

# Joint Research Centre

the European Commission's in-house science service

*Serving society  
Stimulating innovation  
Supporting legislation*

**How the Thematic S3  
Platform for Industrial  
Modernisation supports  
interregional cooperation in  
implementation of Smart  
Specialisation Strategies  
(S3)?**

Smart Specialisation Platform  
DG JRC B.3, European Commission

[www.ec.europa.eu/jrc](http://www.ec.europa.eu/jrc)



# SMART SPECIALISATION PLATFORM



European Commission / Smart Specialisation Platform / Home

Home S3 Platform Sections Tools News Events Knowledge Repository



## Ostrobothnia's video on Smart Specialisation

In this video, Ostrobothnia (Finland) speaks about its experience with S3 and gives guidance to Chile



- EU Countries registered in S3P: 18
- EU Regions registered in S3P: 170
- Non-EU Countries registered in S3P: 2
- Non-EU Regions registered in S3P: 9
- S3P Peer-reviewed Countries: 15
- S3P Peer-reviewed Regions: 60

## Smart Regions

## What we can do for you

The S3 Platform provides advice to EU countries and regions for the design and implementation of their Smart Specialisation Strategy (S3):

- Provide guidance material and good practice examples
- Inform strategy formation and policy-making
- Facilitate peer-reviews and mutual learning
- Support access to relevant data
- Train policy-makers



Thematic  
Platforms



Guidance



Targeted  
Support



Cooperation



Communities &  
Actors



Governance

## S3P Calendar

January 2017						
M	T	W	T	F	S	S
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

S3 Thematic Platform

S3 Governance

S3 Targeted Support

S3 Actors

S3 Cooperation

S3 Communities

## Reports & Publications

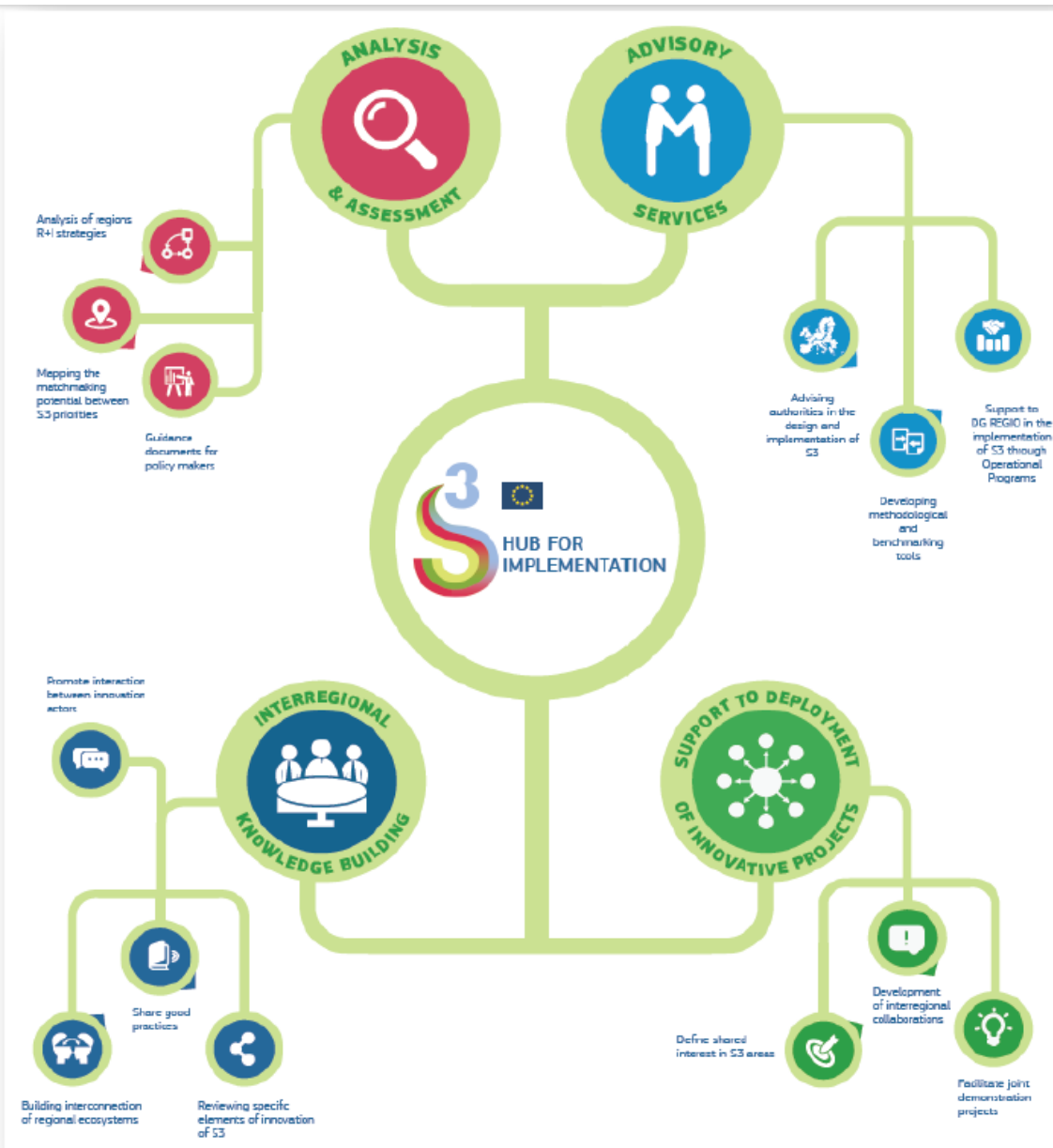
[RIO - Research & Innovation Observatory](#)



S3 Platform  
@S3Platform

Story telling on role of universities in development of North East Romania and its [#smartspecialisation](#) strategy [pic.twitter.com/9ywB8QC99E](https://pic.twitter.com/9ywB8QC99E)

# How S3P supports regions?



## EYE@RIS3

Regional data on R+I investment priorities.

## REGIONAL TRADE & COMPETITION

Identification of regional competitors and trade partners in specific areas.

## ICT MONITORING

European Structural and investment Funds data on planned ICT investments.

## REGIONAL BENCHMARKING

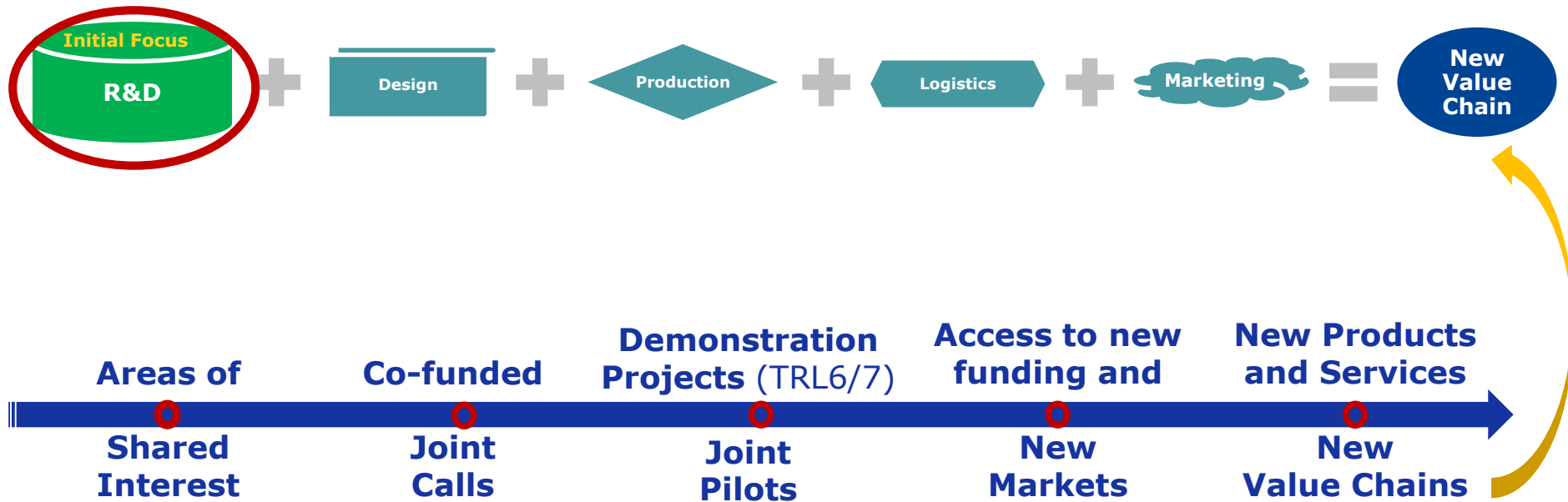
Finding reference regions based on structural similarities.



European  
Commission

# European Commission aims to...

- **support** the development and enhancement of European eco-systems for **interregional collaboration based on areas of smart specialisation.**
- **facilitate** the exchange of experience, mutual learning and cooperation to achieve better matching of business entities with research, as well as innovation actors with their business counterparts.
- **prepare** guidance material on the role of regional authorities in co-creating and developing European value chains in key smart specialisation niches.



# Envisaged stages of the workflow

## **Learn: interregional knowledge building**

- ❖ 'Expression of interest' to propose a theme and a candidate lead-region
- ❖ Joint identification of cooperation areas within the broader priority domains, in perspective of co-investment.

## **Connect: key stakeholder search and matching**

- ❖ Consolidation of this scoping note and establishment of a work plan with a coalition of regions
- ❖ matchmaking between the relevant actors to identify co-investment projects (an action plan for 1 year)

## **Demonstrate: support to deployment of innovative products/services**

- ❖ Preparing fundable projects and business plans
- ❖ Developing investment projects
- ❖ Operationalisation of Joint Demonstration

## **Upscale: financing, communication, documentation and knowledge management**



# Smart Specialisation Thematic Platforms

Thematic platforms fostering interregional collaborations along specific S3 priorities for the realization of joint investment projects in 3 key areas:

- Agri-food
- Energy
- Industrial modernization

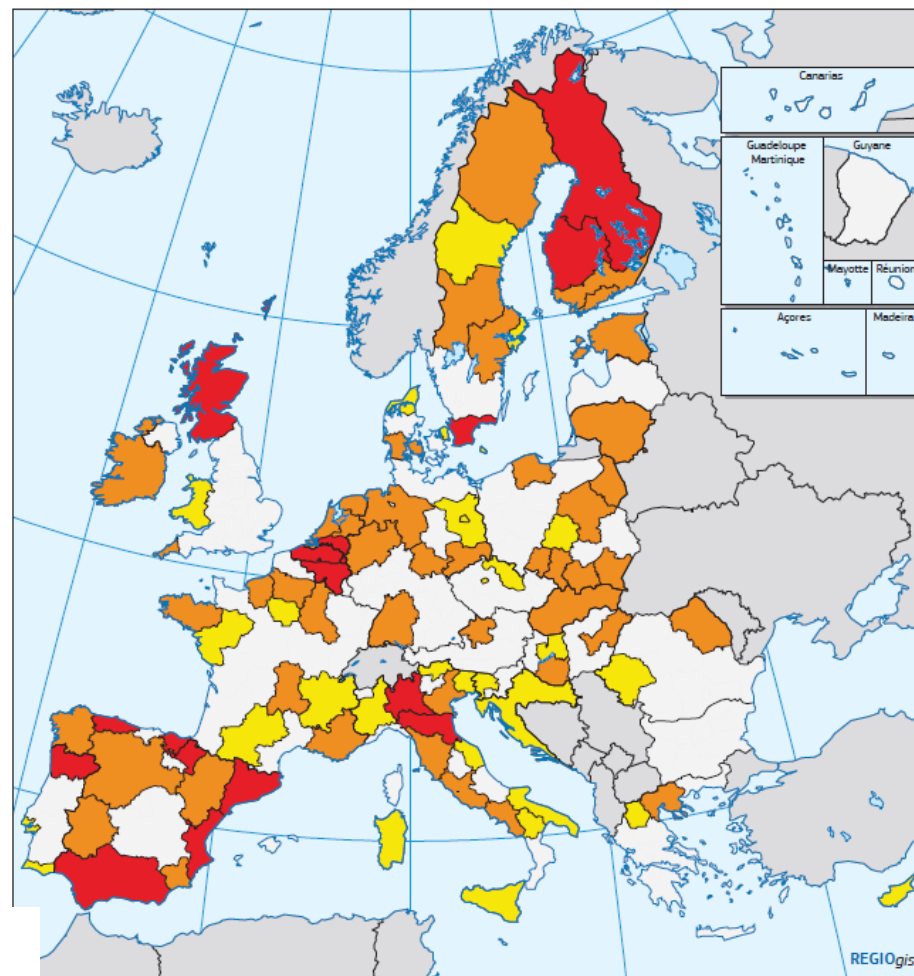
Thematic Smart Specialisation Platforms:  
Which regions participate and in how many different partnerships?

Number of participations



Source: JRC, DG REGIO

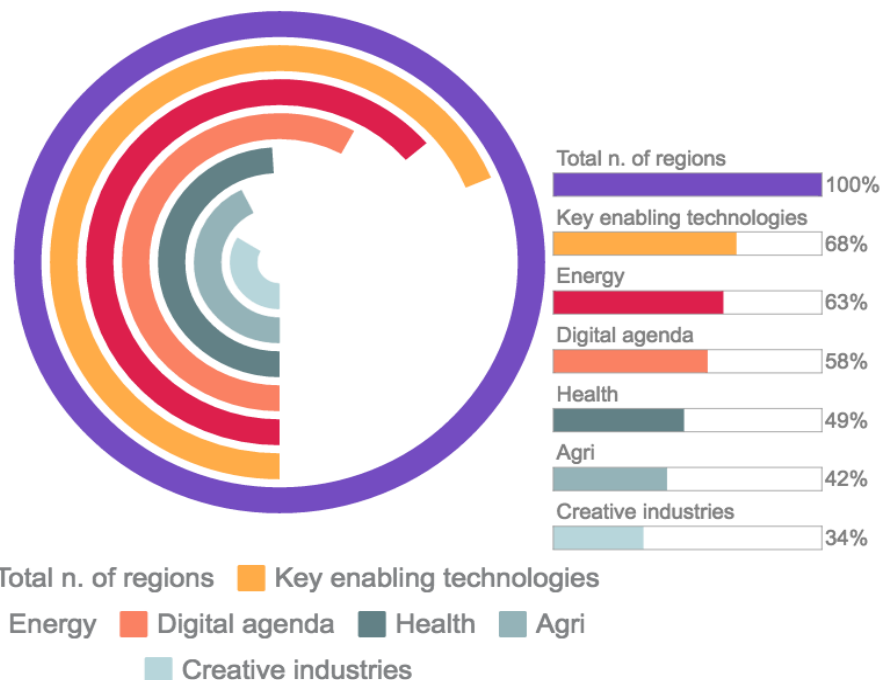
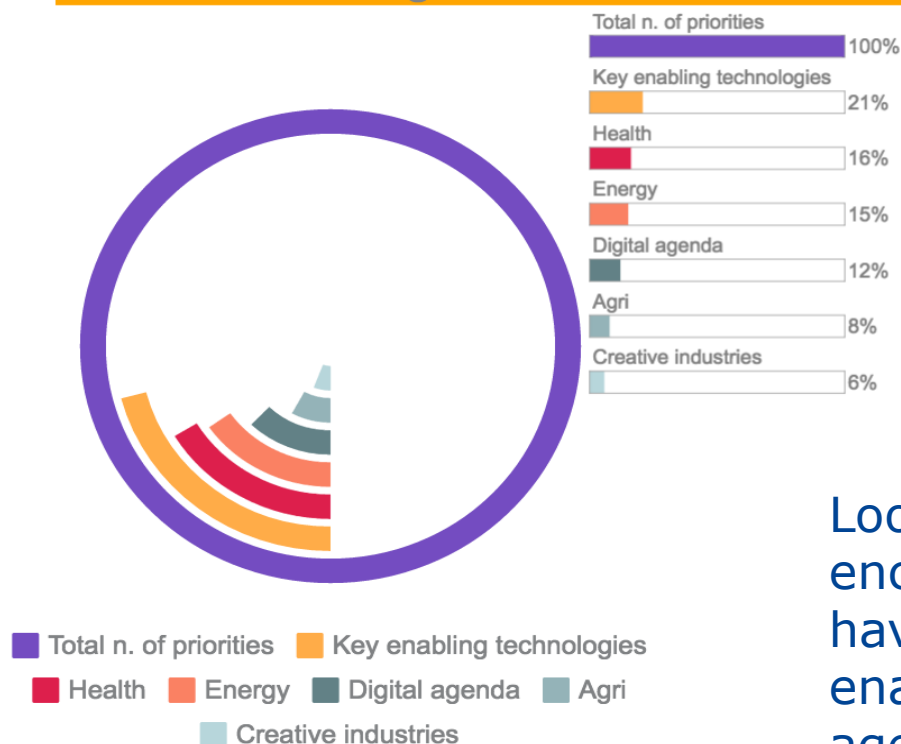
0 500 Km



# Why in industrial modernisation?

Among the over 1300 S3 priorities 21% are linked to key enabling technologies, 16% are health, 12% are digital agenda related priorities.

## Main S3 categories



Looking at the 205 regions that have encoded priorities 68% of these regions have at least one priority related to key enabling technologies, 58% to digital agenda.

# S3P - Industrial Modernization

In summary as of today:

- **11** qualified partnerships
- **65** regional and national authorities participating
- **18** lead regions – that are composing together with DGs involved the Steering Committee
- Steering Committee governing the thematic platform



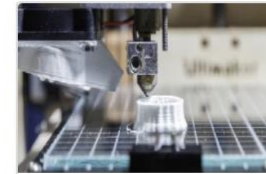
Advanced  
manufacturing



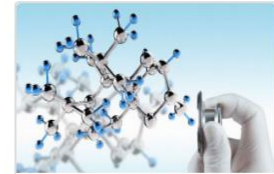
Non-food Biomass



Efficient and  
Sustainable  
Manufacturing



3D-Printing



New Nano-Enabled  
Products



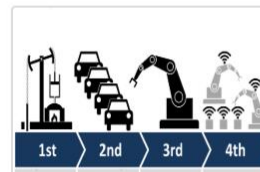
Textile Innovation



Medical technology



Photonics



SMEs to the Industry  
4.0



Sport



Digitalisation and  
Safety for Tourism



# S3P-Industry – Thematic Areas (1/3)



## Advanced manufacturing

### Advanced manufacturing for energy applications

Advanced manufacturing for energy applications in harsh environments (ADMA Energy) is one of the pilot actions inside VANGUARD INITIATIVE that was launched in June 2014.



## Efficient and Sustainable Manufacturing

### Efficient and Sustainable Manufacturing

The main objective is to transfer to industry innovative solutions coming from research and exploiting the potential of smart specialisation in order to promote new efficient and high value-added supply chains.



## Non-food Biomass

### Interregional cooperation on innovative use of non-food Biomass

The Bio-economy Pilot concerns the implementation of synergies in new bio-based value chains across regions based on their smart specialisations.

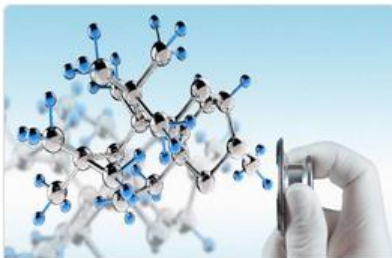


## 3D-Printing

### High Performance Production through 3D-Printing

The key objective is to identify opportunities for joint-demonstration between regions, based on a solid mapping exercise and the detected complementarities between existing demonstration facilities and company needs.

# S3P-Industry – Thematic Areas (2/3)



## New Nano-Enabled Products

### New Nano-Enabled Products

The pilot project focuses on identify existing and missing value chains within nanotechnology across Europe.



## Medical technology

### Medical technology

Medical technology offers new opportunities to address challenges by increasing the efficacy of healthcare and limiting the cost.



## Textile Innovation

### Smart Regional Investments in Textile Innovation

Objective is to strengthen regional textile innovation ecosystems across Europe and enable Textile & Clothing SME's to invest more in innovation

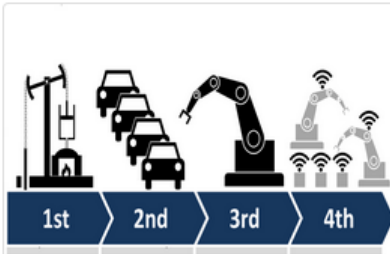


## Photonics

### Photonics

The goal is to identify the European photonic clusters that have unique and valuable propositions, capabilities and capacities in the various supply and value chains.

# S3P-Industry – Thematic Areas (3/3)



## SMEs to the Industry 4.0

### Incorporation of SMEs to the Industry 4.0 paradigm and their assimilation of specialised digital services.

The objective of this partnership is to involve SMEs to the Industry 4.0 paradigm by increasing their absorption of specialised digital services.



## Sport

### Sport

Sport can help specific business sectors to develop, depending on the characteristics of sport demand and supply in any country.

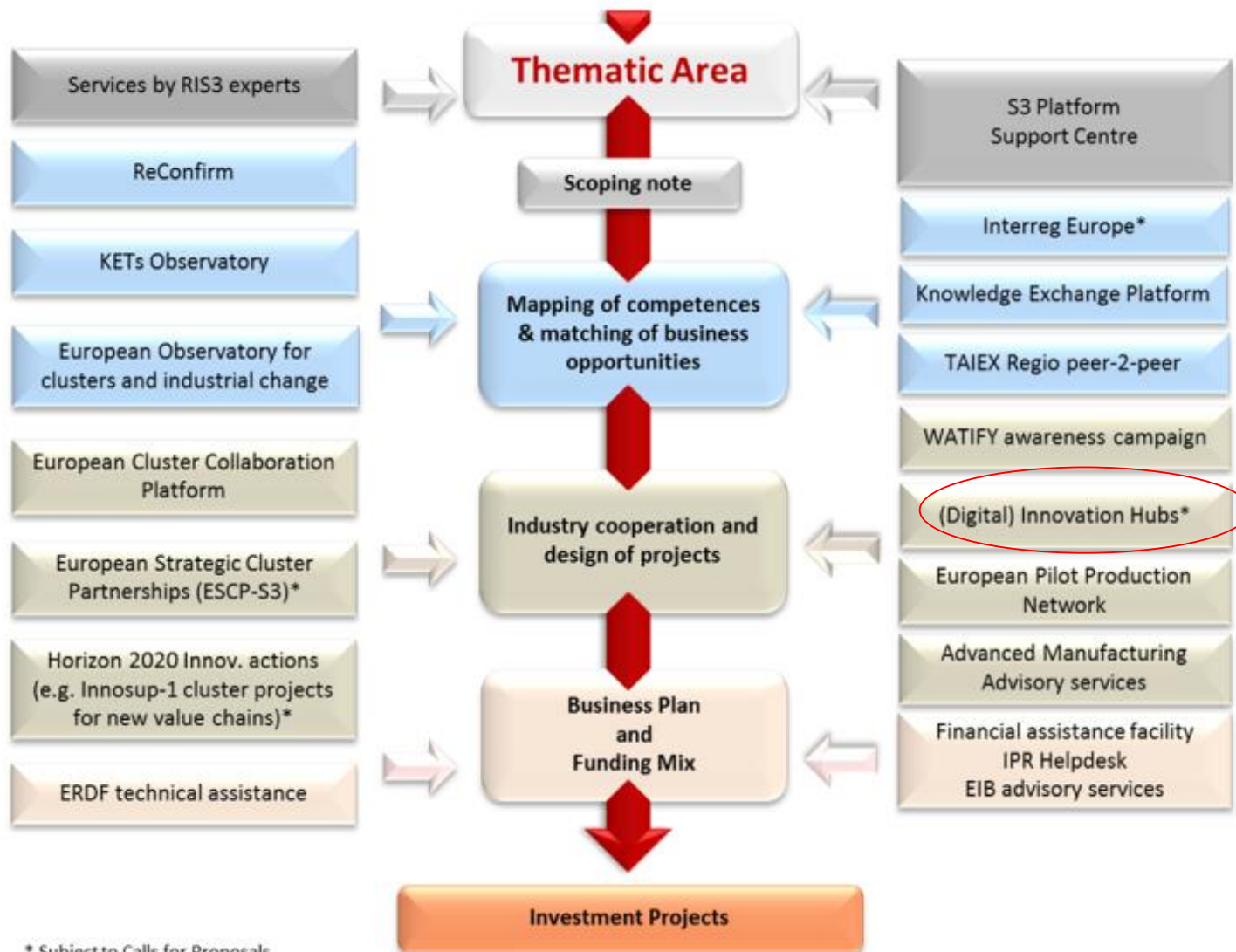


## Digitalisation and Safety for Tourism

### Digitalisation and Safety for Tourism

To enhance the competitiveness and fluent operations of businesses, to improve the productivity as well as to increase the travelers' feeling of safety and security

# Support mechanisms



# Interaction with DIH - 3 examples:

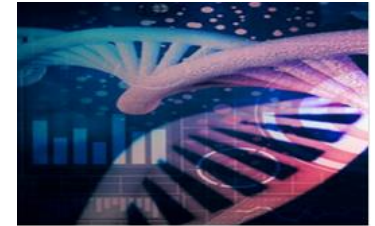
- **Photonics**
- **SMEs to the Industry 4.0**
- **Digitalisation and safety in tourism**



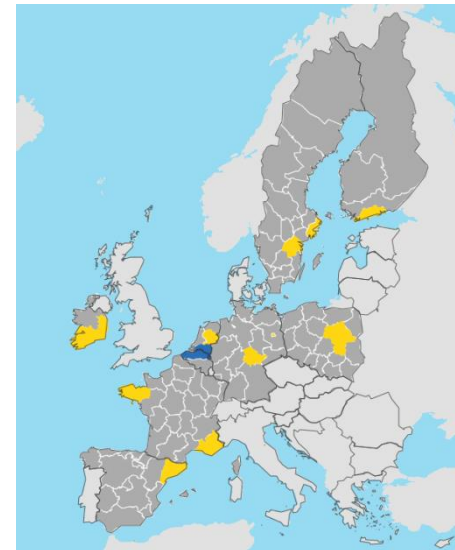
# Photonics (already in the catalogue of the DIHs)

The goal with this S3 partnership is to identify and position the European photonic clusters that have unique and valuable propositions, capabilities and capacities in the various supply and value chains for the various commercial application fields. Intending to "build a global "end-to-end ecosystem" of researchers, chip designers, foundries, corporates, investors and soft/hardware developers."

Leading regions:
Flanders (BE)
South-Netherlands (NL)
Participating regions
Berlin (DE)
Bretagne (FR)
Catalonia (ES)
East Netherlands (NL)
Helsinki-Uusimaa (FI)
Mazowieckie (PL)
Östergötlands (SE)
Provence-Alpes-Côte d'Azur (FR)
Stockholm (SE)
Souther and Eastern Ireland (IE)
Thüringen (DE)



Photonics



# Photonics – 2017 November

Participants	Leads	Participants
	Flanders (BE)	Berlin (DE)
	South-Netherlands (NL)	Bretagne (FR)
		Catalonia (ES)
		East Netherlands (NL)
		Helsinki-Uusimaa (FI)
		Mazowieckie (PL)
		Östergötland (SE)
		Provence-Alpes-Côte d'Azur (FR)
		Southern and Eastern Ireland (IE)
		Stockholm (SE)
		Thüringen (DE)



Rationale of partnership	<p>a. <b>Vision:</b> Europe has to materialize its potential to become world leading in niche and special markets for (integrated) photonics and photonic enabled products</p> <p>b. <b>Mission:</b> Scale up and professionalize supply chains for (integrated) photonics and photonic enabled products by identifying best-in-class clusters in Europe, efficiently connecting clusters and make essential demonstration projects funding ready</p>
--------------------------	---

Status	Phase 1.				Phase 2.	Phase 3.	Phase 4.	
	Scoping	Mapping	Preliminary project ideas	Matchmaking	Design of projects	Business plan	Funding mix	Investment projects
	<b>On-going</b>							
	Scoping paper is in preparation							

Support received / needed)	<p>Vincent Duchene, Idea Consult for scoping document</p> <p>Applications for funding:</p> <ol style="list-style-type: none"> <li>1. Pilot Action on Interregional Innovation Projects</li> <li>2. 2018 : Manufacturing Pilot Lines (providing access to manufacturing of advanced photonics and related services, targeting a wider range of industrial players, in particular SMEs, low barrier access, low and medium production volumes, aiming for future high volume production at competitive cost</li> <li>3. Interreg NWE, approximately Euro 15 Mio, Netherlands (PhotonDelta), Germany, Belgium (Actphast), UK and Ireland (Tyndall) (2017)</li> <li>4. Interreg NL-FL, approximately Euro 3 Mio, Netherlands (PhotonDelta), Belgium (Brussel) (2018)</li> </ol>
----------------------------	---

Next steps / further info	Mapping Q1 2018
---------------------------	-----------------

# SMEs to the Industry 4.0

For Industry 4.0 paradigm, the digital transformation is the one of the most important business trends. To be successful, the digital transformation has to involve not just single companies, but all the partners across the extended value chain, including Digital Innovation Hubs. The digitalisation should allow partners along the supply chain:

- ❑ to improve products and/or services;
- ❑ to reduce costs;
- ❑ to manage operations in a more efficient way thanks to Production Performance Monitoring;
- ❑ to better stand their competition position (access to data and information useful to fasting and better answer to the market needs).

## Co-leading Regions/Member States/

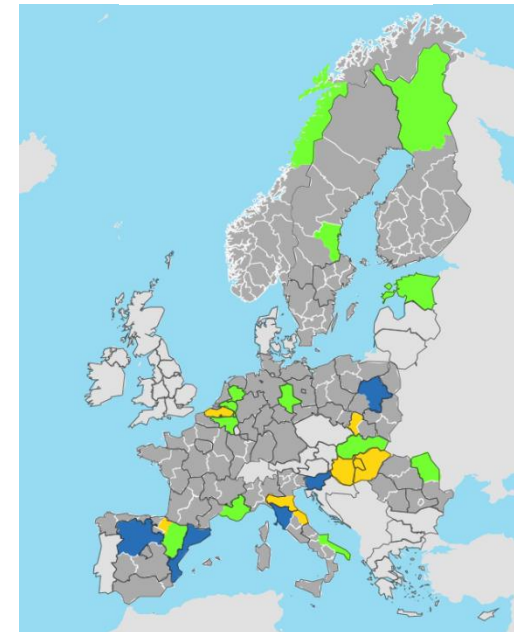
Castilla y Leon (ES)  
Catalonia (ES)  
Mazowieckie (PL)  
Slovenia (SI)  
Tuscany (IT)  
Valencia (ES)

## Participating regions

Silesia (PL)  
Marche (IT)  
Hungary (HU)  
Emilia-Romagna (IT)  
Flanders (BE)  
Navarra (ES)

## Interested regions:

PACA (FR)  
Puglia (IT)  
Slovakia (SK)  
Wallonia (BE)  
Gävleborg (SE)  
South-Holland (NL)  
East-Netherlands (NL)  
Lapland (FI)  
Helgeland (NO)  
North-East Romania (RO)  
Aragon (ES)  
Estonia (EE)  
Sachsen-Anhalt (DE)





# SME-s to Industry 4.0 [merged] – 2017 November

Phase 1.		Phase 2.		Phase 3.		Phase 4.	
Scoping	Mapping	Preliminary project ideas	Matchmaking	Design of projects	Business plan	Funding mix	Investment projects
Done	On going	Done	On going				
Demo-cases				Advancement		Support needed (including expert and indicating time)	
- Production Performance Monitoring Systems				More advanced cases – mapping underway for each area and its value chains – November 2017 – January 2018		mapping of concrete inter-regional value chain and proposals (by inter-acting with local stakeholders i.e. SMEs) and project design	
- Predictive modelling and maintenance							
- Virtual Reality and Simulation Technologies				Developing cases:			
- Smart logistics and network management				Consultative rounds – November 2017 – January 2018			
- Cyber-security for industry				Scoping – finalisation of areas – February 2018			
- Facilitated and Secure Access to the “Cloud”				Validation and endorsement by regional stakeholders – March – April 2018			
				Operationalisation and kick-off – May – June 2018			
Issues to be discussed on Steering team							
Next events							
Further events have to be planned. (including partnership events, agreed or needed matchmaking events for the next 6 months)							
Project submitted and results							
Partners applied for the INTERREG EUROPE – 2017 call. Priority Axes 2. “CYBER – Regional policies for competitive cybersecurity SMEs. Castile y León (ES) and Tuscany Region (IT) have been involved in the partnership led by Bretagne region (F), jointly with Digital Agency of Wallonia (BE), Chamber of Commerce and Industry of Slovenia (SI), Digital Agency of Wallonia (BE), Chamber of Commerce and Industry of Slovenia (SI), Information System Authority (EE).							

# Digitalisation and safety in tourism

The main objective of this thematic area is to help to strengthen tourism industries in the EU, especially in tourism digitalisation and tourism safety. The main goal of this thematic area is to reinforce the regional innovation capacity to facilitate investments based on open innovation infrastructure or new technology by clusters in regional innovation ecosystems.

The tourism regions involved will make a break-through in investments as they have strategically put the digitalization and safety in use as the key competitive factors.

## Leading regions:

Andalucia (ES)

Lapland (FI)

Slovenia (SI)

## Participating regions

Castile y Leon (ES)

Catalonia (ES)

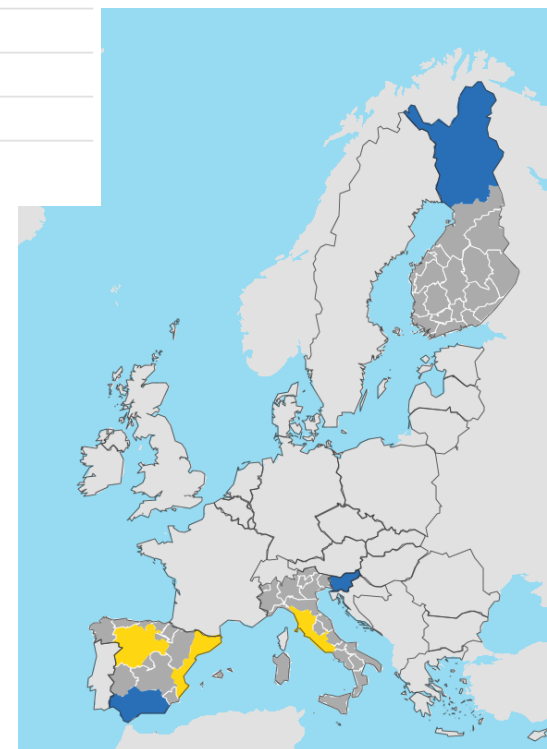
Lazio (IT)

Tuscany (IT)

Valencia (ES)



**Digitalisation and  
Safety for Tourism**





# Digitalisation and safety in tourism – 2017 November

Participants	<b>Leads</b>		<b>Participants</b>				
	Andalusia, lead Lapland, lead Slovenia, co-lead		Castile y Leon Catalonia Lazio Toscana Valencia				
Background	Tourism Safety was initiated by Lapland Finland. The theme was extended by digitalisation for Tourism. Therefore the two regions as leaders were appointed. The close cooperation with NECSTouR was established. Nine more regions expressed their interest in joining the partnership. The new thematic area of Digitalisation and Safety for Tourism was launched in Brussels on 27th of September 2017, on World Tourism Day.						
Rationale of partnership	An increase and boost investment in the tourism industry is the main purpose for setting this partnership. All regions involved have included Tourism in their regional strategies and/or s3. Tourism industry plays an important role in these regions. They have already tourism related clusters and/or collaboration structures involving stakeholders from industry, authorities and academia. Two sub-themes, digitalization and safety, are global megatrends in tourism, which can lead to innovative services/products (in service industry a product typically is an intangible service). These sub-themes were identified as areas being worthy of special support from local governments levels all the way to European levels.						
Status	<b>Phase 1.</b>		<b>Phase 2.</b>		<b>Phase 3.</b>	<b>Phase 4.</b>	
	Scoping	Mapping	Preliminary project ideas	Matchmaking	Design of projects	Business plan	Funding mix
	Done	Ongoing	Done				Investment projects
Support received / needed)	Scoping and preliminary project ideas (Eol phase), supported by JRC, DG Grow, DG Regio and NECSTouR. Expert (Reconfirm) started in Kick-off meeting (28 <sup>th</sup> Sept 2017). Reconfirm by Dec 2018. Mapping is supported by Reconfirm and NECSTouR (the middle of Dec 2017). Governance of the thematic area to be decided: steering group, operational team, agreements, communications, material bank, joint working papers, new regions interested to join, funding in general and of administrative work in particular etc. Next steps support received/needed from Reconfirm, Watify and NECSTouR. Further support is needed in the end of Phase 1 and in Phases 2-4.				<b>Demo-cases / pilot areas</b> <ul style="list-style-type: none"><li>• Access to data, use of open data</li><li>• Risk/Crisis Management</li><li>• Safer and flexible journey in urban/rural/mountain/coastal areas</li><li>• Green mobility and connectivity in urban/rural/mountain/coastal areas</li><li>• Business safety</li><li>• Investing in climate change mitigation</li></ul>		
Next steps	<ul style="list-style-type: none"><li>• 7.11.2017 Valencia, partner workshop</li><li>• 9.11.2017 Valencia, meeting organised by JRC</li><li>• 28.11.2017 European Tourism Day, Brussels</li><li>• 29.11.2017 partner collaboration lab, first draft of Mapping paper by Reconfirm</li><li>• 15.12.2017 deadline for Mapping paper</li><li>• 31.10.2017 deadline for Call for Expression of Interest for Thematic Partnerships to Pilot Interregional Innovation Projects: Application on Risk Management.</li></ul>						



# Topics for DIH collaboration

- Establishment of a pan-European DIH Network
- Sharing of best practices
- Joint projects in (possibly in H2020; Cosme, Erasmus , Interreg):
  - Robotics
  - Visualisation
  - Industrial automation
  - Industrial transformation
- Service development
- Match-making
- Cross clustering
- Secondments, exchange of people
- Digital maturity benchmarking
- Demonstration networks
- Joint Voucher schemes