Cohesion policy helps making Europe fit for the digital age

Gregor Čufer

European Commission
DG Regional and Urban Policy

#CohesionPolicy
#EUinmyRegion

Topics

✓ The 2021-2027 Multiannual financial framework and Cohesion policy negotiations

✓ Why is digital transformation important?

✓ What can Cohesion policy offer?

✓ Smart cities in Cohesion policy

✓ Ongoing pilots and initiatives

✓ Principles for complementarities & synergies with other EU funds

European Commission

KEY FEATURES

Multiannual Financial Framework 2021-2027
´A modern budget for a Union that protects, empowers and defends´

More funding for priority areas

A new mechanism to protect the EU budget from financial risks linked to the rule of law

A strong focus on European added value and on performance

Less red tape for beneficiaries

A more flexible and agile budget with a clearer and leaner architecture

European Commission

Cohesion policy – Modern & dynamic - 331 billion euro

Modern investment

- Focus on transition to smart, low-carbon economy

- Stronger link to European Semester

- Comprehensive performance data (near real time), open data

Simple, flexible, dynamic

- 7 funds, 1 regulation (50% shorter)

- 80 key administrative simplifications

- Faster implementation (return to n+2)

- Responsive to emerging needs (e.g. migration)

For all regions

- Balanced and fair allocation method

- 75% of financial resources to poorest regions and Member States, where most needed

European Commission

Negotiations – Parliament, Council, Commission

✓ **Trilogues** ongoing on MFF and content proposals

✓ **MFF** discussions on the figures already held but decision in Q1 2020

✓ **Sectoral** proposals can only be finalised after MFF deal (ie in 2020) but agreement on most blocks already reached on

European Commission

Agenda for Europe: A Europe fit for the digital age

"*I want Europe to strive for more by* **grasping the opportunities from the digital age** *within safe and ethical boundaries. Digital technologies, in particular Artificial Intelligence, are transforming the world at an unprecedented speed.* **They have changed how we communicate, live and work**. " *(UvdL)*

Read Data story – Cohesion policy making Europe fit for the digital age

European Commission

Role of Cohesion Policy in digital transformation?

Overcome Digital Divide: geographical, social, SMEs
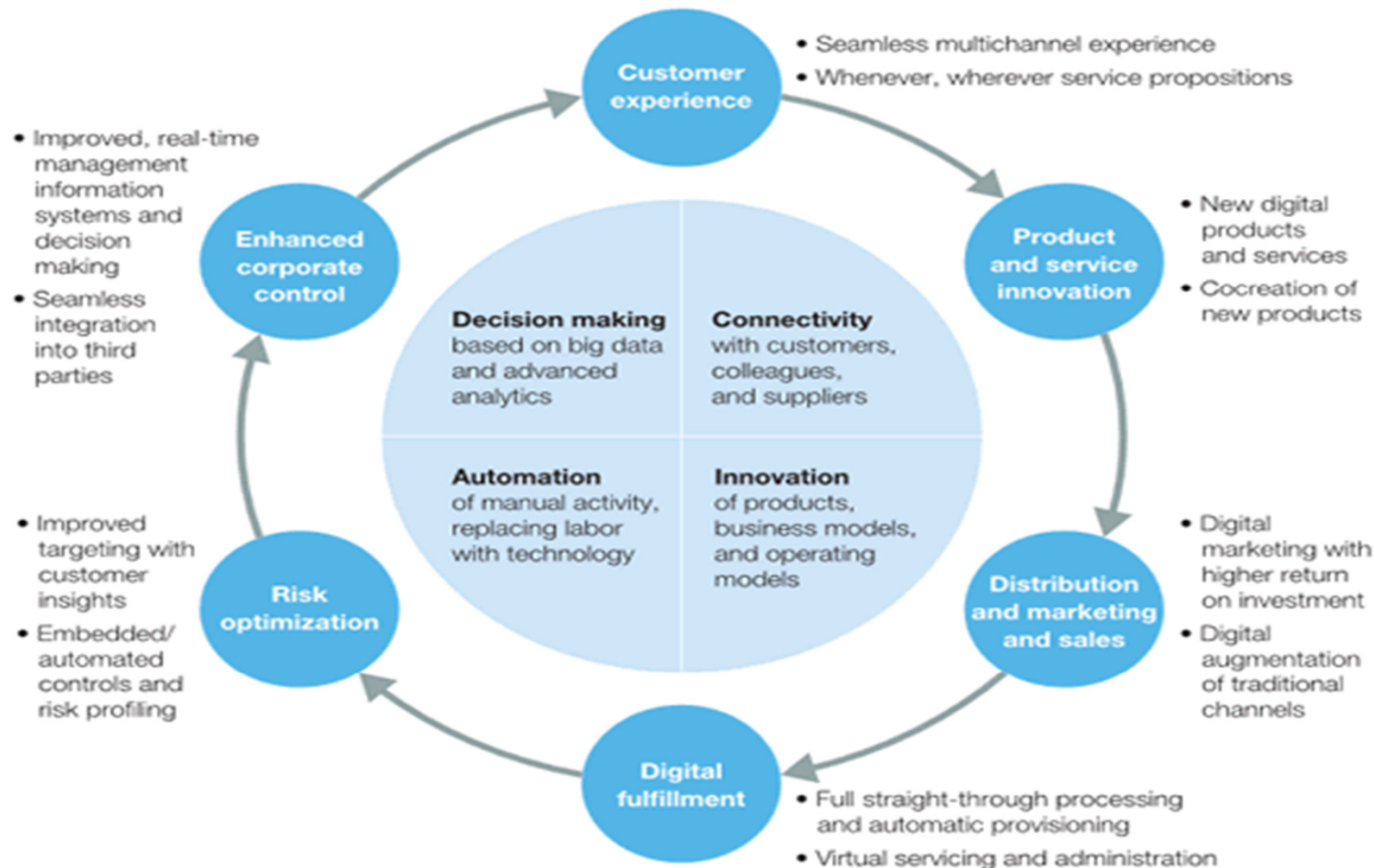

Digital Economy and Society Index (DESI) 2019 ranking
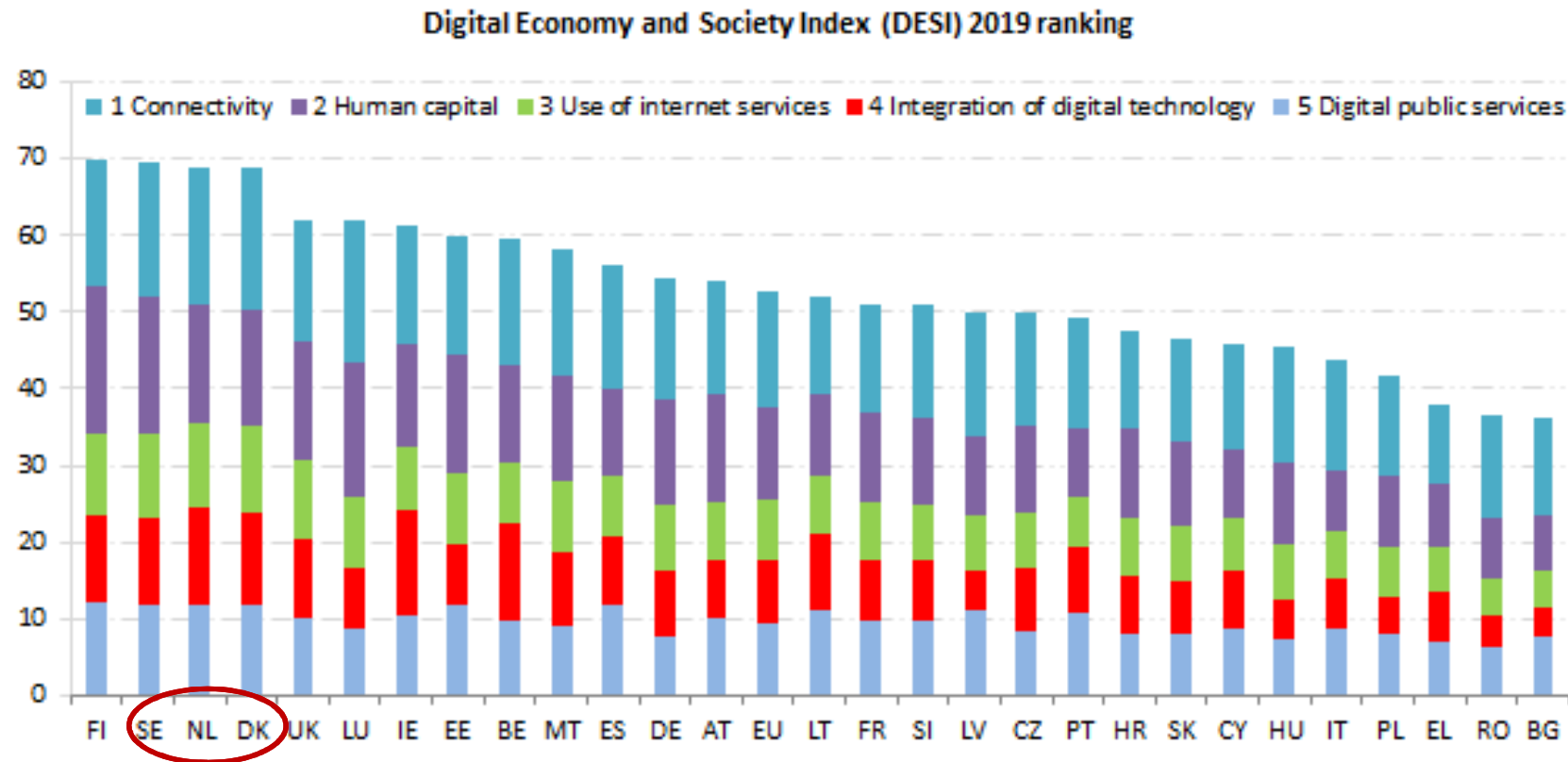
only 3 MS have no mention of digitalisation in Annex D

See DESI country reports:
https://ec.europa.eu/digital-single-market/en/countries-performance-digitisation

Digital transformation
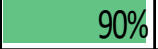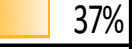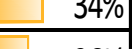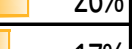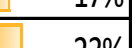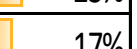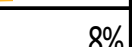
Digital can reshape every aspect of the modern enterprise.

- Improved, real-time management information systems and decision making
- Seamless integration into third parties

Enhanced corporate control

Customer experience
- Seamless multichannel experience
- Whenever, wherever service propositions

Product and service innovation
- New digital products and services
- Cocreation of new products

Decision making based on big data and advanced analytics

Connectivity with customers, colleagues, and suppliers

Automation of manual activity, replacing labor with technology

Innovation of products, business models, and operating models

Distribution and marketing and sales
- Digital marketing with higher return on investment
- Digital augmentation of traditional channels

- Improved targeting with customer insights
- Embedded/automated controls and risk profiling

Risk optimization

Digital fulfillment
- Full straight-through processing and automatic provisioning
- Virtual servicing and administration

Source: Expert interviews; McKinsey analysis

See for instance: https://www.i-scoop.eu/industry-4-0/

European Commission

Digital transformation of European businesses is driven by fast broadband connections, social media and mobile applications.

Key indicators tracking digitisation processes	Year	% of EU28 enterprises			Variation 2018 on 2017 or 2016		
		Large	SMEs		Large		SMEs
Enterprises having **a web site** or homepage	2018	94%	77%		0%		0%
Access to **ICT specialist** skills	2018	90%	65%	(a)	1%		1%
Website has some **interactive functionalities**	2018	74%	57%		0%		-1%
Website has references to the enterprise's **social media profiles**	2018	63%	37%		3%		3%
>50% of the persons employed **use computers** & Internet	2018	52%	43%		2%		3%
Fastest **broadband** connection is at least 30 Mb/s	2018	75%	43%		6%		5%
>20% of workers with **portable devices** for business use	2018	42%	34%		3%		2%
Pay to **advertise** on the internet	2018	38%	26%	(a)	4%		1%
Selling online (at least 1% of turnover)	2018	38%	17%		-1%		-1%
Sending **eInvoices** suitable for automated processing	2018	47%	23%	Not comparable with 2017 or 2016			
Buy medium-high **Cloud Computing** services	2018	39%	17%	(a)	9%		4%
Exploit **B2C eCommerce**	2018	9%	8%	(b)	1%		0%

(a) Variation on 2016

(b) Enterprises where web sales are more than 1% of total turnover and B2C web sales more than 10% of the web sales

Source: European Commission services based on Eurostat data

DESI Report 2019 – Integration of Digital Technology

Policy objectives

- **develop solutions**
- **pilot**
- **demonstrate**
- **test**
- **tech transfer**

A smarter Europe (innovative & smart economic transformation)

A greener, low-carbon Europe (including energy transition, the circular economy, climate adaptation and risk management)

A more connected Europe (mobility and ICT connectivity)

A more social Europe (the European Pillar of Social Rights)

A Europe closer to citizens (sustainable development of urban, rural and coastal areas and local initiatives)

Deploy solutions in public & private sector

European Commission

Cohesion Policy Objective 1: 2021-27 A smarter Europe by promoting innovative and smart economic transformation

Enhancing **R&I** capacities + uptake of advanced technologies

Digitisation for citizens, companies and governments

Smart Specialisation Strategies

Developing skills for S3, industrial transition and entrepreneurship

Growth and competitiveness of **SMEs**

start-up/scale-up

European Commission
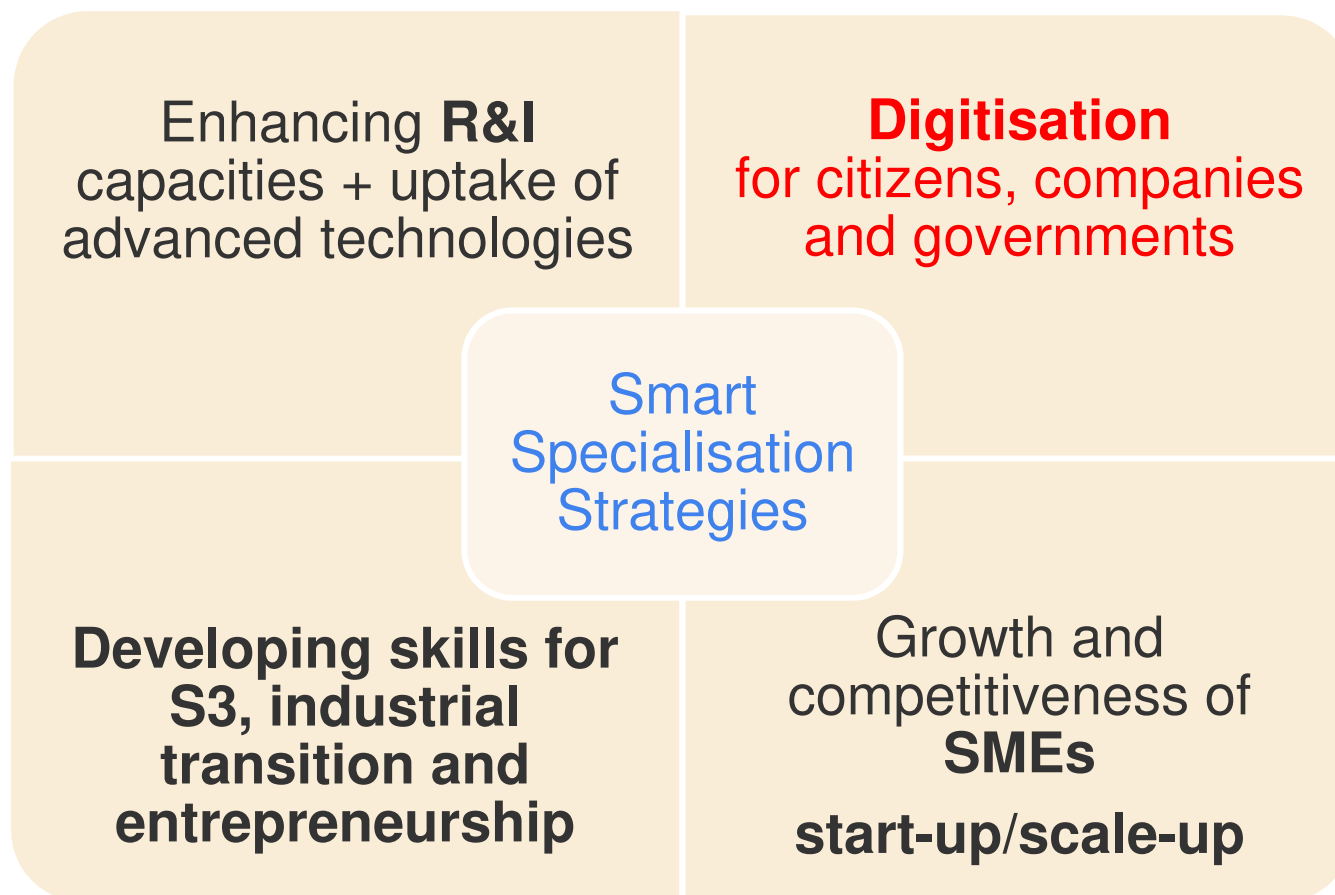
Scope of support from the ERDF

✓investments in infrastructure;

✓investments in access to services;

✓productive investments in SMEs;

✓equipment, software and intangible assets;

✓information, communication, studies, networking, cooperation, exchange of experience and activities involving clusters;

✓training, life-long learning and education activities under PO1 (in line with S3)

• ….
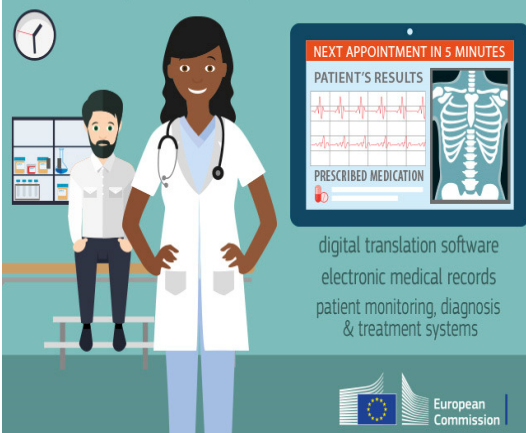
Priorities for digital investments under PO1

In line with the relevant **Smart Specialisation Strategy**:

✓**Take-up of digital technologies**

✓**Digital transformation of business models: B2B; B2C;C2C**

✓**Building up capacities**

✓**Living Labs, test-beds**

✓**eGovernment**

✓**Digital start-ups & scale-ups**

✓**e-inclusion, e-health, e-learning, e-skills**

Digitisation is transforming all sectors

Today's hospital doctors need digital skills

NEXT APPOINTMENT IN 5 MINUTES
PATIENT'S RESULTS
PRESCRIBED MEDICATION

Benefits:

- facilitates communication between doctors & patients
- improves access to medical information
- allows doctors to save time and to treat more patients

digital translation software
electronic medical records
patient monitoring, diagnosis & treatment systems

European Commission

#EUSkillsAgenda

Today's industrial machine operators need digital skills

Benefits:

- faster manufacturing & reduced errors
- less hard, manual, repetitive tasks
- manufacturing processes more sustainable.

computer-aided design
manufacturing & machinist calculating software

European Commission

#EUSkillsAgenda

Today's VET teachers need digital skills

- Learning management systems
- Virtual learning platforms
- Digital simulation technologies

INTERACTIVE WHITE BOARD

Benefits:

- improved communication between teachers & students
- improved quality of learning
- increased safety

European Commission

#EUSkillsAgenda

Today's farmers need digital skills

Herd vaccination
Automated irrigation
Crop monitoring
Farm management

Mon 10

Benefits:

- improved decision making
- less repetitive & physically demanding tasks
- increased flexibility, productivity & animal health

European Commission

#EUSkillsAgenda

Delineation regarding digital skills

ERDF

PO1, specific objective 1.4: *developing skills for smart specialisation industrial transition and entrepreneurship*

PO4, specific objective 4.2: *improving access to inclusive and quality services in education, training and life-long learning through developing infrastructure*

- **VET infrastructure and/or equipment**
- **Higher education infrastructure and/or equipment**

ESF+

- Support to **systems and reforms in the education sector**
- Supporting the **development and use of new teaching methods and innovative technologies** for delivering high-quality educational content
- Enhance **higher education's relevance to labour market needs**, and to stimulate partnerships between higher education, business and research organisations

Investments in cities under PO1 – legislative framework

- At least **6% of the ERDF resources** at national level under the Investment for jobs and growth goal, other than for technical assistance, **shall be allocated to sustainable urban development** in the form of community-led local development, integrated territorial investments or another territorial tool under PO5 (ERDF Regulation).

- Where PO1 included in 6% SUD: **investments have to be in line with relevant smart specialisation strategy.**

- Possible tools: ITI (CLLD)

- Partnership principle (art. 6 CPR) - coordination during development and implementation of the operational programmes, ITIs, and smart specialisation strategy

European Commission

One Stop Shop for Cities - Europa web-portal

✓A smart city is a place where traditional networks and services are made **more efficient with use of digital and telecommunication technologies** for the benefit of its inhabitants and business.

✓A smart city goes **beyond the use of ICT** for better resource use and less emissions.

✓It means **smarter transport and energy networks**, **upgraded water supply** and **waste disposal facilities**, and more **efficient ways to light and heat buildings**.

✓It also means a **more interactive and responsive city** administration, safer public spaces and meeting the needs of ageing population.

https://ec.europa.eu/info/eu-regional-and-urban-development/topics/cities-and-urban-development/city-initiatives/smart-cities_en

Smart Cities – place based transformation

- Link to smart specialization – Direct support of local innovation economy, innovation clusters & the support of 21st century skills, in particular ICT professional skills

- Supporting sustainable urban development - Cross sectoral, integrated planning at city level and at functional regional level to support the development of smart urban solutions

- Consideration of digital infrastructure as key sector development and enabler (RDI facilities, broadband) and digital technologies (i.e. ICT & mobility, energy infrastructure, water & waste, health …)

> JASPERS is helping cities & regions prepare strategies and investments building on a place-based concept of smart cities with a view to achieving their goals as stated in their development plans as well as support concrete projects.

European Commission

Investments in cities under PO1 – good practice examples

- **Smart Kalasatama (Helsinki, Finland):** model district for smart living, incorporates digital services, sensors and IoT in the infrastructure, testing of new kind of urban services (waste collection, traffic management, energy management, digital health services, flexible facilities for telework)

- **Climate Street (Cologne, Germany)**: testbed for digital and smart solutions in historical city center (traffic and parking management)

- **DansMaRue (Paris, France), Make a suggestion (Stockholm, Sweden)**: digital application for citizens to foster resident's participation in city's life and decision-making process

- **Circle City Scan (Amsterdam, Netherlands)**: project developing a roadmap for the first circular city, identifying and testing areas where the city can make the most significant and tangible progress in realising a circular economy

European Commission

Pilot Action: Regions in Industrial Transition

Development of a comprehensive strategy for economic transformation

• 10 regions & 2 countries

• Broad innovation and inclusive growth building on smart specialisation strategy

• Multi-sectoral focus

• automation, decarbonisation, emerging and digital technologies, skills and investment

See: Commission and OECD recommendations to help EU countries and regions achieve industrial transition

Pilot Action for Interregional Innovation Investment

Test new ways to:
- Commercialize and scale-up

- Attract private investment for promising innovation projects

- Explore and strengthen synergies between different EU instruments (ESI Funds, the Investment Plan, Horizon 2020, COSME)

- Test & shape ideas for future

Digital technologies are key to many of the pilots

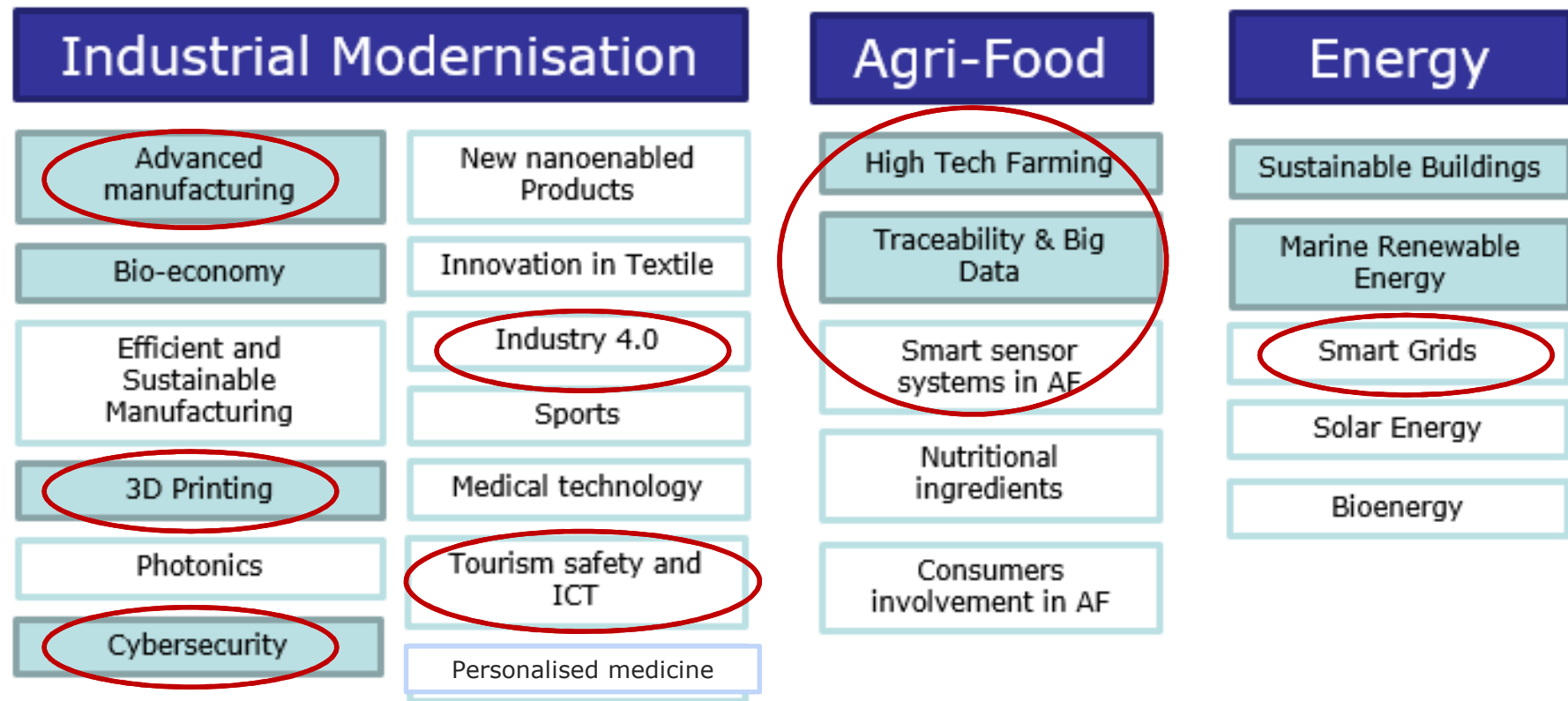| THEMATIC AREA		PARTICIPATING REGIONS
Bio-economy	Conversion of lignin/wood into new functional aromatics which outperform fossil-based aromatics	Emilia-Romagna (IT), Flanders (BE), Helsinki-Uusimaa (FI), Łódzkie (PL), Lower Austria (AT), Navarra (ES), Noord-Brabant (NL), North Rhine-Westphalia (DE), Wallonia (BE)
Batteries	Advanced materials for batteries	Andalusia (ES), Aragon (ES), Austria (AT), Auvergne-Rhone-Alpes (FR), Baden-Württemberg (DE), Basque Country (ES), Bavaria (DE), Brussels-Capital Region (BE), Castilla Y Leon (ES), Central Ostrobothnia (FI), East Netherlands (NL), East Slovenia (SI), Emilia-Romagna (IT), Flanders (BE), Kainuu (FI), Lapland (FI), Lombardy (IT), Metropol Region Eindhoven (NL), Navarra (ES), Northern Ostrobothnia (FI), Nouvelle-Aquitaine (FR) Pohjois-Savo (FI), Valencia (ES), Vestlandet (NO), Viken (NO), West Slovenia (SI)
Cybersecurity	Design and test a tailored and integrated acceleration programme for scale-ups in cybersecurity across EU	Brittany (FR), Castilla Y Leon (ES), Central Finland (FI), Estonia (ET), North Rhine-Westphalia (DE)
De- & re-manufacturing for circular economy	Composite recovery from wind energy systems and re-manufacturing of e-motors/e-mobility batteries	Basque Country (ES), Emilia-Romagna (IT), Flanders (BE), Lombardy (IT), Norte (PT), Saxony (DE), Scotland (UK), Tampere (FI)
High-tech farming	High tech solutions for table and wine grapes and poultry dust reduction	Central Macedonia (EL), Centro (PT), East Central Sweden (SE), Emilia-Romagna (IT), Estonia (ET), Extremadura (ES), Flanders (BE), Galicia (ES), Gelderland (NL), Limburg (BE), Marche (IT), Noord-Brabant (NL), Noord Holland (NL), North East Romania (RO), Northern Ireland (UK), Northern Netherlands (NL), Pays De la Loire (FR), South Ostrobothnia (FI), Tuscany (IT), Veneto (IT), Weser-Ems (DE), West Macedonia (EL), Zuid Holland (NL)
3Dprinting	Hybrid 3DP-Carbon fiber components for chassis, trimmings and mechanical systems and knuckle/upright through metal AM produced inserts (3DP) in compression moulded fibre reinforced thermoplastic	Aragon (ES), Emilia-Romagna (IT), Flanders (BE), Lombardy (IT), Noord-Brabant (NL), Norte (PT), Saxony (DE), Wallonia (BE)
Marine renewable energy	Sensors, instrumentation and remote monitoring	Andalusia (ES), Asturias (ES), Basque Country (ES), Brittany (FR), Cornwall (UK), Dalarna (SE), Emilia-Romagna (IT), Flanders (BE), Lombardy (IT), Navarra (ES), Norte (PT), Ostrobothnia (FI), Skåne (SE), Scotland (UK), Sogn og Fjordane (NO), South Denmark (DK)
Sustainable buildings	Intelligent control management of electrical energy consumption and local information by smart plugs	Algarve (PT), Andalusia (ES), Central Slovenia (SI), Friuli-Venezia Giulia (IT), Provence-Alpes-Côte d'Azur (FR), South Karelia (FI)
Traceability and big data in agri-food	A single food traceability tool	Andalusia (ES), Aragon (ES), Emilia-Romagna (IT), Extremadura (ES), Friuli-Venezia Giulia (IT), Pays De la Loire (FR), Pazardzhik (BG), South Ostrobothnia (FI), South Savo (FI)

Thematic Smart Specialisation Platforms

Industrial Modernisation		Agri-Food	Energy
Advanced manufacturing	New nanoenabled Products	High Tech Farming	Sustainable Buildings
Bio-economy	Innovation in Textile	Traceability & Big Data	Marine Renewable Energy
Efficient and Sustainable Manufacturing	Industry 4.0	Smart sensor systems in AF	Smart Grids
3D Printing	Sports	Nutritional ingredients	Solar Energy
Photonics	Medical technology	Consumers involvement in AF	Bioenergy
Cybersecurity	Tourism safety and ICT		
	Personalised medicine		

Digital technologies are key to many of the interregional smart specialisation partnerships

See: http://s3platform.jrc.ec.europa.eu/s3-thematic-platforms

European Commission

Digital Innovation Hubs

✓ Financed through Cohesion policy

✓ European Digital Innovation Hubs – selection process ongoing – centrally managed EU funds

A European Digital Innovation Hub is

A single organization or a coordinated group of complementary organizations
Operating on a non-profit basis
Supporting companies and/or public sector in digital transformation

A European Digital Innovation Hub offers

"Test before invest" facilities

Support for skills and training

Support to find investments
        (cooperation with InvestEU Advisory Hub and Enterprise Europe Network

Innovation ecosystem and networking

EU funding will be made available for hubs that are already (or will be) supported by their Member States (or regions), so as to increase the impact of public funding.

European Commission

Funding the digital transformation

	Research & Innovation	Strategic capacities (Computing, data,..)	Communication Infrastructure, Broadband, etc.	Human capital	Deployment
National regional and local	Cohesion	Cohesion	Cohesion	Cohesion	Cohesion Agri. funds
EU wide Collective effort	Horizon Europe	Digital Europe	Connecting Europe Facility 2,0	Digital Europe, Horizon Europe	Digital Europe
Financial Instrument	InvestEU	InvestEU	InvestEU	InvestEU	InvestEU

European Commission

Coordination, demarcation and complementarities between the Funds and other Union instruments

Strategic level:

- **European Semester 2019 Country reports Annex D & "Partnership Agreements**
- **Complementarity** of ERDF with Horizon Europe, Digital Europe, Single Market Programme, etc.
- **Enabling conditions**: Smart Specialisation Strategies

Financial level:

1. **Sequential funding:** draw on results of previous EU funding for new projects (e.g. via "Innovation Radar": www.innoradar.eu for H2020, DIHs previously ERDF funded …)
2. **Alternative funding: Seal of Excellence** under ERDF rules with less red tape and more possibility to align ERDF funding to conditions of directly managed programme ; **13 programmes foresee issuing SoE**
3. **Voluntary transfers** of up to 5% to directly / indirectly managed EU funds; no "money-back-guarantee" if not spent in MS; all CPR Funds and 10 directly managed programmes are open to receive transfers
4. **Cumulative funding**: Joint funding for projects, possibly on pro rata basis, with each part under own fund's rules: 14 programmes foresee cumulative funding

Management level:

- Managing Authorities may identify implementing bodies of other programmes (e.g. Horizon Europe co-fund / partnerships / JUs) as **intermediate bodies for implementing cumulative or alternative funding under ERDF rules**. (Art. 65(3 & 5) CPR)

European Commission

Questions and Answers