

## Digital Scoreboard 2016 and other information relevant for decisions about Digital Innovation Hubs

### Belgium



#### **Accompanied by the WG1 Report on Digital Innovation Hubs:**

https://ec.europa.eu/futurium/en/content/report-wg1-digital-innovation-hubs-mainstreaming-digital-innovation-across-all-sectors-final



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### Belgium's national strategies for digitising industry

4 different industrial policies: **Digital Belgium** at federal level, **Industrie 4.0** in Flanders region, Digital Wallonia for Wallonia region and beDigital.brussels for Brussels region



#### **Digital Belgium**

- Launched in 2015 by the Belgian Federal Government, to boost the digital economy and expand prospects for growth and jobs.
- Supported by 'Digital Minds for Belgium', a Steering Committee comprising CEOs from digital companies, entrepreneurs, investors and academics.

#### Flemish initiative on Industrie 4.0

- New industry 4.0 policy initiatives are building upon the existing 'Flanders In Action' and 'New Industrial Policy' initiatives to boost digital business and manufacturing concepts in industrial companies (Vision 2050 policy framework)
- Active participation of Flanders Make and imec
- Funding for activities related to Industry 4.0 exceeds 50M EUR per year
- In 2017, 4M EUR will be spent to support the set-up and strengthening of innovation hubs and pilot lines

https://www.vlaanderen.be/nl/publicaties/detail/vision-2050





- The actions for digitising industry are connected to the overall transformation strategy (Plan Marshall 4.0) and coordinated through a **Digital Agency**
- Funding: expected to mobilise 2.9bn EUR in public investmens between 2015 and 2019

invested in 2017 under the Nexttech Plan to support digital start-ups

#### beDigital.brussels

- Regional Policy Statement 2014-19: Brussels to become a Digital Capital
- Regional Innovation Plan 2016-**2020**: Brussels to become the capital of innovation
- A total budget of 7,86M EUR is







## Made Different: Enabling factories of the future

## MADE DIFFERENT

#### **MADE DIFFERENT – Factories of the future**

- An **industry-led, bottom-up initiative** that provides transformation and assessment services to manufacturing companies all over Belgium
- Is supported by the Government **of Flanders** and coordinated by **Sirris/Agoria**, with partners from the other major sectorial organisations
- It has been recognised as good practice for supporting transformation of companies by the **Flanders and Walloon regions** and inspired recently a new **COSME support action** on services for **industrial SME transformation**.

http://www.madedifferent.be/

#### **Made Different – Digital Wallonia**

Budget: app. 350-400K EUR.

<u> </u>	
Policy Lever(s)	Mainly funded by private actors; Strong focus on the development of new technologies although upskilling of workforce is also considered; Bottom-up implementation.
Funding Model	No dedicated funding scheme; several public grants available; participating companies need to cover a share of participation costs.
Target audience(s)	Belgian manufacturing companies from all economic sectors, in particular SMEs.
Oncepts & Focus Areas	Made Different defines the concept of 'Factory of the Future' based on seven key transformations including both technology and social innovation dimensions.
Key drivers	High level of mobilisation from industry partners; Factory of the Future Awards as a very attractive marketing tool to businesses
Wey barriers	Relative low-level of funding dedicated to manufacturing SMEs.
Implementation strategy	Initiated and designed by private actors
Results achieved	265 companies currently involved in the programme, out of which 65% are SMEs.  16 companies have been awarded the label 'Factory of the Future'.

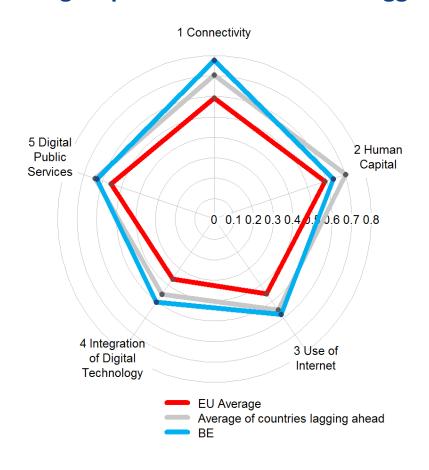
For more information please refer to the individual report per Member State on the national and regional initiatives on Digitising European Industry available on <a href="https://ec.europa.eu/futurium/en/implementing-digitising-european-">https://ec.europa.eu/futurium/en/implementing-digitising-european-</a> industry-actions/national-initiatives-digitising-industry



### Belgium's performance in the DESI 2016

Belgium ranks 5 among EU countries.

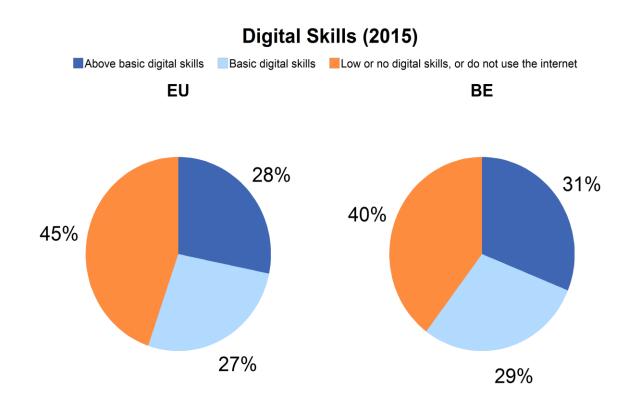
It is part of the group of countries that are lagging ahead.





### Human Capital: Digital Skills

In Belgium 29% of citizens have basic digital skills (27% in the EU) and 31% have above basic digital skills (28% in the EU).



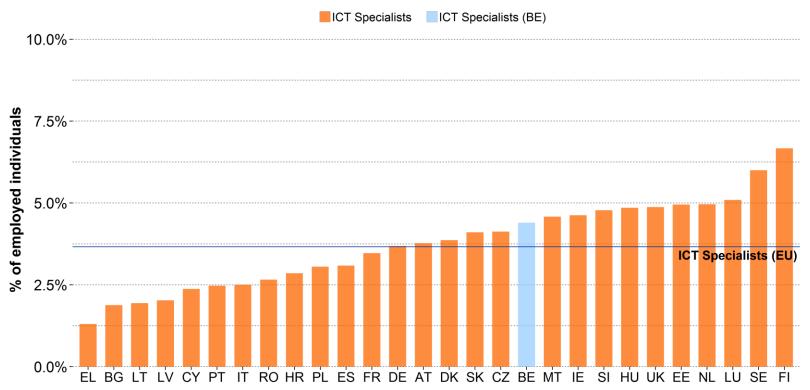
% of individuals



### Human Capital: ICT Specialists in the workforce

### In Belgium ICT Specialists account for 4.4% of the workforce (3.7% in the EU).

### ICT Specialists in the workforce (2014)

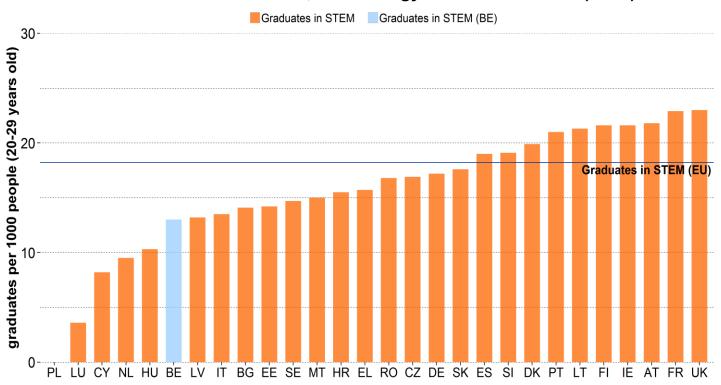




# Human Capital: Graduates in STEM (Science, Technology and Mathematics)

## Belgium has 13 graduates in STEM per each 1000 people aged 20-29 years old (18 in the EU).

#### **Graduates in Science, Technology and Mathematics (2013)**

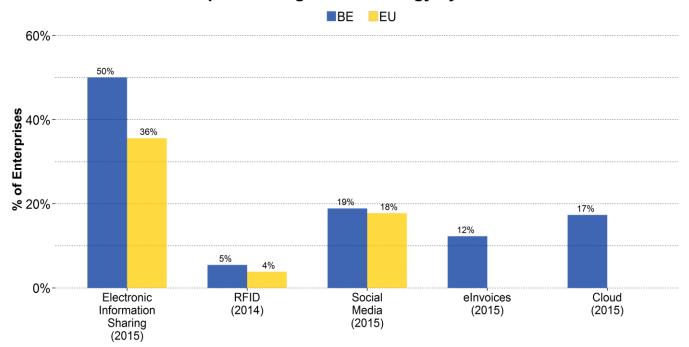




### Integration of Digital Technology: **Business digitization**

Businesses in Belgium are adopting different digital technologies to enhance productivity, such as sharing internal information electronically or using RFID, elnvoicing, Social Media and Cloud.

#### Adoption of Digital Technology by Businesses

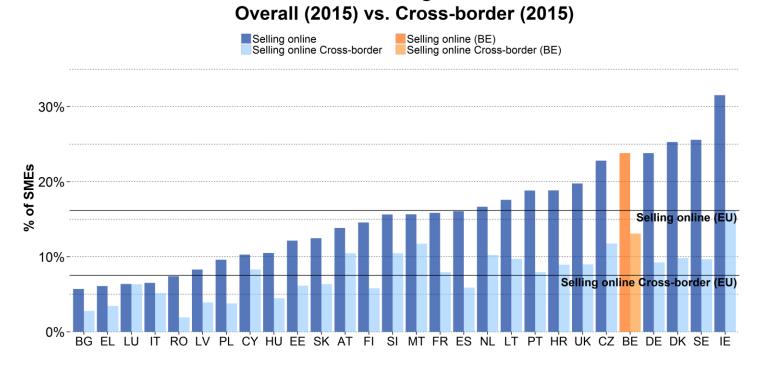




## Integration of Digital Technology: SMEs selling online

In Belgium 24% of SMEs sell online (16% in the EU). 13% of Belgian SMEs sell online to other EU countries (7.5% in the EU).

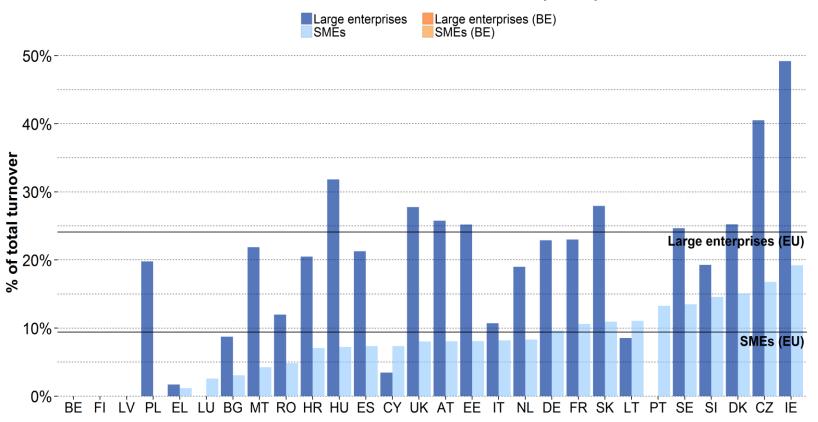






## Integration of Digital Technology: SME Turnover from eCommerce

#### **Turnover from eCommerce (2015)**

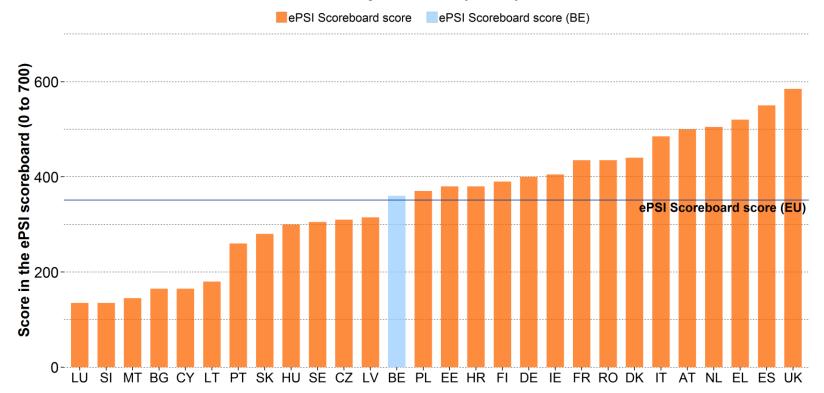




### Digital Public Services: Open Data

Belgium scores 360 out of 700 in the European Public Sector Information scoreboard, against an overall score of 351 out of 700 for the European Union.

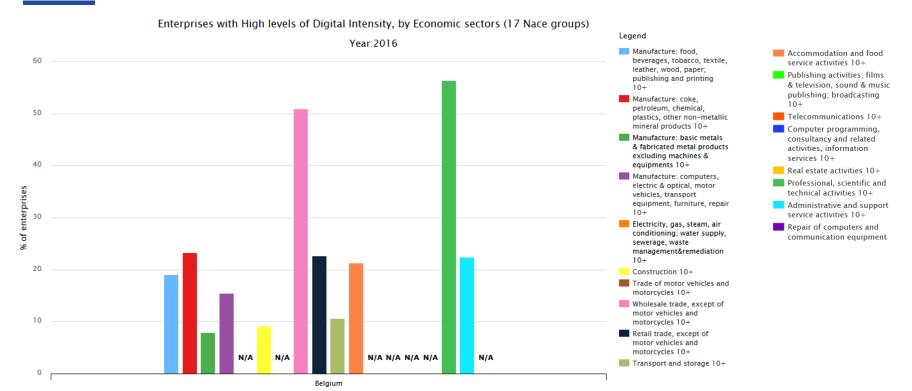
#### **Open Data (2015)**



Source: The Public Sector Information Scoreboard is a 'crowdsourced' tool to measure the status of Open Data and PSI re-use throughout the EU.



## Enterprises with high level of Digital Intensity by economic sectors in Belgium



#### Sectors where less than 30% of the companies have a high level of digital intensity

- Manufacture: food, beverages, tobacco, textile, leather, wood, paper; publishing and printing 10+
- Manufacture: coke, petroleum, chemical, plastics, other non-metallic mineral products 10+
- Manufacture: basic metals & fabricated metal products excluding machines & equipment 10+
- Manufacture: computers, electric & optical, motor vehicles, transport equipment, furniture, repair 10+
- Electricity, gas, steam, air conditioning; water supply, sewerage, waste management & remediation
- Construction 10+
- Retail trade, except of motor vehicles and motorcycles 10+
- Transport and storage 10+
- Administrative and support service activities 10+
- Accommodation and food service activities 10+
- Real estate activities 10+
- Trade of motor vehicles and motorcycles 10+
- · Repair of computers and communication equipment

#### Sectors where more than 30% of the companies have a high level of digital intensity:

- Wholesale trade, except of motor vehicles and motorcycles 10+
- Professional, scientific and technical activities 10+

http://digital-agenda-data.eu/charts/analyse-one-indicator-and-compare-breakdowns#chart={%22indicator-

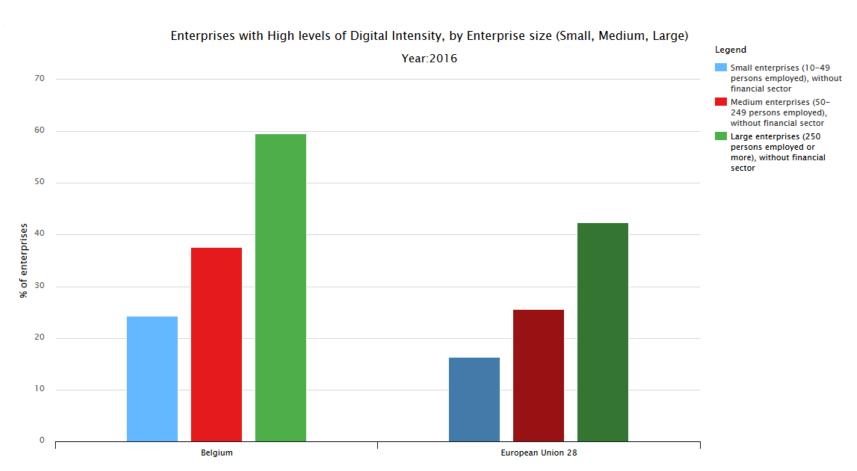
group%22:%22ebusiness%22,%22indicator%22:%22e di hivhi%22,%22bre akdown-group%22:%22econsector%22.%22unit-

measure%22:%22pc\_ent%22,%22time-period%22:%222016%22,%22ref-area%22:[%22BE%22]}

13



## Enterprises with high levels of digital intensity, by Enterprise size



http://digital-agenda-data.eu/charts/analyse-one-indicator-and-compare-breakdowns#chart={"indicator-group":"ebusiness","indicator":"e\_di\_hivhi","breakdown-group":"byENTsize\_s\_m\_l","unit-measure":"pc\_ent","time-period":"2016","ref-area":["EU28","BE"]}



# Digital Innovation Hubs Catalogue The Belgium case



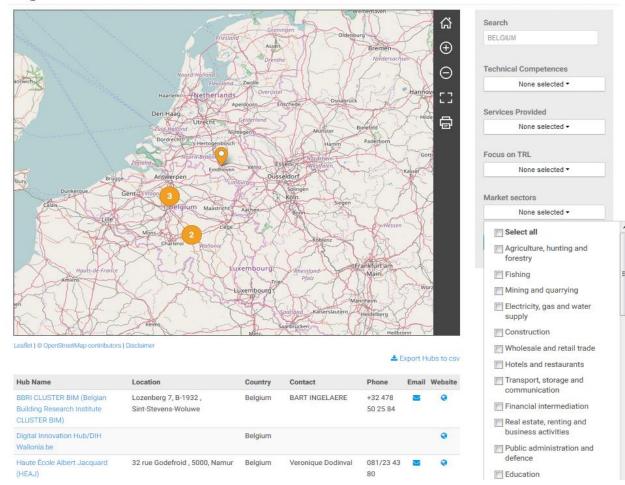
### The version available presents:

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

http://s3platform.jrc.ec.europa. eu/digital-innovation-hubs-tool

JRC-B3-DIH@ec.europa.eu

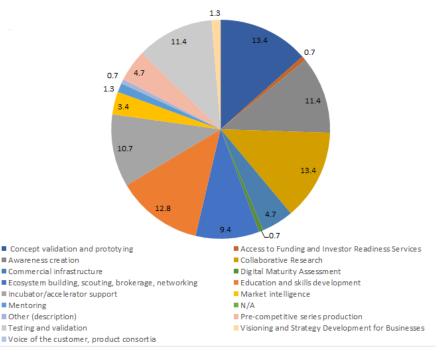
#### Digital Innovation Hubs



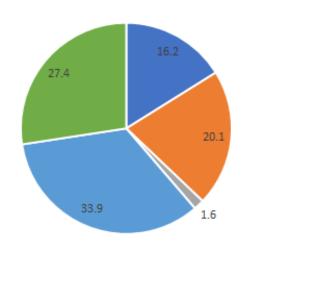


## Services provided and types of customers supported by DIHs in Belgium - Analysis





### Types of customers supported (%)



- Large companies, multi-nationals
- = N/A
- SMEs (<250 employees)</li>

- MidCaps (between €2-10 billion turnover)
- Research organisations
- Start-up companies



# Competence centers/DIHs funded by EU projects in Belgium in H2020

Project Topic Code	Project Acronym	Project Duration	Project End Date	Participant Legal Name	Participant Role	Participant Short Name	Core Legal Entity Type	Research Organisation ?
FoF-09-2015	Fortissimo 2	36	31/10/2018	NOESIS SOLUTIONS NV	PARTICIPANT	NOESIS	PRIVATE	No
FOF-12-2017	MIDIH	36	30/09/2020	EIT DIGITAL	COORDINATOR	EIT DIGITAL	PRIVATE	No
FOF-12-2017	AMable	48	31/08/2021	EUROPEAN FEDERATION FOR WELDING JOINING AND CUTTING	PARTICIPANT	EWF	PRIVATE	No
FOF-12-2017	AMable	48	31/08/2021	SIRRIS HET COLLECTIEF CENTRUM VAN DE TECHNOLOGISCHE INDUSTRIE	PARTICIPANT	SIRRIS	PRIVATE	Yes
ICT-04-2017	TETRAMAX	48	31/08/2021	UNIVERSITEIT GENT	PARTICIPANT	UGent	PUBLIC	Yes
ICT-04-2017	SmartEEs	36	13/09/2020	EUROPEAN BUSINESS AND INNOVATION CENTRE NETWORK AISBL	PARTICIPANT	EBN	PRIVATE	No
ICT-04-2017	SmartEEs	36	13/09/2020	INTERUNIVERSITAIR MICRO- ELECTRONICA CENTRUM	PARTICIPANT	IMEC	PRIVATE	Yes
ICT-04-2017	DIATOMIC	36	31/08/2020	INTRASOFT INTERNATIONAL SA	COORDINATOR	INTRA	PRIVATE	No
ICT-25-2015	EUROPRACTICE 2016	24	30/06/2018	INTERUNIVERSITAIR MICRO- ELECTRONICA CENTRUM	COORDINATOR	IMEC	PRIVATE	Yes

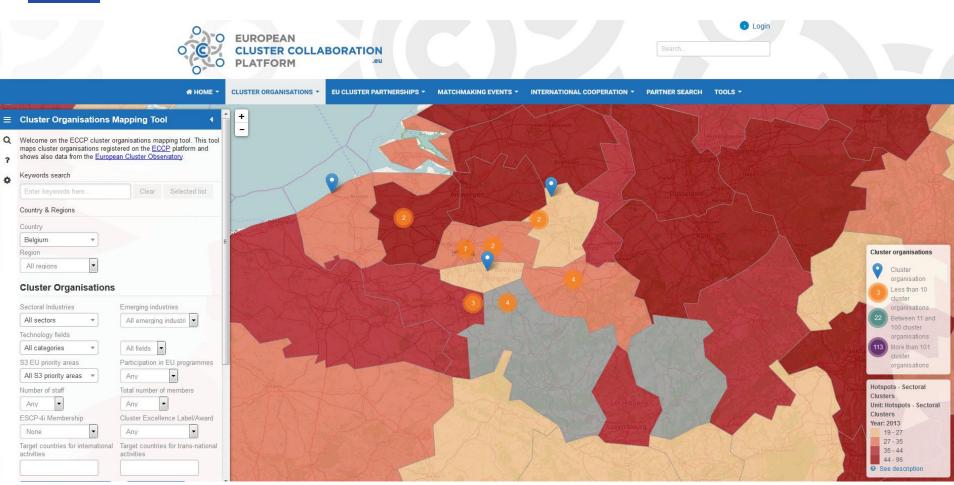


# Competence centers/DIHs funded by EU projects in Belgium in FP7

Project Number	Project Acronym	Project Duration	Project Start Date	Project End Date	Project Number of Participants	Participant Short Name	Participant Legal Name	Participant Role	Organisation Type
609029	FORTISSIMO	42	01-Jul-2013	31-Dec-2016	123	NOESIS	NOESIS SOLUTIONS NV	Participant	PRC
609046	LASHARE	48	01-Sep-2013	31-Aug-2017	69	MULTI	MULTITEL ASBL	Participant	REC
609046	LASHARE	48	01-Sep-2013	31-Aug-2017	69	LASEA	LASER ENGINEERING APPLICATIONS SA	Participant	PRC
609046	LASHARE	48	01-Sep-2013	31-Aug-2017	69	EWF	EUROPEAN FEDERATION FOR WELDING JOINING AND CUTTING	Participant	ОТН
609100	CloudFlow	46	01-Jul-2013	30-Apr-2017	47	NUMECA	NUMERICAL MECHANICS APPLICATIONS INTERNATIONAL SA	Participant	PRC
609100	CloudFlow	46	01-Jul-2013	30-Apr-2017	47	NOESIS	NOESIS SOLUTIONS NV	Participant	PRC
609100	CloudFlow	46	01-Jul-2013	30-Apr-2017	47	BORIT	BORIT NV	Participant	PRC
609100	CloudFlow	46	01-Jul-2013	30-Apr-2017	47	CAPVIDIA	CAPVIDIA	Participant	PRC
609306	INTEFIX	36	01-Jul-2013	30-Jun-2016	33	CECIMO	CECIMO - THE EUROPEAN COMMITTEE FOR THE CO-OPERATION OF THE MACHINE TOOLS	Participant	ОТН
609355	APPOLO	48	01-Sep-2013	31-Aug-2017	36	LASERSPEC	LASERSPEC	Participant	PRC
609355	APPOLO	48	01-Sep-2013	31-Aug-2017	36	NST-BE	NEXT SCAN TECHNOLOGY BVBA	Participant	PRC
609355	APPOLO	48	01-Sep-2013	31-Aug-2017	36	IT4IP	IT4IP	Participant	PRC
288881	COLAE	36	01-Sep-2011	31-Aug-2014	19	UGent	UNIVERSITEIT GENT	Participant	HES
619205	ACTPHAST	48	01-Nov-2013	31-Oct-2017	24	IMEC	INTERUNIVERSITAIR MICRO- ELECTRONICACENTRUM IMEC VZW	Participant	REC
619205	ACTPHAST	48	01-Nov-2013	31-Oct-2017	24	VUB	VRIJE UNIVERSITEIT BRUSSEL	Coordinator	HES
632860	I3H	30	01-Jul-2014	31-Dec-2016	9	IMEC	INTERUNIVERSITAIR MICRO- ELECTRONICACENTRUM	Participant	REC
632860	I3H	30	01-Jul-2014	31-Dec-2016	9	IMINDS	IMINDS	Participant	REC
632860	I3H	30	01-Jul-2014	31-Dec-2016	9	EIT ICT LABS IVZW	EIT DIGITAL	Coordinator	ОТН
601116	ECHORD Plus Plus	60	01-Oct-2013	30-Sep-2018	107	KU Leuven	KATHOLIEKE UNIVERSITEIT LEUVEN	Participant	HES
601116	ECHORD Plus Plus	60	01-Oct-2013	30-Sep-2018	107	FRS	FLEXIBLE ROBOTIC SOLUTIONS	Participant	PRC



### Clusters in Belgium

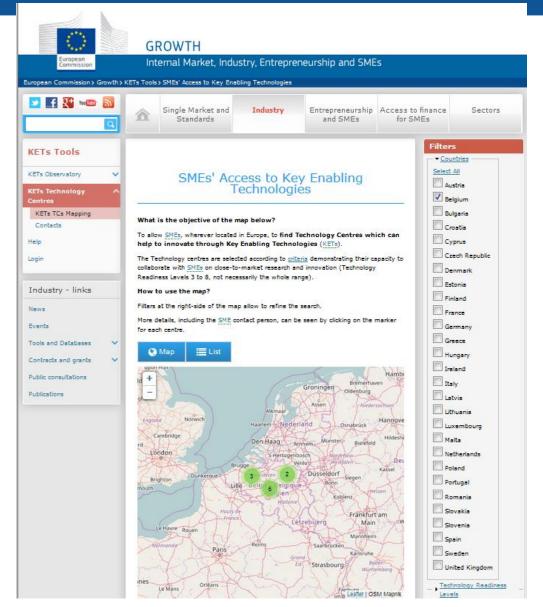


https://www.clustercollaboration.eu/print/cluster-list?combine=&country\_code=be

Please see WG1 report



### KETs in Belgium



https://ec.europa.eu/growth/tools-databases/kets-tools/kets-tc/map?field\_postal\_address\_country%5B0%5D=BE



### eit Digital Co-Location Centres

**Co-Location Centres** are meeting places, melting pots, hubs, where planned, as well as ad hoc, meetings and events take place.

They bring together talents, ideas, technologies and investments that turn the Co-Location Centres into vibrant hot spots where students, researchers, engineers and business developers cross-pollinate to succeed in the market.

https://masterschool.eitdigital.eu/about-us/co-location-centres/

No eit Digital Co-Location Centre in Belgium



## Pilot Lines in Nanotechnology and Advanced Materials

Project Number	Project Acronym	Project Title	Project Start Date	Project End Date	Participant Legal Name	Participant Short Name	Sectors	Pilot line
646155	INSPIRED	INdustrial Scale Production of Innovative nanomateRials for printEd Devices	01/01/2015	31/12/2018	NANOTECHNOLOGY INDUSTRIES ASSOCIATION	NIA AISBL		
646159	BASMATI	printing	01/01/2015	31/12/2017	BELIFE	BEL		
646159	BASMATI	printing	01/01/2015	31/12/2017	JSR MICRO NV	JSR		
646159	BASMATI	printing	01/01/2015	31/12/2017	PRAYON S.A	PRAYON		
646159	BASMATI	printing	01/01/2015	31/12/2017	UMICORE	UMI		
646296	Hi-Response	Innovative High Resolution Electro-Static printing of Multifunctional Materials.	01/03/2015	31/08/2018	INTERUNIVERSITAIR MICRO-ELECTRONICA CENTRUM	IIMEC		
646307	PLATFORM	Open access pilot plants for sustainable industrial scale nanocomposites manufacturing based on buckypapers, doped veils and prepregs	01/02/2015	31/01/2018	NANOCYL SA	NANOCYL SA		
685909	SKHINCAPS	SKin Healthcare by Innovative NanoCAPsuleS	01/10/2015	30/09/2019	DEVAN CHEMICALS NV	DEVB		
685909	SKHINCAPS	SKin Healthcare by Innovative NanoCAPsuleS	01/10/2015	30/09/2019	PRO-ACTIVE	PRO		
685952	NANOTUN3D	Development of the complete workflow for producing and using a novel nanomodified Ti-based alloy for additive manufacturing in special applications.	01/10/2015	31/03/2019	VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V.	VITO	The AM industryThe manufacturing activities included in the supply chain of the aero- space sectors - Powder- metallurgy industry.	ESH risks
686116	OptiNanoPro	Processing and control of novel nanomaterials in packaging, automotive and solar panel processing lines	01/10/2015	30/09/2018	ORGANIC WASTE SYSTEMS NV	OWS NV		
686135	PROCETS	PROtective composite Coatings via Electrodeposition and Thermal Spraying	01/01/2016	30/06/2019	FALEX TRIBOLOGY NV	Falex		
686135	PROCETS	PROtective composite Coatings via Electrodeposition and Thermal Spraying	01/01/2016	30/06/2019	TENNECO AUTOMOTIVE EUROPE BVBA	TENNECO		



# Planned investments, allocated resources, in Belgium, in relation to European Regional Development Funds in categories relevant for Digital Innovation Hubs

