

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

Hungary



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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for Digital Innovation Hubs

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Hungary's national strategy for digitising industry



Hungarian Platform IPAR 4.0 (Industry 4.0)

- Launched in **2016** under the leadership of the Institute for Computer Science and Control (SZTAKI), the Hungarian Academy of Sciences with the full support and commitment of the **Government of Hungary**, and specifically that of the **Ministry of National Economy**.
- Primary focus is on the automotive sector.
- 7 strong working groups: Strategic planning; Employment, education and training; Manufacturing and logistics; ICT technologies (safety, reference architectures, standards); Industry 4.0 cyber-physical pilot systems; Innovation and business model and legal framework

https://www.i40platform.hu

Funding

- Part of the wider EPIC CoE project, IPAR 4.0 is financed by the same financial sources.
- Key financial instrument: Horizon2020 with more than **10.8 million EUR** (appr. HUF 3.26 billion)
- Contributions by the NRDI Office (3.6 million EUR) and GINOP

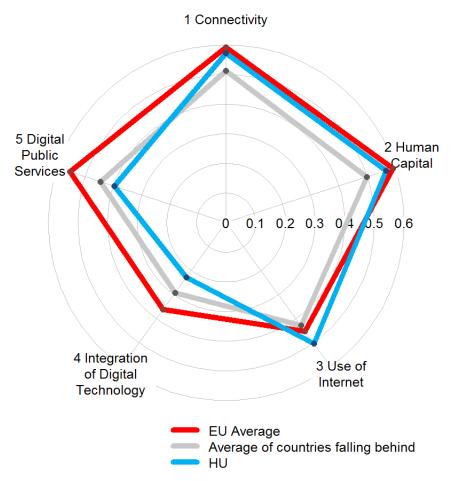
For more information please refer to the individual report per Member State on the national and regional initiatives on Digitising European Industry available on https://ec.europa.eu/futurium/en/implementing-digitising-european-industry-actions/national-initiatives-digitising-industry



Hungary's performance in the DESI 2016

Hungary ranks 20 among EU countries.

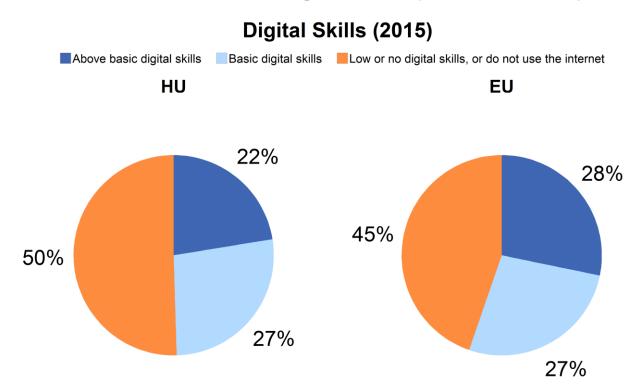
It is part of the group of countries that are falling behind.





Human Capital: Digital Skills

In Hungary 27% of citizens have basic digital skills (27% in the EU) and 22% have above basic digital skills (28% in the EU).



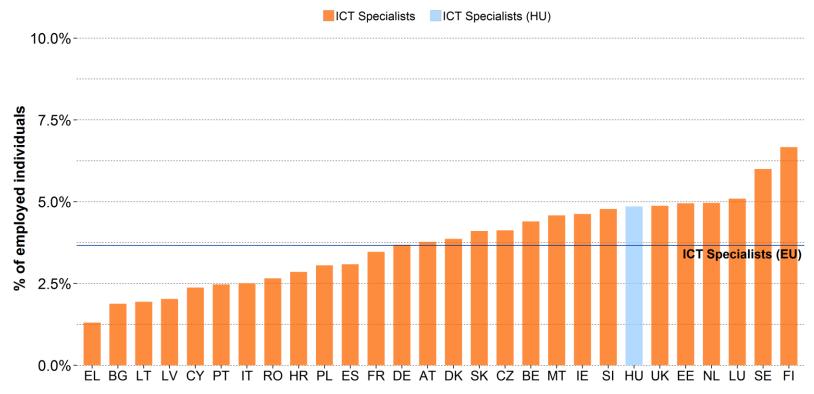
% of individuals



Human Capital: ICT Specialists in the workforce

In Hungary ICT Specialists account for 4.9% of the workforce (3.7% in the EU).

ICT Specialists in the workforce (2014)

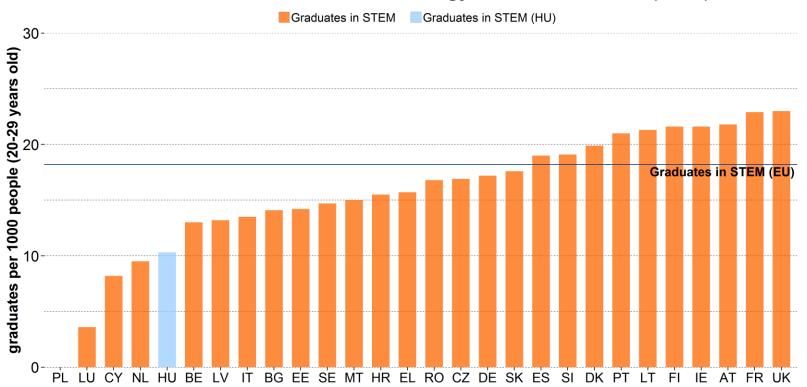




Human Capital: Graduates in STEM (Science, Technology and Mathematics)

Hungary has 10 graduates in STEM per each 1000 people aged 20-29 years old (18 in the EU).

Graduates in Science, Technology and Mathematics (2013)

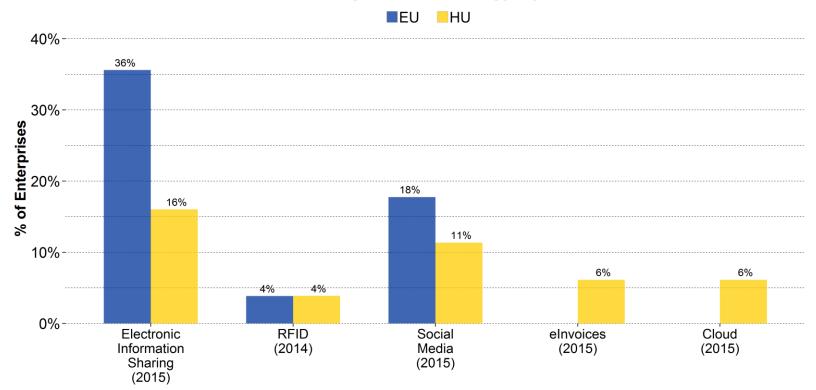




Integration of Digital Technology: **Business digitization**

Businesses in Hungary 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



Digital Scoreboard 2016

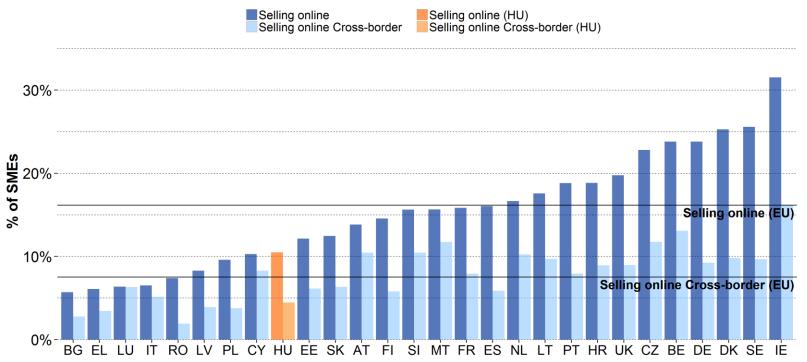


Integration of Digital Technology: SMEs selling online

In Hungary 10% of SMEs sell online (16% in the EU).

4.5% of Hungarian SMEs sell online to other EU countries (7.5% in the EU).



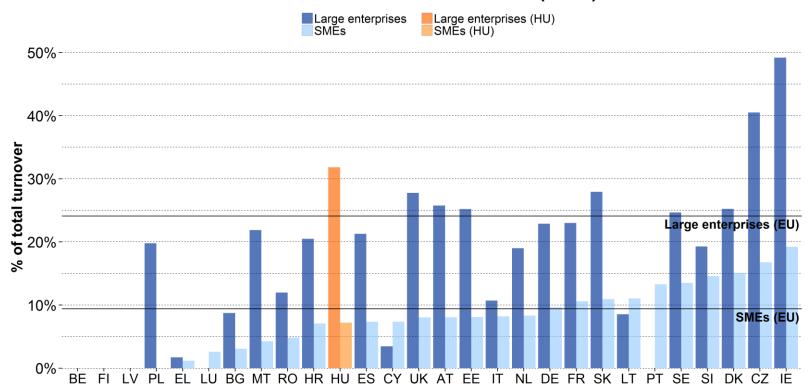




Integration of Digital Technology: SME Turnover from eCommerce

SMEs in Hungary obtain on average 7.2% of their turnover from eCommerce (9.4% in the EU). Large enterprises derive on average 32% of their turnover from eCommerce (24% in the EU).

Turnover from eCommerce (2015)

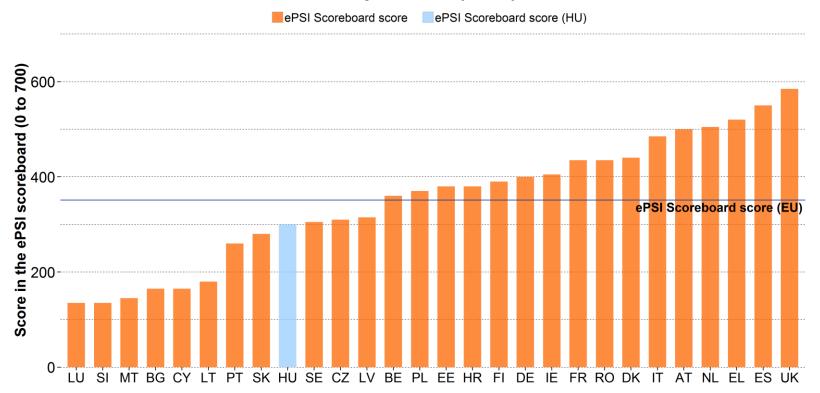




Digital Public Services: Open Data

Hungary scores 300 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)



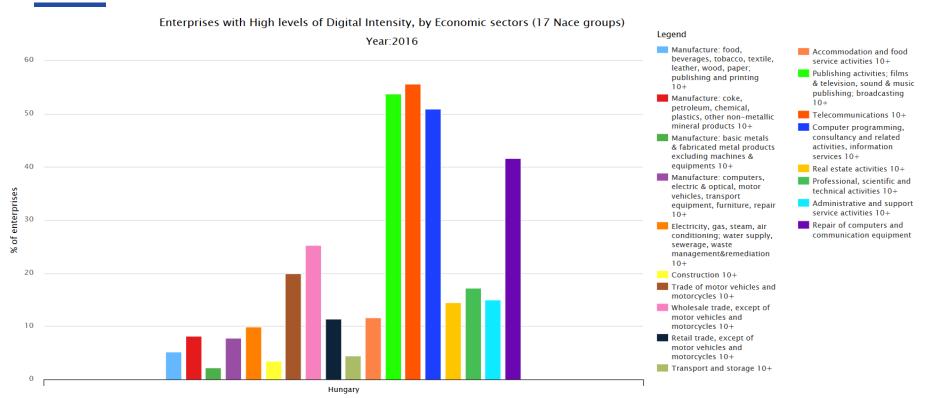
Source: The Public Sector Information Scoreboard is a 'crowdsourced' tool to measure the status of Open Data and PSI re-use throughout the EU. 11

https://ec.europa.eu/digital-single-market/en/scoreboard/hungary

Digital Scoreboard 2016



Enterprises with high level of Digital Intensity by economic sectors in Hungary



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+
- Accommodation and food service activities 10+
- Real estate activities 10+
- Trade of motor vehicles and motorcycles 10+
- Administrative and support service activities 10+
- Wholesale trade, except of motor vehicles and motorcycles 10+
 - Professional, scientific and technical activities 10+

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

- Publishing activities; films & television, sound & music publishing; broadcasting 10+
- Telecommunications 10+
- Computer programming, consultancy and related activities, information services
- Repair of computers and communication equipment

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

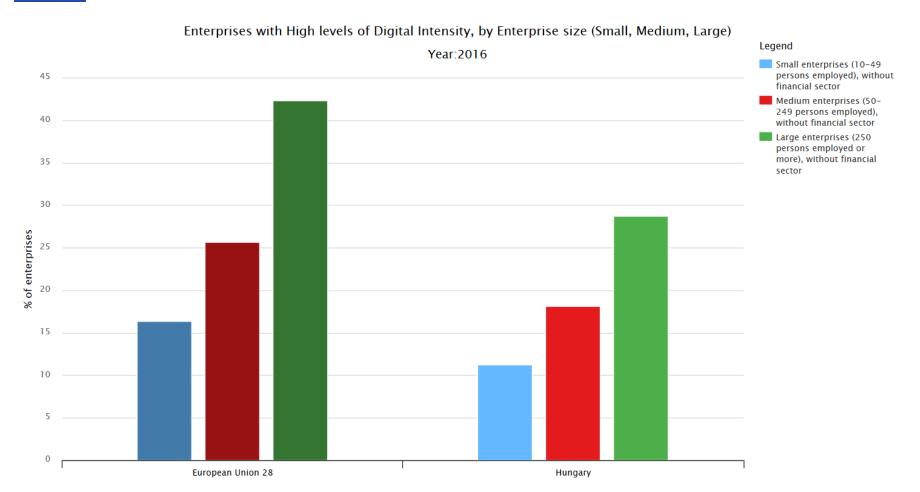
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measure%22:%22pc_ent%22,%22time-period%22:%222016%22,%22ref-

area%22:[%22HU%22]}



Enterprises with high levels of digital intensity, by Enterprise size



http://digital-agenda-data.eu/charts/analyse-one-indicator-and-compare-breakdowns#chart={%22indicator-group%22:%22ebusiness%22,%22indicator%22:%22e_di_hivhi%22,%22breakdown-group%22:%22byENTsize_s_m_l%22,%22unit-measure%22:%22pc_ent%22,%22time-period%22:%222016%22,%22ref-area%22:[%22EU28%22,%22HU%22]}



Digital Innovation Hubs Catalogue The Hungary case

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Hungary Tamás

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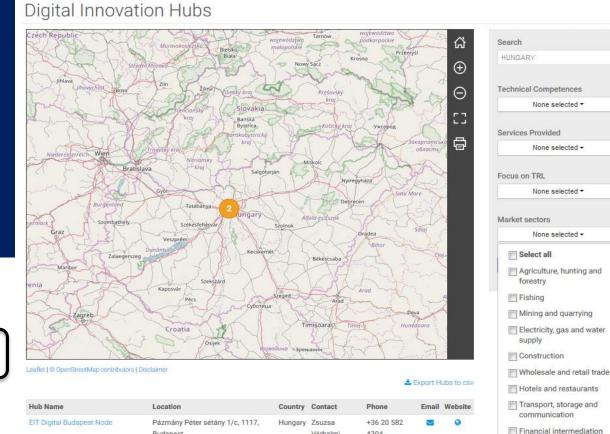


The version available presents:

- 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



Kende u. 13-17, 1111, Budapest

None selected *

None selected .

None selected ▼

None selected -

forestry

communication

Real estate, renting and

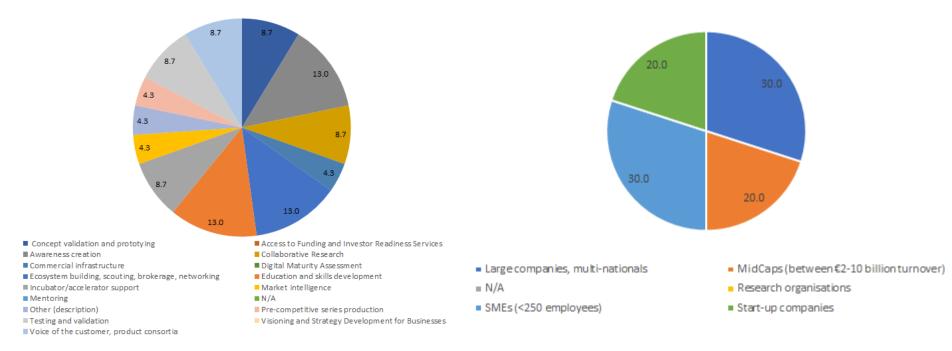
business activities Public administration and



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









Competence centers/DIHs funded by EU projects in Hungary 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?
ICT-01-2014	EuroCPS	36	31/01/2018	BUDAPESTI MUSZAKI ES GAZDASAGTUDOMANYI EGYETEM	PARTICIPANT	BME	PUBLIC	Yes
ICT-04-2017	TETRAMAX	48	31/08/2021	BUDAPESTI MUSZAKI ES GAZDASAGTUDOMANYI EGYETEM	PARTICIPANT	BME	PUBLIC	Yes
ICT-04-2017	Smart4Europe	24	31/08/2019	BUDAPESTI MUSZAKI ES GAZDASAGTUDOMANYI EGYETEM	PARTICIPANT	BME	PUBLIC	Yes
ICT-04-2017	FED4SAE	36	31/08/2020	BUDAPESTI MUSZAKI ES GAZDASAGTUDOMANYI EGYETEM	PARTICIPANT	BME	PUBLIC	Yes
FOF-12-2017	L4MS	42	31/10/2018	PANNON GAZDASAGI HALOZAT EGYESULET	PARTICIPANT	PBN	PRIVATE	No
FOF-12-2017	CloudiFacturing	42		Bakony Elektronika Kft.	PARTICIPANT	BE	PRIVATE	No
FOF-12-2017	CloudiFacturing	42		INNOMINE GROUP KFT	PARTICIPANT	INNOMINE	PRIVATE	No
FOF-12-2017	CloudiFacturing	42		DSS Consulting Informatikai és Tanácsadó Kft.	PARTICIPANT	DSS	PRIVATE	N/A
FOF-12-2017	CloudiFacturing	42		MAGYAR TUDOMANYOS AKADEMIA SZAMITASTECHNIKAI ES AUTOMATIZALASI KUTATOINTEZET	PARTICIPANT	SZTAKI	PUBLIC	Yes

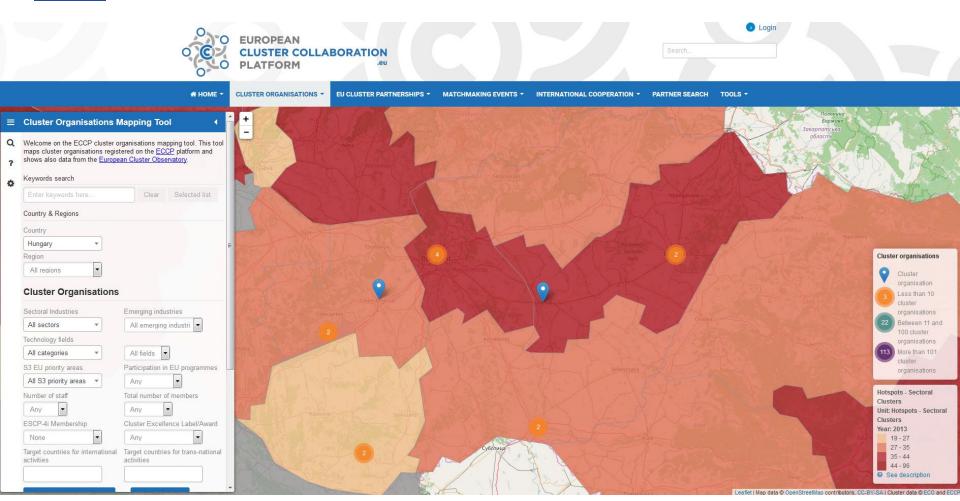


Competence centers/DIHs funded by EU projects in Hungary in FP7

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
608886	CloudSME	33	01-Jul-2013	31-Mar-2016	29	MTA SZTAKI	MAGYAR TUDOMANYOS AKADEMIA SZAMITASTECHNIKAI ES AUTOMATIZALASI KUTATOINTEZET	Participant	REC
632860	I3H	30	01-Jul-2014	31-Dec-2016	9	EOTVOS LORAND UNIVERSITY	EOTVOS LORAND TUDOMANYEGYETEM	Participant	HES



Clusters in Hungary

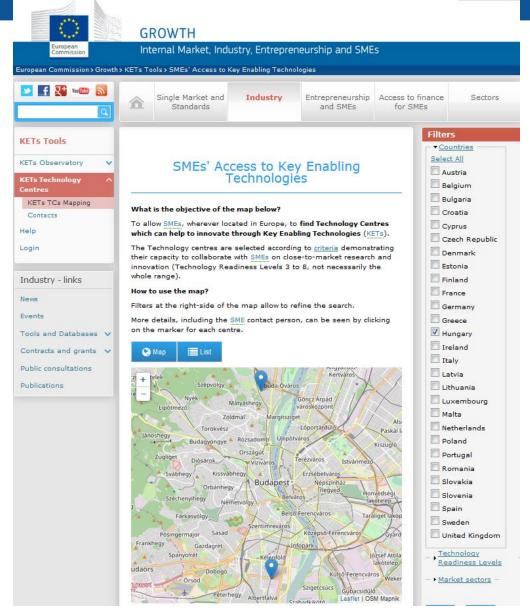


https://www.clustercollaboration.eu/print/cluster-list?combine=&country_code=hu

Please see WG1 report



KETs in Hungary

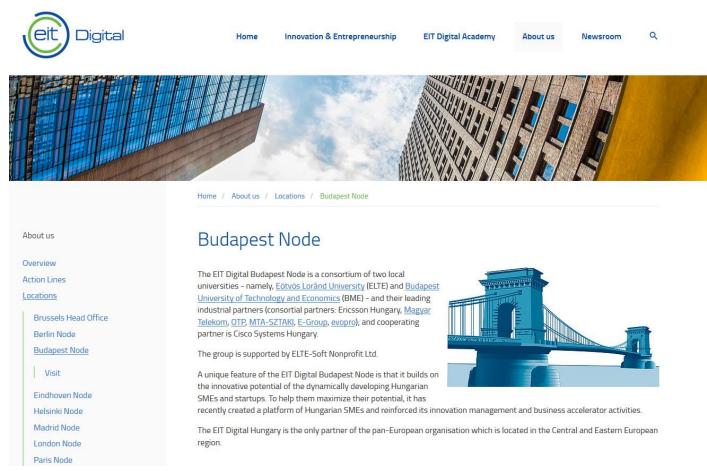


https://ec.europa.eu/growth/tools-databases/kets-tools/kets-tc/map?field_postal_address_country[]=HU



eit Digital Co-Location Centres

eit Digital Co-Location Centre in Budapest



https://www.eitdigital.eu/about-us/locations/budapest-node/

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



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
686116	OptiNanoPro	Processing and control of novel nanomaterials in packaging, automotive and solar panel processing lines	01/10/2015	30/09/2018	LASER CONSULT MUSZAKI- TUDOMANYOS ES GAZDASAGI TANACSADO KORLATOLT FELELOSSEGU TARSASAG	LC Innoconsult		
686116	OptiNanoPro	Processing and control of novel nanomaterials in packaging, automotive and solar panel processing lines	01/10/2015	30/09/2018	PEMU MUANYAGIPARI ZARTKORUEN MUKODORESZVENYTA RSASAG	PEMU	Packaging, Automotive, Photovoltaics	for validation and demonstration work during the project



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



