ecosystem
- Brokerag
- Access to finance
- Market intelligence
- Training and education
- Incubator/mentoring services



#### COMPETENCE CENTRE

#### Competences in Digital Technologies

- Provide access to infrastructure and technology platforms
- Provide digitisation and application expertise
- Support experimentation in real-life environments
- Support fabrication of new products
- Demonstrate best practices
- Showcase technologies in pilot factories, fab-labs

## KETs technology centres open to SMEs

In 60% of EU countries, SMEs are not likely to find the services they need



The Commission maps existing centres. It encourages Member States and regions to invest in innovation hubs and incentivise companies to embrace technological innovations



## Uptake of Advanced Manufacturing by SMEs

### Actions to facilitate the uptake of advanced manufacturing solutions

EU network of technology centres providing services to SMEs (advanced manufacturing for clean production) (4,9 M€, H2020 INNOSUP-3-2017)



**Advanced manufacturing support centre** helping SMEs to make informed investment decisions
(2,4 M€, COSME, 2017-2020)

- help SMEs assessing the possibility of adopting advanced manufacturing solutions and transform towards a 'factory of the future'
- ✓ set up learning networks of next-generation factories, also to become inspiring examples for other manufacturing companies



### Raise awareness: boost, connect, inspire

## A forward-looking vision

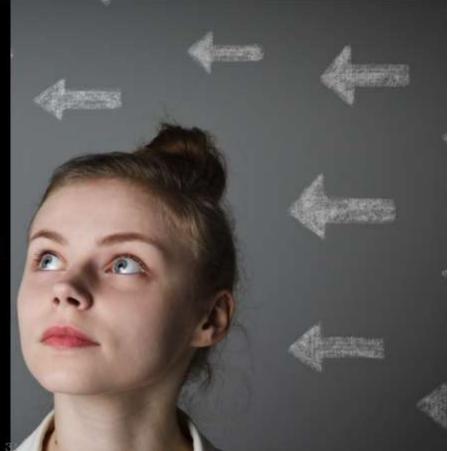


Boosting Technological Transformation

## Watify is

an awareness-raising campaign funded by the European Commission to support the EU efforts to stimulate the modernization of Europe's industry by:

- Fostering European SMEs' digital and technological transformation
- Supporting Europe's regions to translate their smart specialisation strategies in the area of digitisation and KETs into concrete projects.





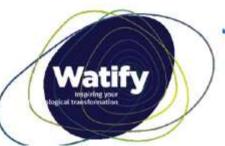
## How?



Boosting Technological Transformation







- will boost and facilitate
  - technological transfer to SMEs and regions and cities through a network of competence centres.
- will connect SMEs and stakeholders by facilitating the sharing of best practices, lessons learnt, ideas for advancement and by encouraging collaboration on projects.
  - will inspire SMEs and local stakeholders to transform and work together on digitisation and KETS projects.

## **THANK YOU**

**Digitising European Industry** 

http://ec.europa.eu/digital-agenda/en/digitising-european-industry

Twitter: #DigitiseEU

**Digital Economy** 

http://ec.europa.eu/growth/sectors/digital-economy\_en