



European
Commission

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

Bulgaria



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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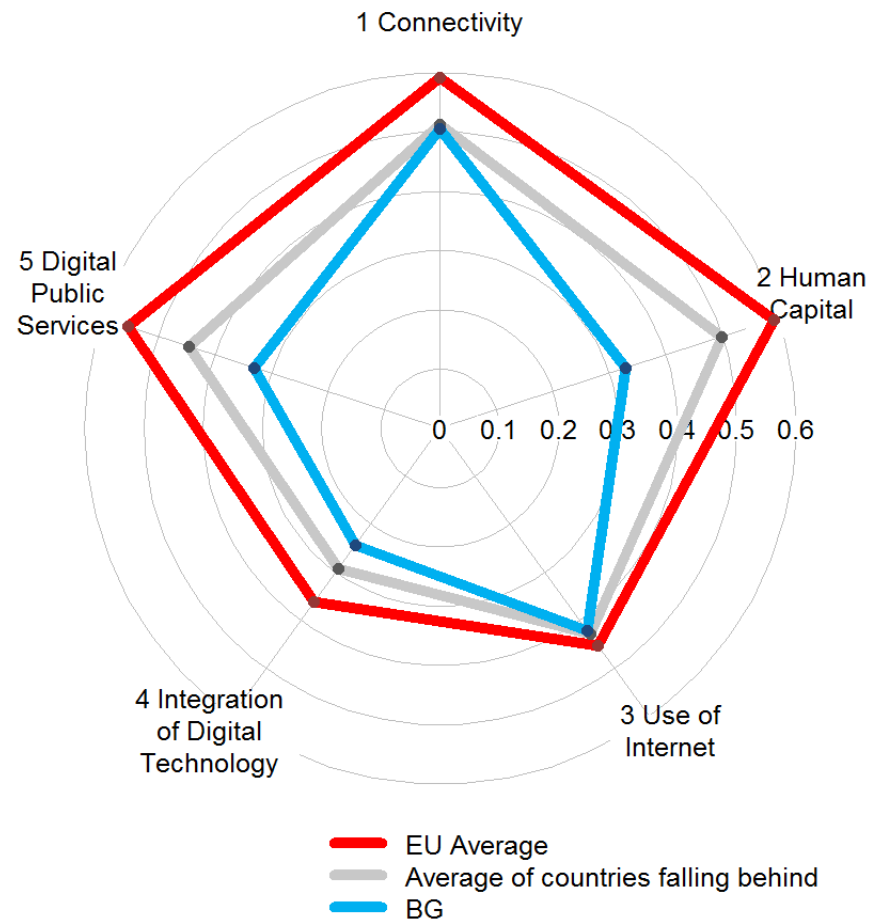
Bulgaria's national policy initiative on digitising industry



Bulgaria has a national policy initiative on digitising industry under preparation

- Expected to be launched in 2017, the initiative is supported by the Ministry of Economy, together with the Ministry of Education and Science, Ministry of Transport, Information Technology and Communication, with the participation of research institutions, companies, universities, professional organizations and NGOs.
- The initiative brings together industrial, academic and public stakeholders for implementation of Industry 4.0 in Bulgaria.
- Funding: information NA

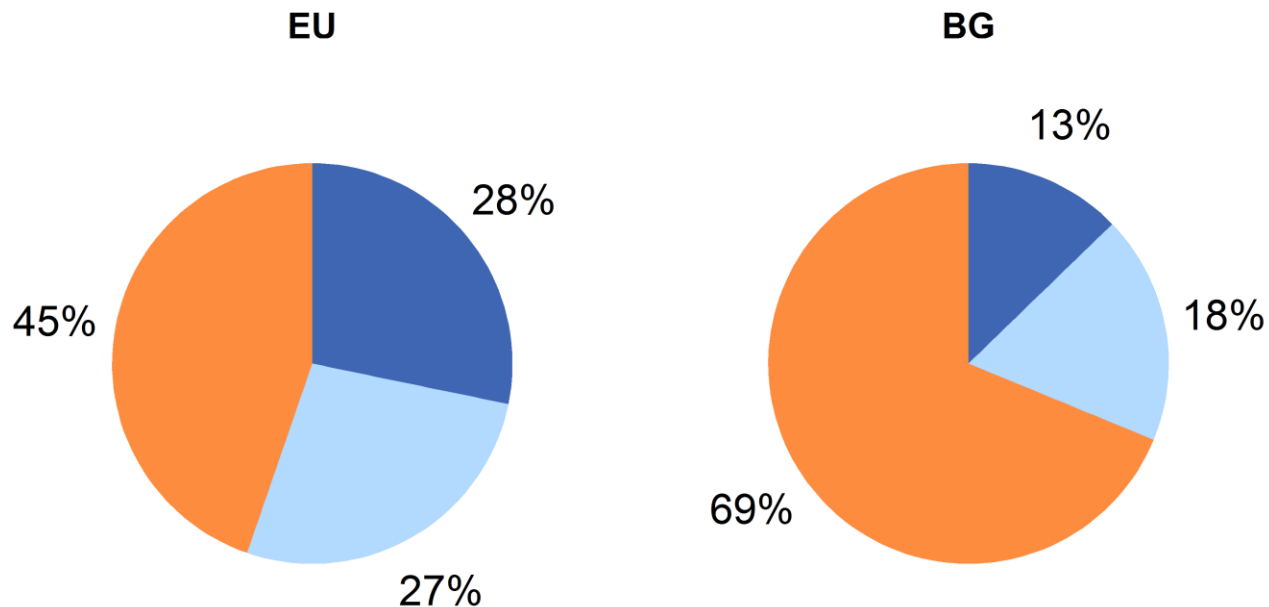
**Bulgaria ranks 27 among EU countries.
It is part of the group of countries that are falling behind.**



In Bulgaria 18% of citizens have basic digital skills (27% in the EU) and 13% have above basic digital skills (28% in the EU).

Digital Skills (2015)

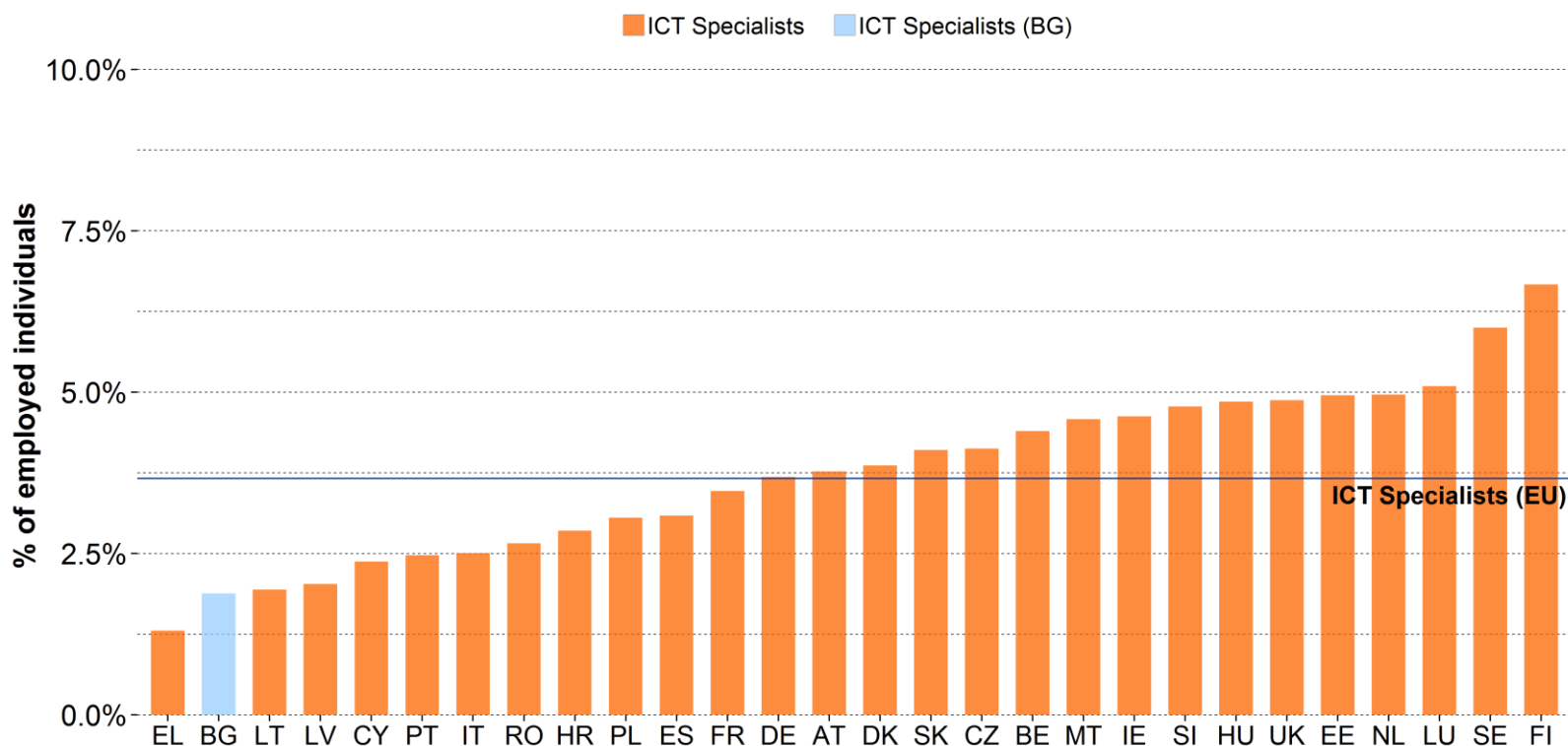
■ Above basic digital skills ■ Basic digital skills ■ Low or no digital skills, or do not use the internet



% of individuals

In Bulgaria ICT Specialists account for 1.9% of the workforce (3.7% in the EU).

ICT Specialists in the workforce (2014)

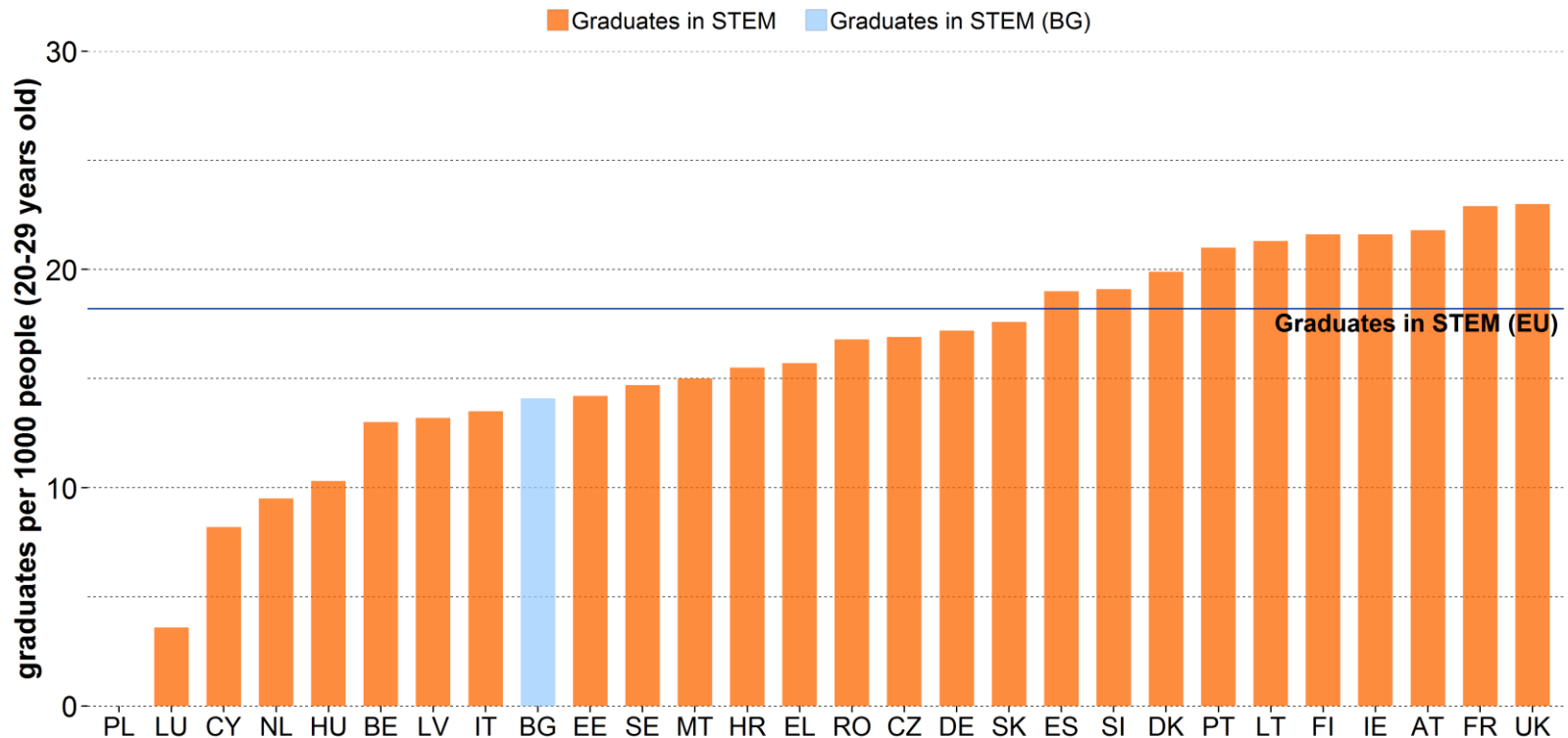


Human Capital: Graduates in STEM (Science, Technology and Mathematics)

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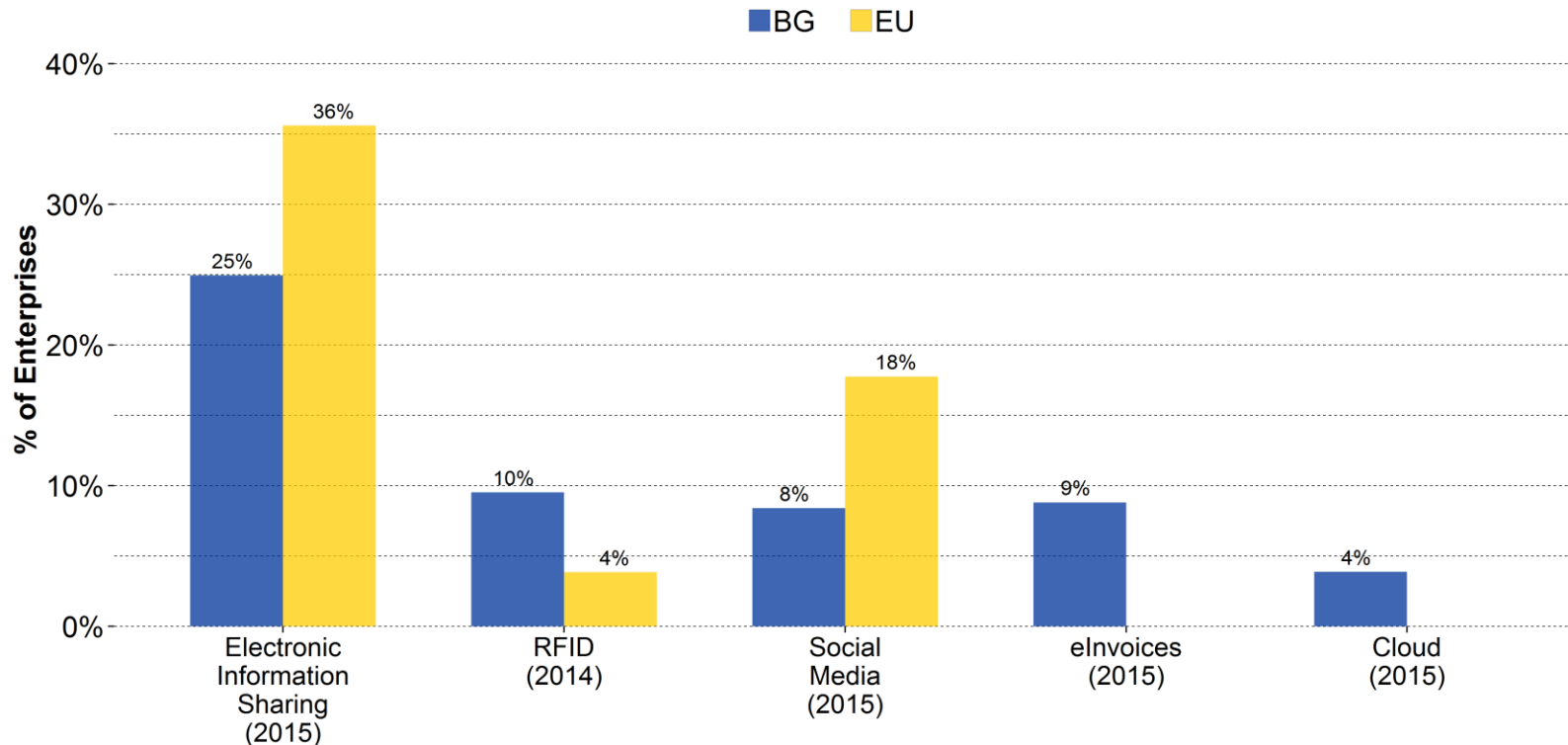
Bulgaria has 14 graduates in STEM per each 1000 people aged 20-29 years old (18 in the EU).

Graduates in Science, Technology and Mathematics (2013)



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

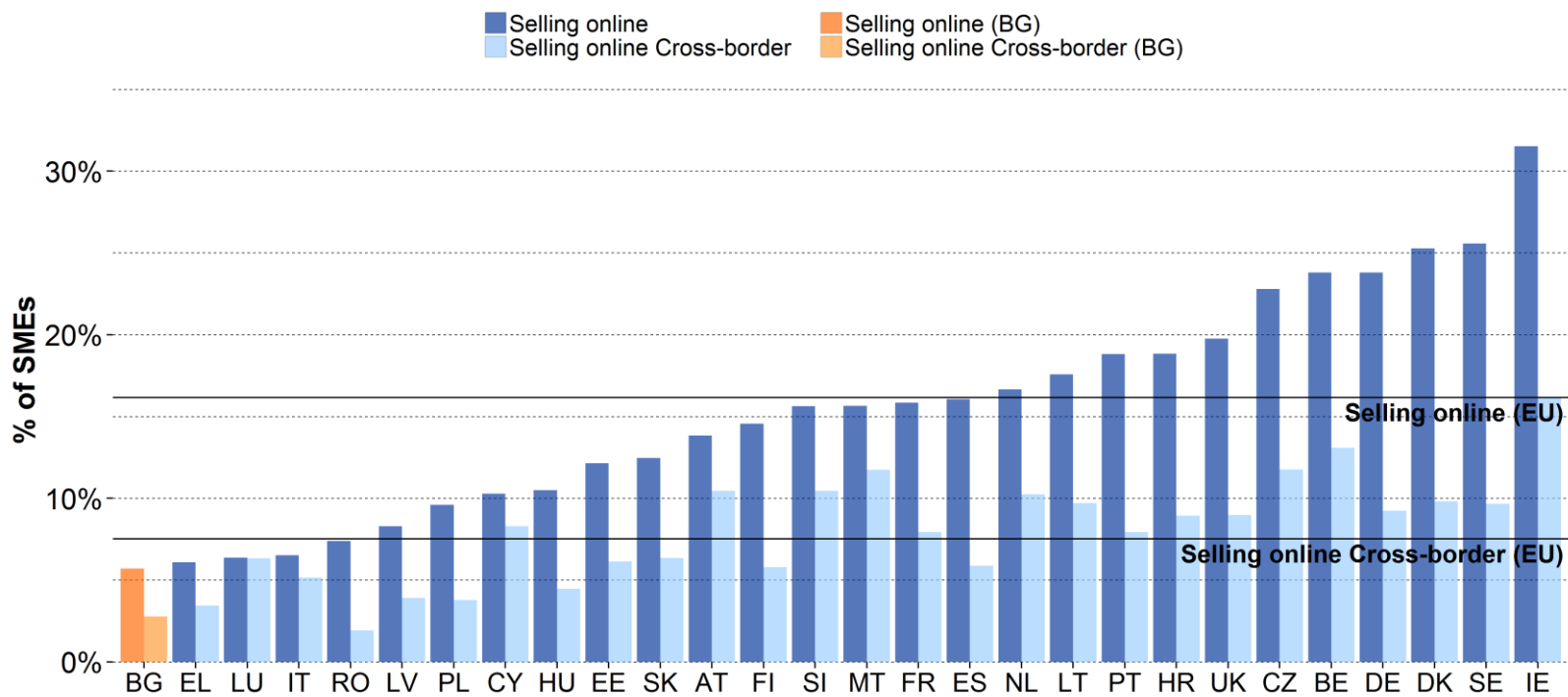
Adoption of Digital Technology by Businesses



In Bulgaria 5.7% of SMEs sell online (16% in the EU).

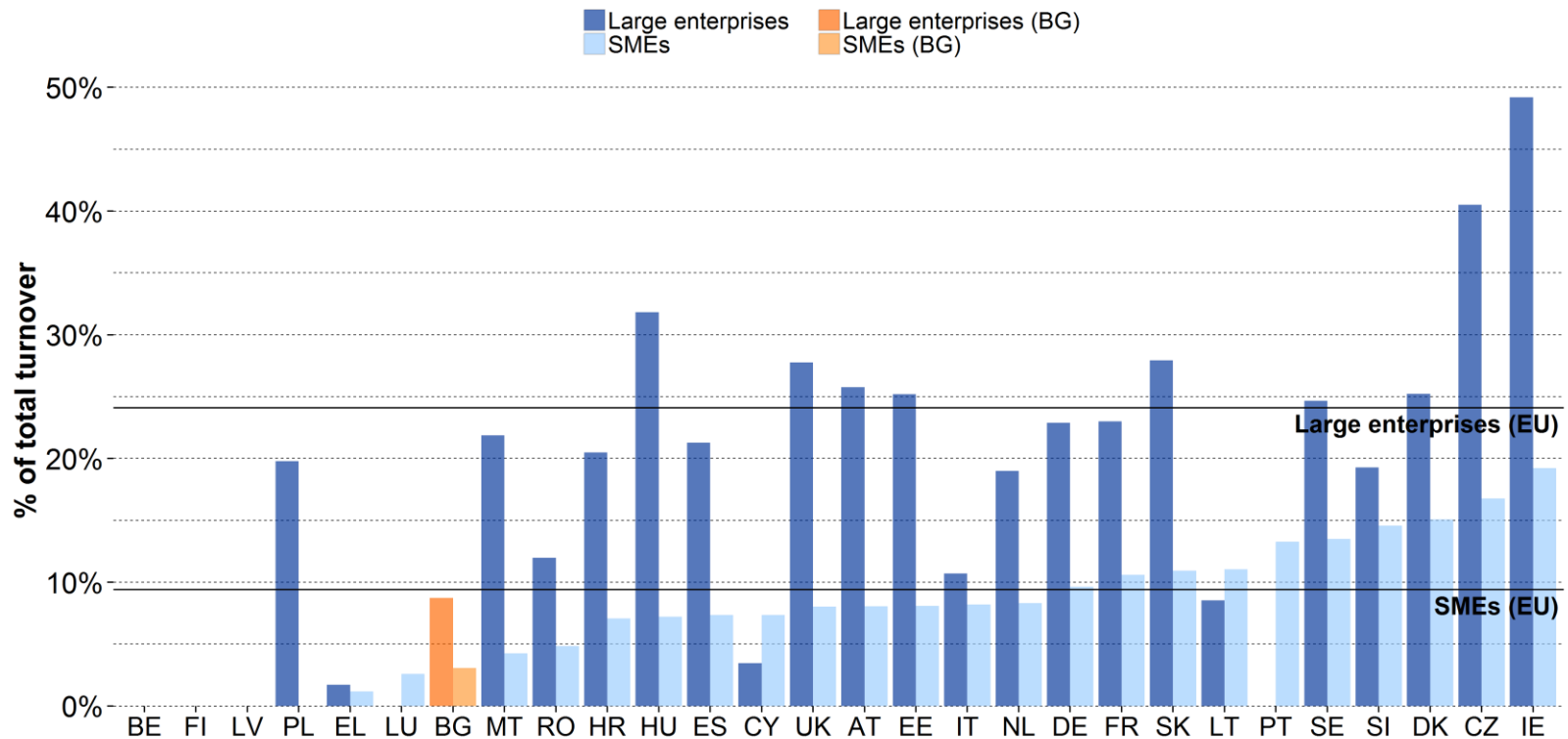
2.8% of Bulgarian SMEs sell online to other EU countries (7.5% in the EU).

**SMEs selling online
Overall (2015) vs. Cross-border (2015)**



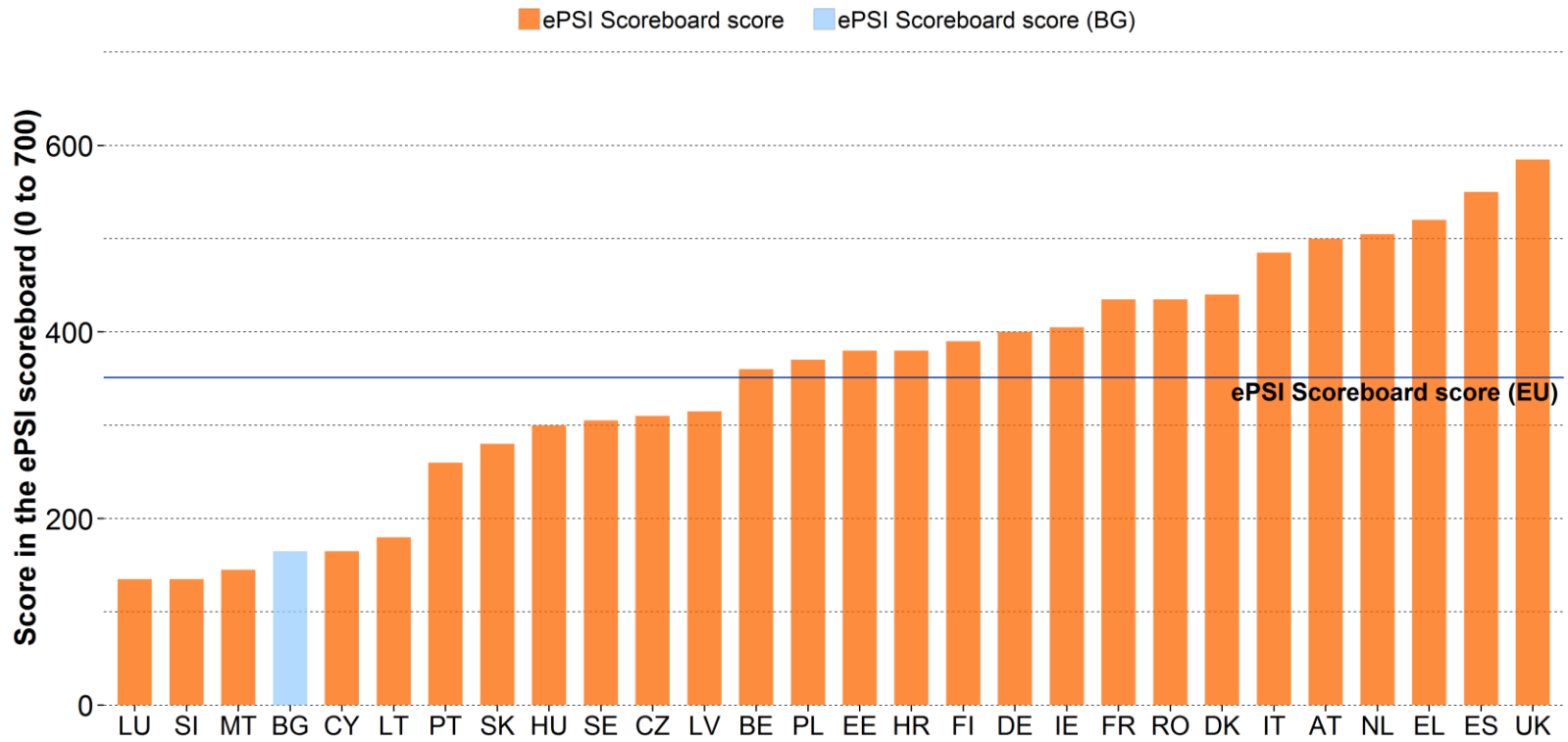
SMEs in Bulgaria obtain on average 3.1% of their turnover from eCommerce (9.4% in the EU). Large enterprises derive on average 8.7% of their turnover from eCommerce (24% in the EU).

Turnover from eCommerce (2015)



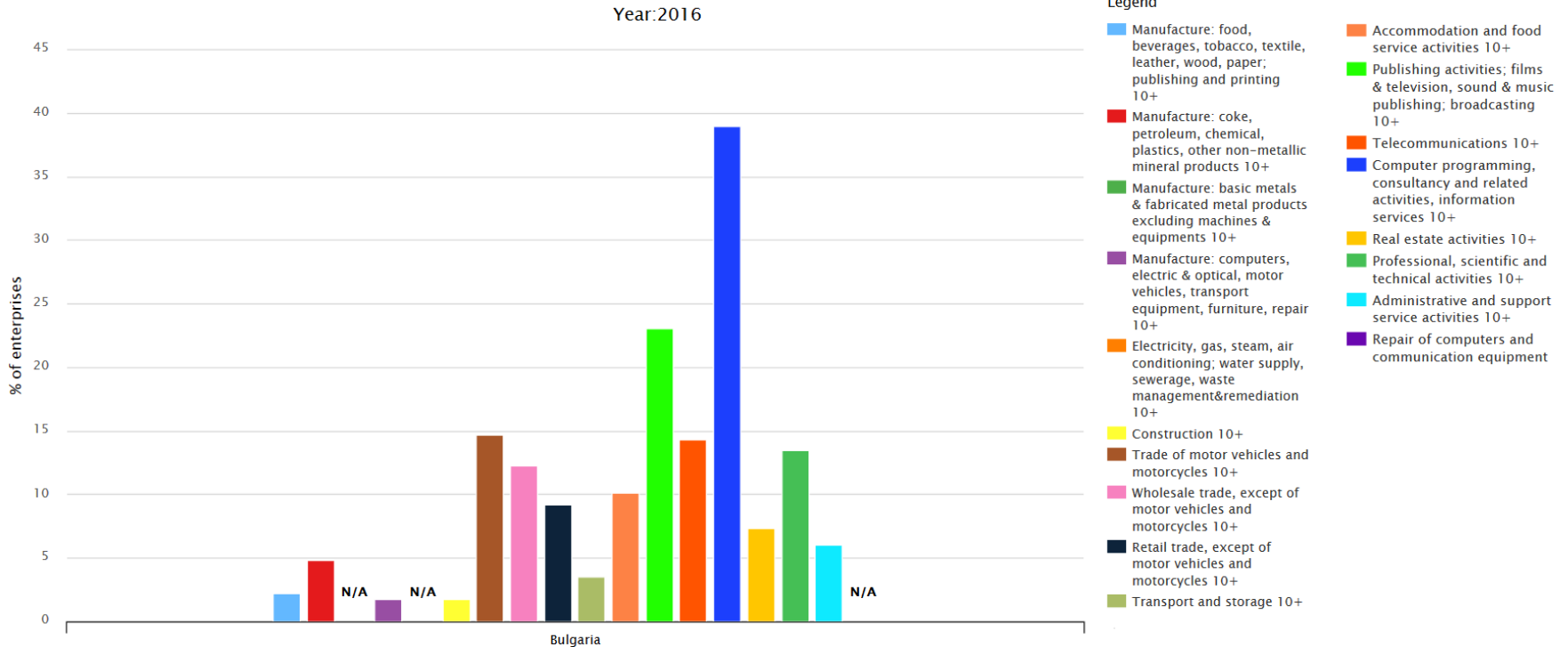
Bulgaria scores 165 out of 700 in the European Public Sector Information scoreboard, against an overall score of 351 out of 700 for the European Union.

Open Data (2015)



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

Enterprises with High levels of Digital Intensity, by Economic sectors (17 Nace groups)



Legend

- 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 & equipments 10+
- Manufacture: computers, electric & optical, motor vehicles, transport equipment, furniture, repair 10+
- Electricity, gas, steam, air conditioning; water supply, sewerage, waste management & remediation 10+
- Construction 10+
- Trade of motor vehicles and motorcycles 10+
- Wholesale trade, except of motor vehicles and motorcycles 10+
- Retail trade, except of motor vehicles and motorcycles 10+
- Transport and storage 10+
- Accommodation and food service activities 10+
- Publishing activities; films & television, sound & music publishing; broadcasting 10+
- Telecommunications 10+
- Computer programming, consultancy and related activities, information services 10+
- Real estate activities 10+
- Professional, scientific and technical activities 10+
- Administrative and support service activities 10+
- Repair of computers and communication equipment

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 10+
- Construction 10+
- Retail trade, except of motor vehicles and motorcycles 10+
- Transport and storage 10+
- Administrative and support service activities 10+
- Trade of motor vehicles and motorcycles 10+
- Wholesale trade, except of motor vehicles and motorcycles 10+
- Accommodation and food service activities 10+
- Real estate activities 10+
- Professional, scientific and technical activities 10+
- Repair of computers and communication equipment

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

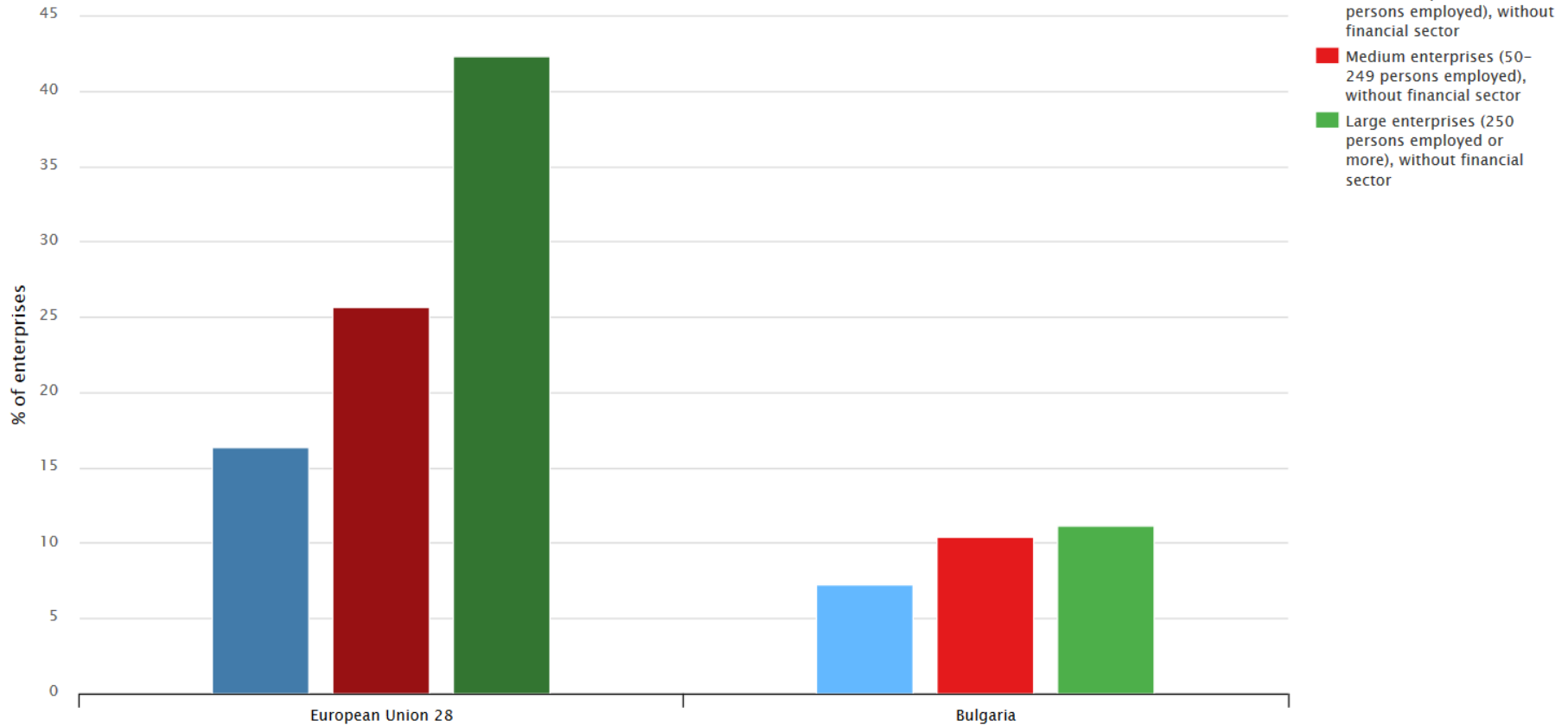
- Computer programming, consultancy and related activities, information services 10+

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

Enterprises with high levels of digital intensity, by Enterprise size

Enterprises with High levels of Digital Intensity, by Enterprise size (Small, Medium, Large)

Year:2016



[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:\[%22BG%22,%22EU28%22\]}](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:[%22BG%22,%22EU28%22]})

Digital Innovation Hubs Catalogue

The Bulgaria case

European
Commission



SMART SPECIALISATION PLATFORM

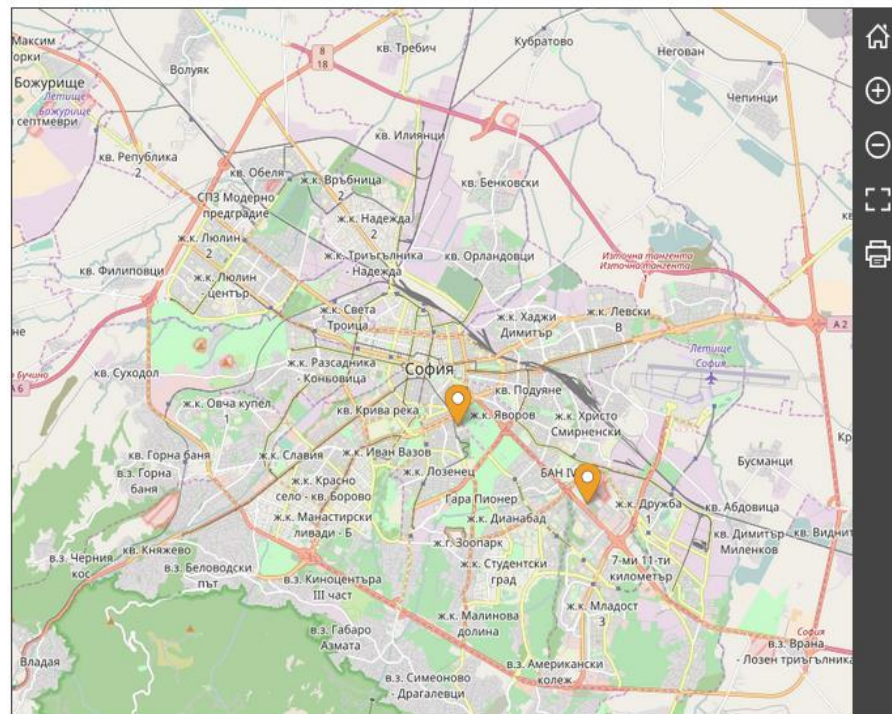


European Commission / Smart Specialisation Platform / Tools / Digital Innovation Hubs

Home S3 Platform Sections Tools News Events Knowledge Repository

Search

Digital Innovation Hubs



Search

Technical Competences

None selected ▾

Services Provided

None selected ▾

Focus on TRL

None selected ▾

Market sectors

None selected ▾

- Select all
- Agriculture, hunting and forestry
- Fishing
- Mining and quarrying
- Electricity, gas and water supply
- Construction
- Wholesale and retail trade
- Hotels and restaurants
- Transport, storage and communication
- Financial intermediation
- Real estate, renting and business activities

Leaflet | © OpenStreetMap contributors | Disclaimer

Export Hubs to csv

Hub Name	Location	Country	Contact	Phone	Email	Website
SmartFabLab	blvrd Hristo Smirnenki 1, Sofia	Bulgaria	Dr Stavri Nikolov	+359 882 041 499	✉	🌐
Sofia Tech Park	blvrd Tsarigradsko Shosse 111B, 1784, Sofiq	Bulgaria	Todor Mladenov	+359 889 900619	✉	🌐

The version available presents:

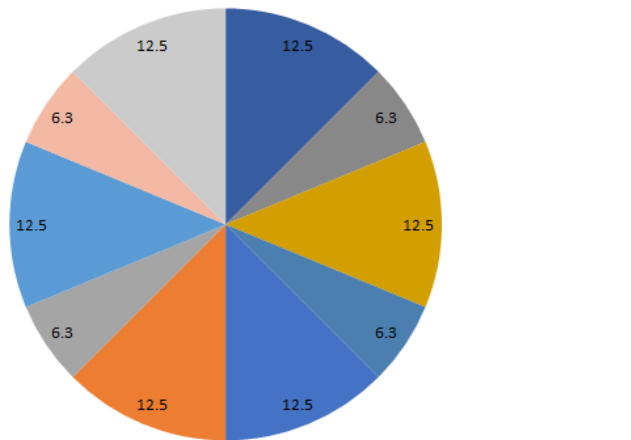
- Fact-sheets with profile, contact data, service examples for regional, national, and EU-supported DIHs
- Map-based search tool by technical competences, market sector, services

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

JRC-B3-DIH@ec.europa.eu

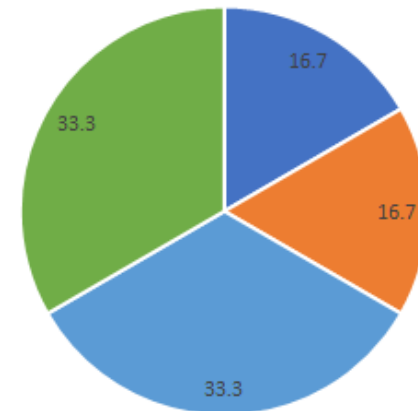
Services provided and types of customers supported by DIHs in Bulgaria - Analysis

Types of services provided (%)



- Concept validation and prototyping
- Awareness creation
- Commercial infrastructure
- Ecosystem building, scouting, brokerage, networking
- Incubator/accelerator support
- Mentoring
- Other (description)
- Testing and validation
- Voice of the customer, product consortia
- Access to Funding and Investor Readiness Services
- Collaborative Research
- Digital Maturity Assessment
- Education and skills development
- Market intelligence
- N/A
- Pre-competitive series production
- Visioning and Strategy Development for Businesses

Types of customers supported (%)



- Large companies, multi-nationals
- N/A
- SMEs (<250 employees)
- MidCaps (between €2-10 billion turnover)
- Research organisations
- Start-up companies

The analysis of the data presented was conducted by TNO, the detailed data is provided in the Catalogue of DIHs available on: <http://s3platform.jrc.ec.europa.eu/digital-innovation-hubs-tool>



Competence centers/DIHs funded by EU projects in Bulgaria 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-04-2017	TETRAMAX	48	31/08/2021	AMG TECHNOLOGY OOD	PARTICIPANT	AMGT	PRIVATE	No

No participation

Cluster Organisations Mapping Tool

Welcome on the ECCP cluster organisations mapping tool. This tool maps cluster organisations registered on the ECCP platform and shows also data from the [European Cluster Observatory](#).

Keywords search

Enter keywords here... Clear Selected list

Country & Regions

Country: Bulgaria

Region:

Cluster Organisations

Sectoral Industries: All sectors

Technology fields: All categories

S3 EU priority areas: All S3 priority areas

Number of staff: Any

ESCP-4i Membership: None

Target countries for international activities:

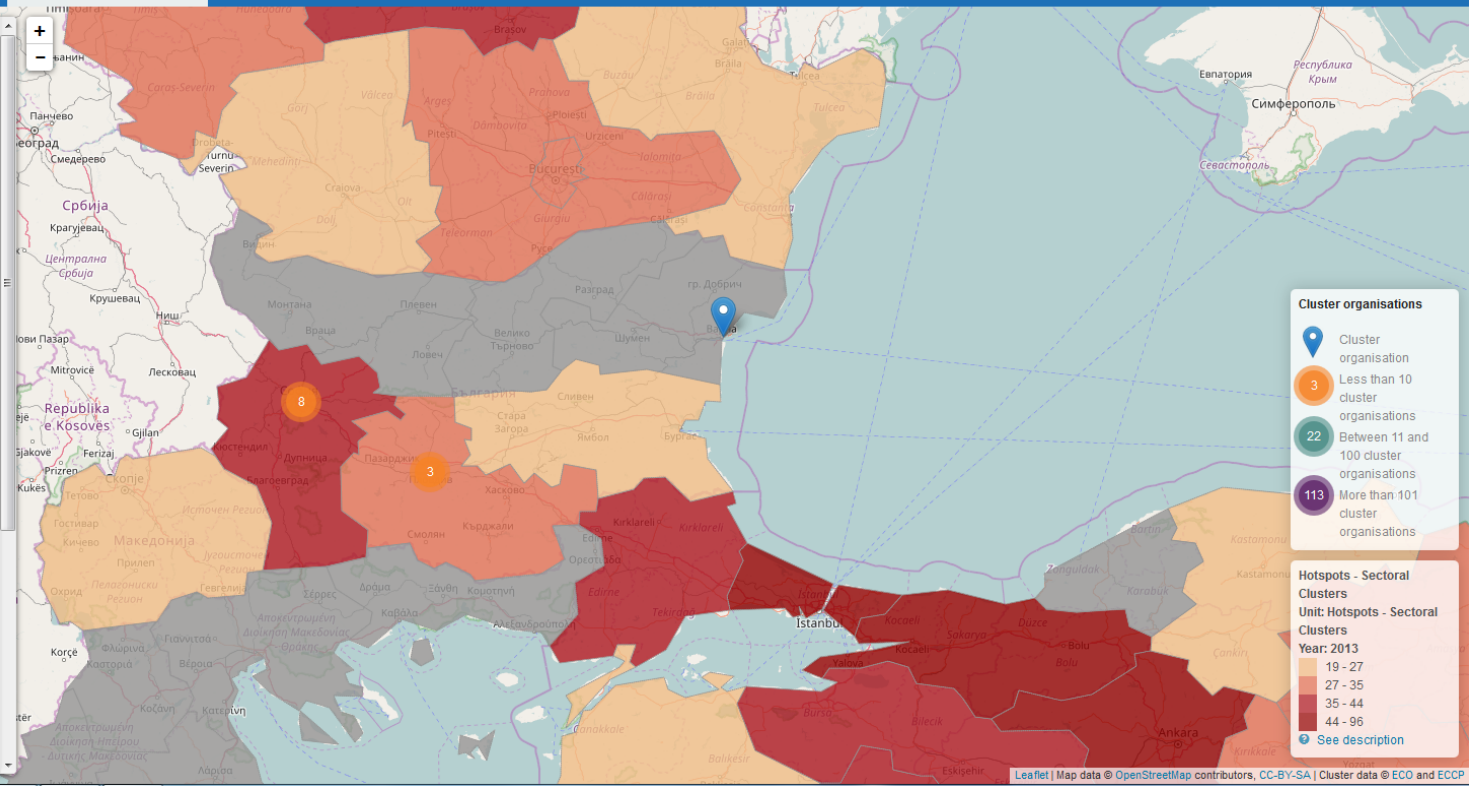
Emerging industries: All emerging industries

Participation in EU programmes: Any

Total number of members: Any

Cluster Excellence Label/Award: Any

Target countries for trans-national activities:



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

Please see [WG1 report](#)

GROWTH
Internal Market, Industry, Entrepreneurship and SMEs

European Commission > Growth > KETs Tools > SMEs' Access to Key Enabling Technologies

Single Market and Standards | **Industry** | Entrepreneurship and SMEs | Access to finance for SMEs | Sectors

KETs Tools

- KETs Observatory
- KETs Technology Centres**
 - KETs TCs Mapping
 - Contacts
- Help
- Login

Industry - links

- News
- Events
- Tools and Databases
- Contracts and grants
- Public consultations
- Publications

SMEs' Access to Key Enabling Technologies

What is the objective of the map below?

To allow **SMEs**, wherever located in Europe, to **find Technology Centres which can help to innovate through Key Enabling Technologies (KETs)**.

The Technology centres are selected according to **criteria** demonstrating their capacity to collaborate with **SMEs** on close-to-market research and innovation (Technology Readiness Levels 3 to 8, not necessarily the whole range).

How to use the map?

Filters at the right-side of the map allow to refine the search.

More details, including the **SME** contact person, can be seen by clicking on the marker for each centre.

There are no result with your selection, please select other filters values.

What are KETs Technology Centres?

KETs Technology Centres help companies cross the 'Valley of Death', that is to say to **go from lab to market**, for new **KETs**-based products. They help companies reduce the time-to-market for new innovation ideas.

KETs Technology Centres are public or private organisations carrying out **applied research and close-to-market innovation** (Technology Readiness Levels TRL 3 to 8, not necessarily the whole range) in Key Enabling Technologies (**KETs**).

Technology Centres typically provide the following services:

- Access to technology expertise and facilities for validation;
- Demonstration;
- Proof of concept / lab testing
- Prototype development and testing;
- Pilot production and demonstration/ pilot lines / pre-series
- Product validation / certification

What are the criteria for inclusion in the mapping?

1. **Technology centres have to comply with 3 qualitative criteria**
 - They should **provide services to industry and SMEs**
 - They must **be active in at least one Key Enabling Technology**
 - They should **be active in the higher Technology Readiness Levels (TRL)**, namely have activities in TRL5, TRL6, TRL 7 or

Filters

- ▼ **Countries**
 - Select All
 - Austria
 - Belgium
 - Bulgaria
 - Croatia
 - Cyprus
 - Czech Republic
 - Denmark
 - Estonia
 - Finland
 - France
 - Germany
 - Greece
 - Hungary
 - Ireland
 - Italy
 - Latvia
 - Lithuania
 - Luxembourg
 - Malta
 - Netherlands
 - Poland
 - Portugal
 - Romania
 - Slovakia
 - Slovenia
 - Spain
 - Sweden
 - United Kingdom
- ▼ **Technology Readiness Levels**
- ▼ **Market sectors**

https://ec.europa.eu/growth/tools-databases/kets-tools/tc/map?field_postal_address_country%5B0%5D=BG

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 Bulgaria**

No Pilot Lines in Nanotechnology and Advanced Materials in Bulgaria

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

European Commission

EUROPEAN STRUCTURAL AND INVESTMENT FUNDS

DATA

European Commission > European Structural & Investment Funds > Data

HOME EXPLORE EU DATA EXPLORE BY THEME EXPLORE BY COUNTRY EXPLORE BY FUND

Country Data for: Bulgaria

View a different country

Finances: Planned

Finances: Implemented

EU Payments

Achievements

Programmes

Bulgaria, through 10 national programmes, benefits from ESIF funding of EUR 9.9 billion. This represents an average of 1 363 euro per person from the EU budget over the period 2014-2020. This page includes visualizations on the planning and implementation of the finances available, the EU payments to Bulgaria and achievements at country level. You can explore further the ESI Funds programmes of the country in the "Programmes" section, where we list also the relevant Interreg programmes for Bulgaria.

Total EU National

Country Budget for 2014-2020:

€11 734 023 008

FINANCES: PLANNED

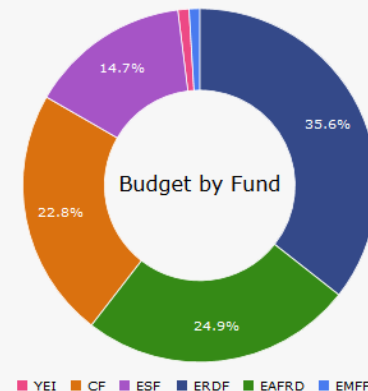
Total

Back to Top

The planned EU financing, national co-financing and total financing are visible using the filters provided in the blue bar above. Based on the filter chosen the planned financing over the period 2014-2020 is presented below 1) by fund and 2) broken down by major theme. (The source dataset is available on the link "Explore and share this dataset").

Total Budget by Fund (daily update): Bulgaria, EUR

Explore and Share this Data



Refresh Date: 21/8/2017