

Joint Research Centre

the European Commission's in-house science service

*Serving society
Stimulating innovation
Supporting legislation*

How the Smart Specialisation Platform for Industrial Modernisation supports EU regions in implementation of their Smart Specialisation Strategies (S3)?

Smart Specialisation Platform
DG JRC B.3, European Commission

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SMART SPECIALISATION PLATFORM



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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

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

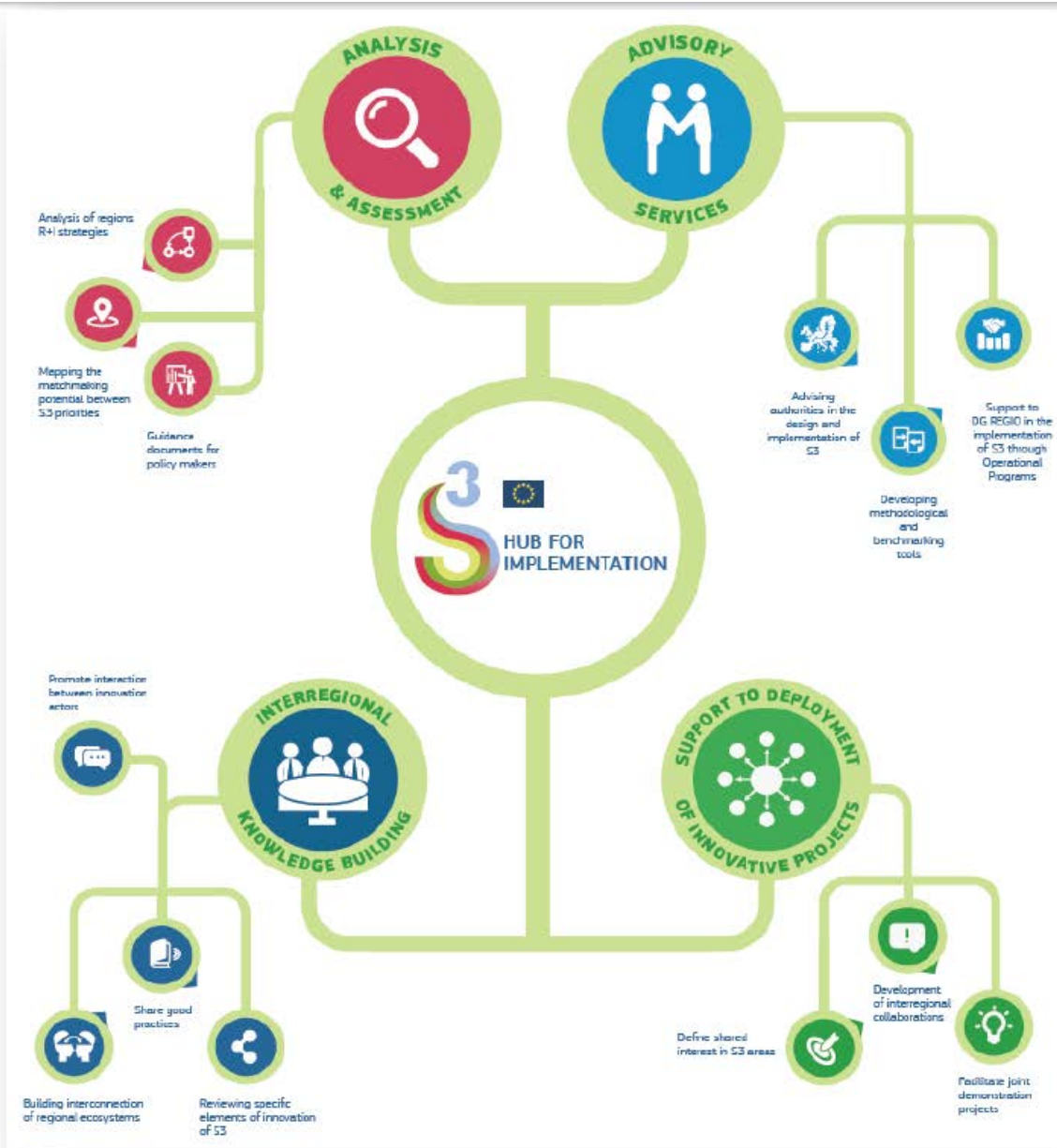
[RIO - Research & Innovation Observatory](#)



S3 Platform
@S3Platform

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

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

Smart Specialisation - paradigm shift in the EU planning of Research&Innovation investments

- Research strengths with business needs
- Clear prioritisation
- Bottom-up interactive process
- Concentration of resources
- Critical mass
- Faster uptake of ideas
- Building interregional cooperation

Reasons for opening up Smart Specialisation Strategies (Internationalisation of S3)

- get access to wider business and knowledge networks
- get necessary research capacity
- reaching out to other markets
- expanding business opportunities
- combining complementary strengths
- joining GVCs
- etc.

Stages of transnational cooperation in S3

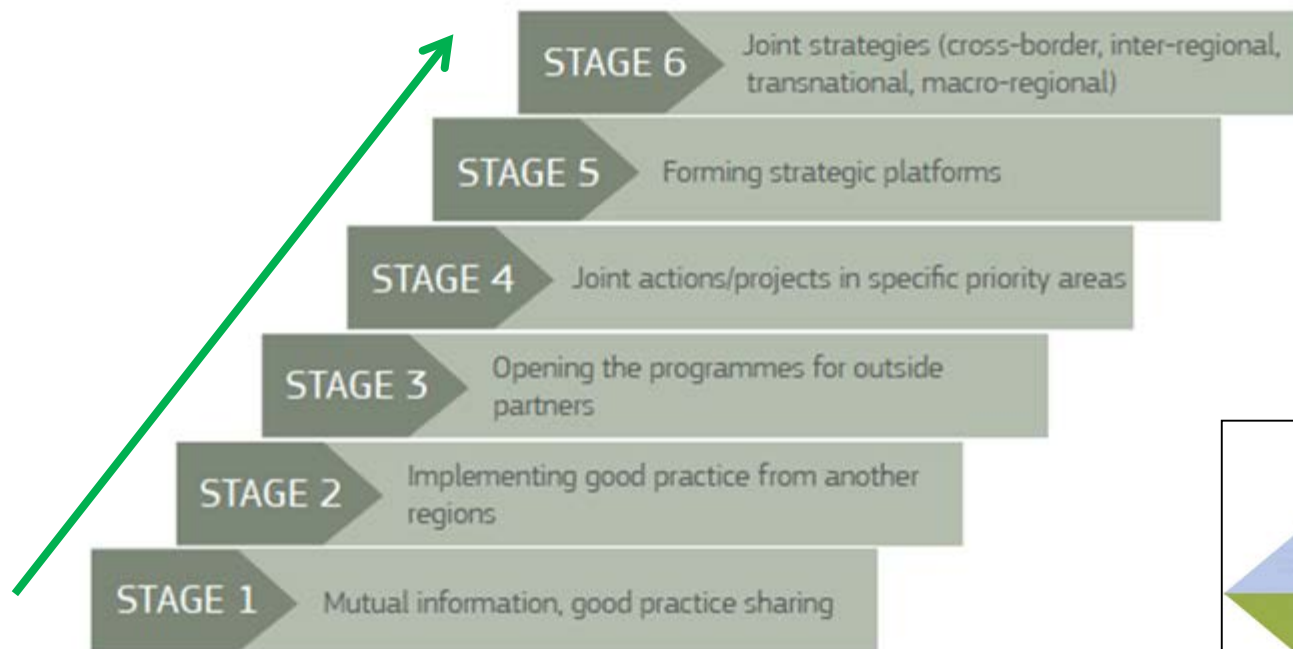


Figure IV.1 Evolution of transnational collaboration



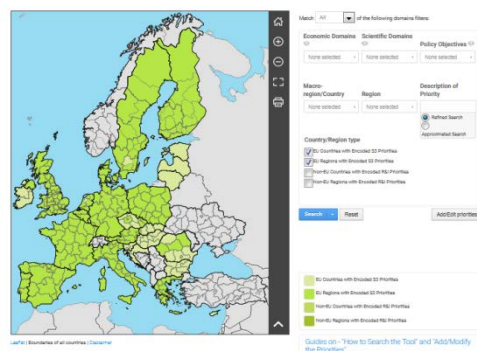
Eye@RIS3: Innovation Priorities in Europe

Eye@RIS3 visualises public investment priorities for innovation across Europe. It enables public managers and stakeholders to position their territory in comparison to other territories and to find potential partners for collaboration. Inside the EU, priorities are linked to the use of the European Regional and Development Funds (ERDF). Data are based on the information found in Smart Specialisation Strategies and related strategy documents. Outside the EU, they represent priorities reported in various government strategy documents.

To allow for easy comparisons with established classifications, priorities are classified using the *Subsector Classification of Economic Activities in the European Community (NACE rev. 2)* and the *Nomenclature for the Analysis and Comparison of Economic Programmes and Budgets (NACE rev. 2)*.

Last update: The tool has been fully updated in September 2017. Data are continuously updated based on inputs from European regional and national authorities and their stakeholders (also called the "territorial discovery process" in the literature on smart specialisation).

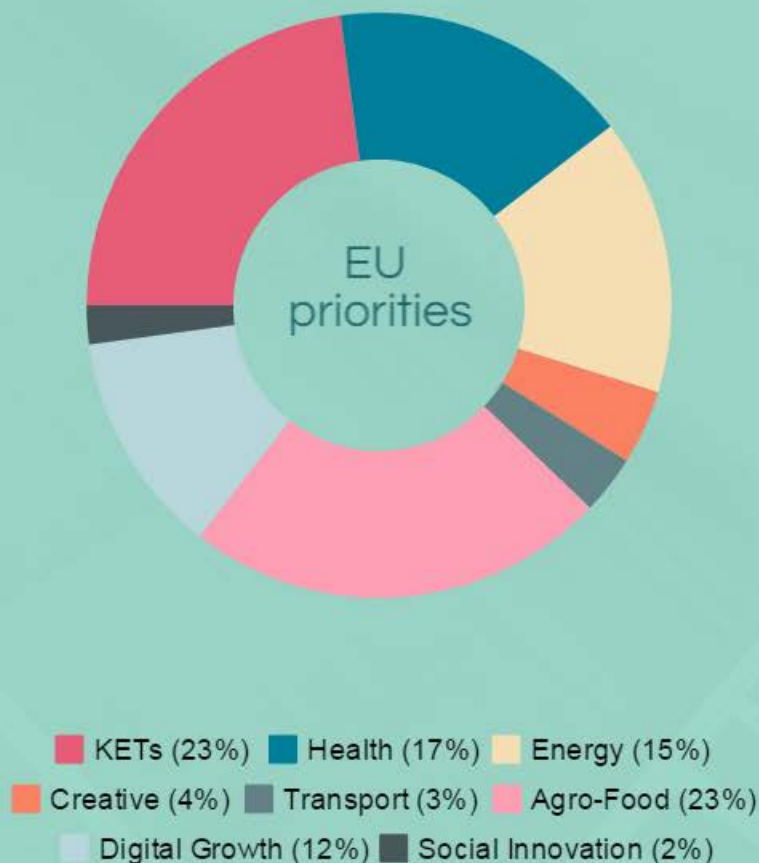
[More information](#)



1,260+

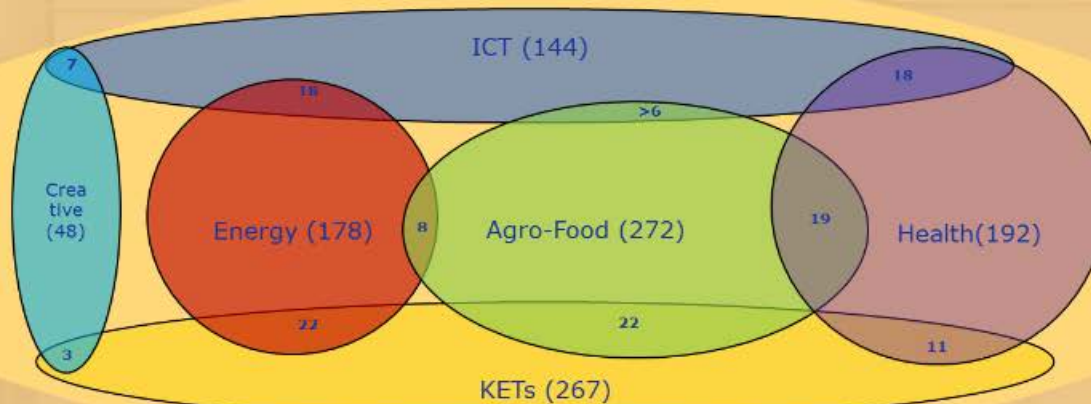
The number of priorities encoded in the Eye@RIS3 database

Main RIS3 categories (2015)



Many RIS3 priorities are linked to several such categories

Overlaps in priority areas



1

The largest overlap areas

ICT/KETS-22
KETS/ENERGY-22

2

Large overlap areas

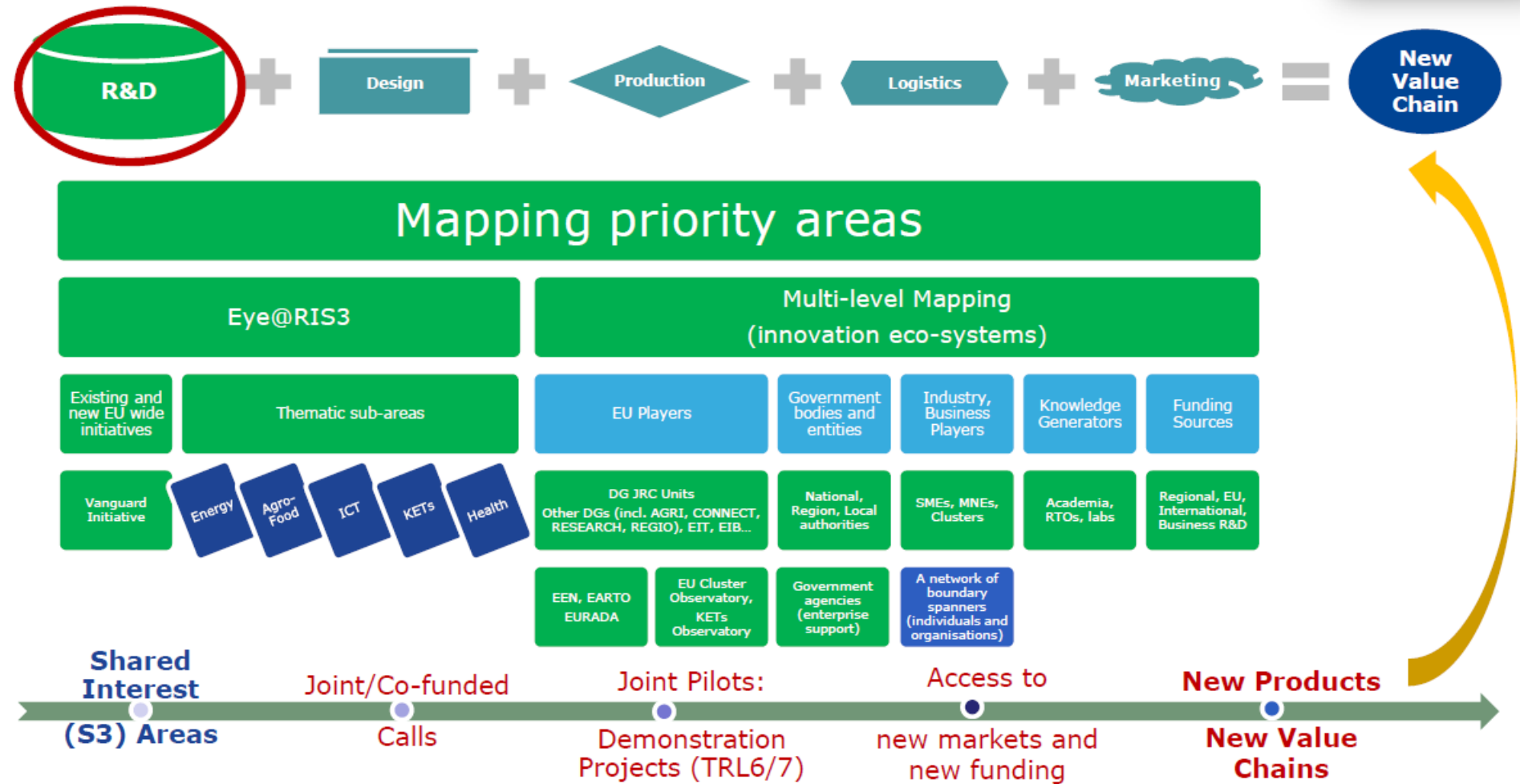
AGRO-FOOD/HEALTH-19
ENERGY/ICT-18
ICT/HEALTH-18
KETS/HEALTH-11

3

Significant overlaps

ICT/CREATIVE-7
AGRO-FOOD/ENERGY-8
ICT/AGRO-FOOD-6
CREATIVE/KETS-3

How S3P supports Thematic platforms?



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

Join an existing proposal/ partnership

Regions/ countries need to consider:

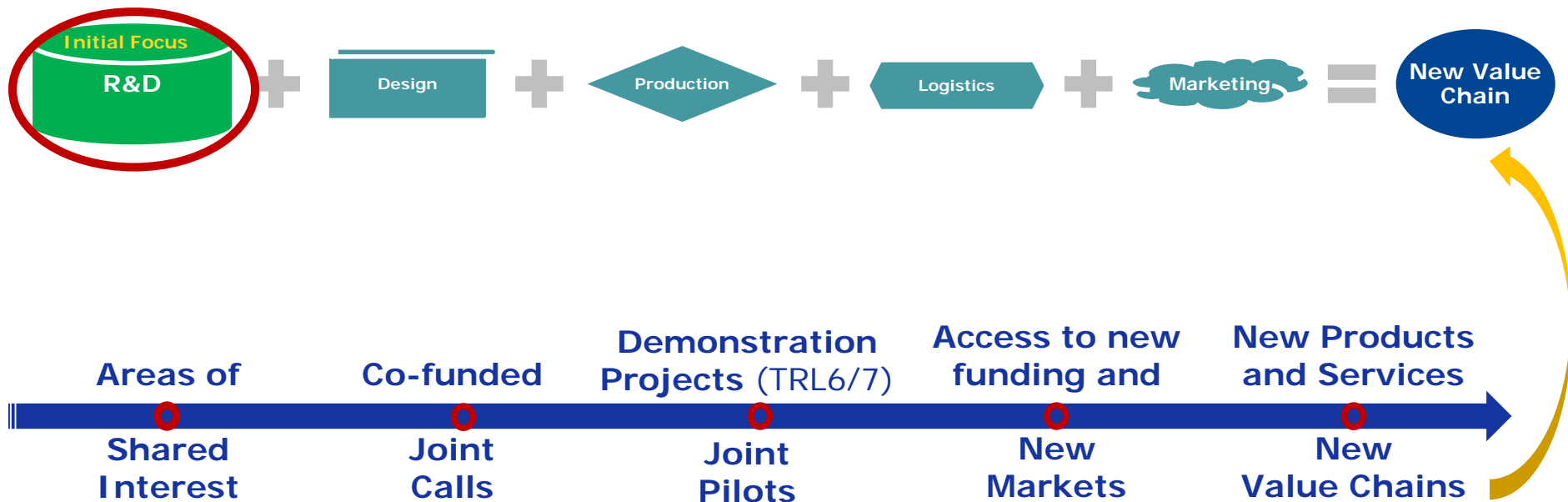
- if the theme is **linked to their S3 priority(-ies)**
- if they have **dedicated resources (for co-investment)** to implement activities in this area
- if collaboration is of **mutual benefit** for all participating regions

and also:

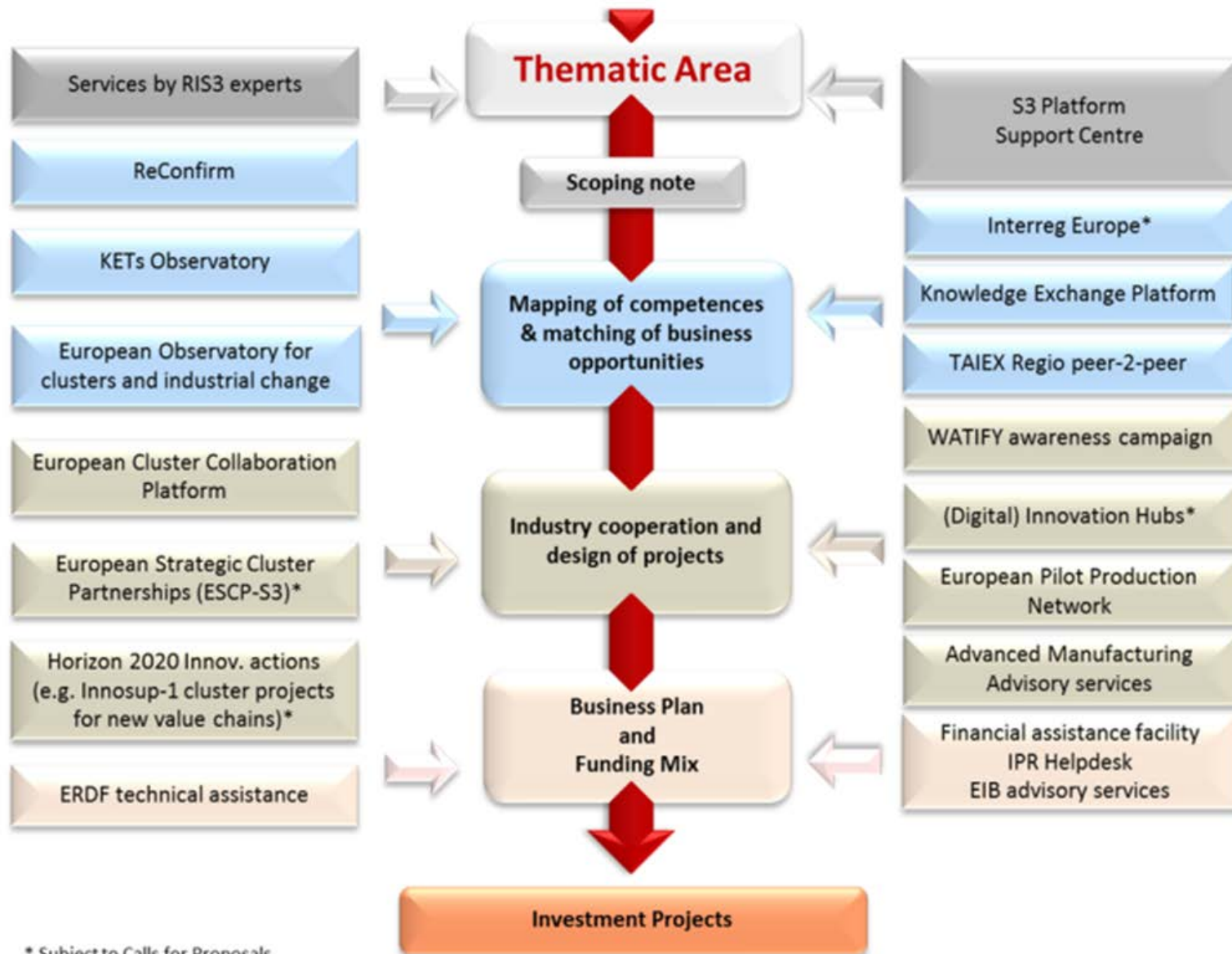
- what they would like to **achieve from** such partnership
- what they are **bringing in**
- how they see the **their region's activities fit into** the possible value chains that would be developed by participating regions

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.



Support mechanisms



Qualification criteria for the partnerships

- **Relevance and importance of the proposed thematic areas:** transformative and innovative idea, clear added-value, sufficient granularity, business interest, synergies, etc.
- **Level of ambition and commitment** (political and financial)
- **Leadership:** two or more regions have commitment as lead-regions
- **Number of regions involved and geographical balance**
- **Envisaged involvement of stakeholders** (industry, academia, public authorities, civil society), including cluster organisations and business networks
- **Links to RIS3 priority areas**
- **Openness towards other regions**

Robotics as an explicit S3 priority at EYE@RIS3



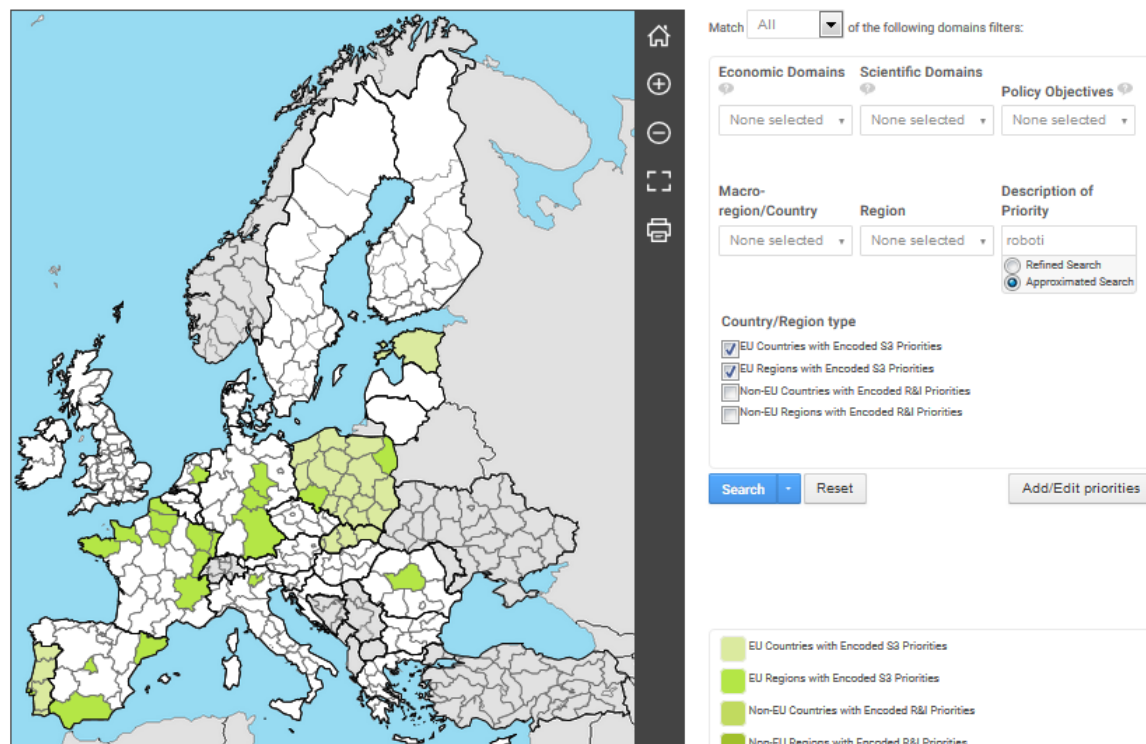
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To allow for easy comparisons with established classifications, priorities are classified using the [Statistical Classification of Economic Activities in the European Community \(NACE rev. 2\)](#) and the [Nomenclature for the Analysis and Comparison of Scientific Programmes and Budgets \(NABS 2007\)](#).

Last updates: The tool has been fully upgraded in September 2017. Data are continuously updated based on inputs from European regional and national authorities and their stakeholders (also called the "entrepreneurial discovery process" in the literature on smart specialisation).

[More information](#)



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

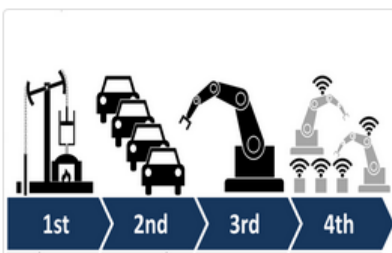


Photonics

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

S3P-Industry – work progress overview

Theme	Leading regions	Workflow phases								Projects / demo cases
		Scoping	Mapping	Preliminary project	Matchmaking	Design of projects	Business plan	Funding mix	Investment project	
ADMA energy application	Basque Country Scotland	Defined	Defined	Defined	Defined / done					1) Real condition testing of new materials for offshore: composites, steel, ductile iron and light metals 2) Cost-effective power transfer 3) Optimised corrosion management – including modelling, sensing and design
Bioeconomy	Lombardy Region Randstad region	Defined	Ongoing	Defined	Ongoing	Partly defined				1) Bio-based aromatics 2) Lignocellulose refinery 3) Turning (waste)gas into value 4) Biogas beyond energy production 5) Aviation biofuel 6) Food and feed ingredients from agro-food waste 7) Food and feed ingredients from algae
Efficient and sustainable manufacturing pilot	Lombardy Catalonia	Defined	Defined	Defined	Ongoing	Partly defined	Ongoing			1) De- and remanufacturing to recover and re-use functions and materials from end-of-life products 2) Adaptive and intelligent manufacturing and assembly for personalised products and components 3) Advance sustainable surface and coating manufacturing technologies on polymer materials 4) Digital and virtual factory integrated planning and simulation into operative environment
High performance production through 3D printing pilot	Flanders South Netherlands Norte	Defined	Defined	Defined	Ongoing	Defined	Ongoing	Ongoing		1) Multi-materials components by hybrid 3D-printing manufacturing (metal-CFRP) 2) Mono-material metal 3D printing for automotive components and tools for large, medium and small parts 3) 3D-Printing complex parts for machinery & tooling 4) Additive subtractive high precision and high finish pilot production hubs 5) 3D-Printed customized components for orthosis, exoskeleton and exoprostheses 6) Mass-customized consumer goods in creative industries
Incorporation of SMEs to the Industry 4.0 paradigm	Florence Castilla y Leon Valencia Catalonia Mazowieckie Slovenia Hungary	Defined	Ongoing	Defined	Ongoing					1) Predictive modeling and maintenance (applied to automotive/food and agricultural machinery) 2) Production Performance Monitoring Systems (PPMS – metal machining) 3) Virtual Reality and Simulation Technologies (AutoFood) 4) Smart logistics and network management (food) 5) Cyber-security for industry (generic) 6) Facilitated access to the “cloud” (generic)
Medical technology	Auvergne-Rhône-Alpes Lombardy	Defined	Ongoing	Ongoing	starting					Under validation: 1) Medical devices 2) Medical imaging 3) Connected health 4) Biomaterials and implants 5) Drug delivery 6) In vitro diagnosis 7) Computer assisted medical intervention
New nano enable products pilot	Skåne Tampere	Defined	Defined	Defined	Ongoing	Ongoing				1) Nano wires for ICT and energy applications 2) Nano-Enabled Microsystems for Bioanalysis (NeMs4Bio) 3) Printed nano-electronics: integrated energy harvesting / cross technology application platform 4) Industrial pilot production of nanomaterials establishing new value chains
Smart Regional Investments in Textile Innovation	Valencia North-East Romania	Defined	Defined in most regions	Defined	Ongoing	Starting				1) Sustainability (resource-efficiency and circular economy) 2) Industry4.0 and new digital business models 3) Sector diversification (Technical & smart textiles) 4) Design- and creativity-based innovation (incl. eco-design)
Sports	Lapland	Defined	Ongoing							1) Smart Sport Wearables (quantified self) - ICT4Self 2) Smart Sport environment and IoT (quantified environment) - ICT4Env 3) Healthy active lifestyle - Sport4Vitality
Digitalisation and safety in tourism	Lapland Andalusia Slovenia	Defined	Ongoing	Defined						1) Access to data, use of open data 2) Risk, crisis management 3) Safer and flexible journey in urban, rural, mountain, coastal areas 4) Green mobility and connectivity in urban, rural, mountain, coastal areas 5) Business safety 6) Investing in climate change mitigation
Photonics	South Netherlands Flemish region	Ongoing	Starting							

Scoping Note – Sport partnership

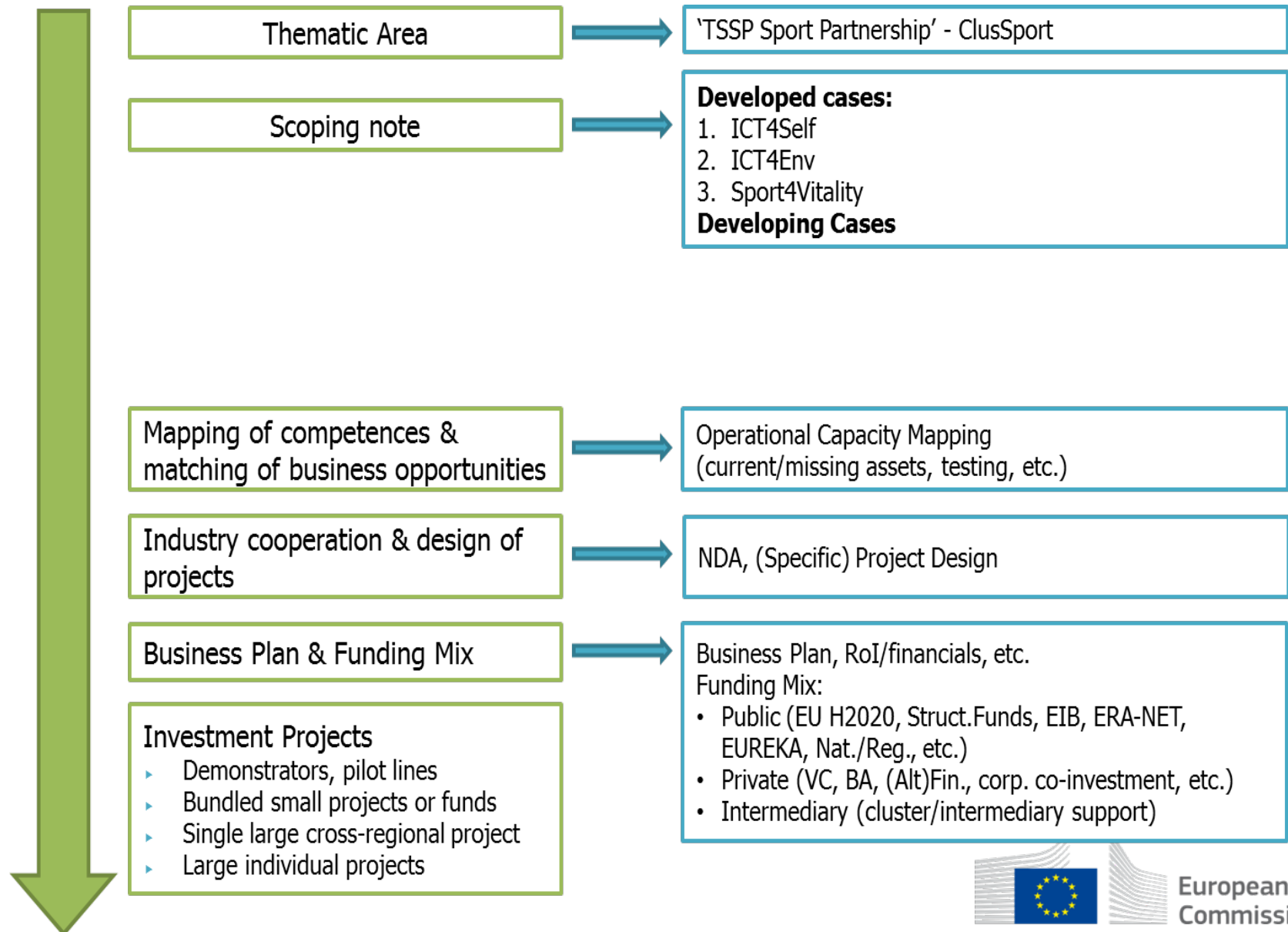
Vision. The vision of the partnership was consensually agreed upon. It is formulated below:

“The Sport Partnership aims to support EU regions committed to generate a pipeline of business investment projects in the sport sector”

Rationale. The rationale was also elaborated further and is presented below:

“Following a bottom-up approach - implemented through interregional cooperation, cluster participation and business involvement as well as aligning specialization profiles of the partner regions”

Scoping Note – Sport partnership



Thematic Platforms

[Agri-Food](#)

[Energy](#)

[Industrial Modernisation](#)

[How does it work](#)

[Thematic Areas](#)

[Creating a new Thematic Area](#)

[EU Support](#)

[Documents](#)

[Steering Committee meetings](#)

▪ **Meeting 08 November**

▪ [Meeting 17 March](#)

[About our methodology](#)

2nd steering committee meeting - 08 November 2017

The 2nd Steering Committee of the Smart Specialisation Platform for Industrial Modernisation took place - alongside the [GROW your REGION conference](#) held on 8-9 November 2017- in Valencia, Spain.



The meeting was attended by representatives of the leading regions of the 11 qualified partnerships, various European Commission services, EIB, Interreg and invited experts.

Presentations from European Commission services:

[Progress and next steps](#)

[European strategic cluster partnerships](#)

[Pilot actions linked to smart specialisation](#)

Presentations from the new partnerships:

[Sport partnership](#)



Stay in touch

S3 Platform webpage: <http://s3platform.jrc.ec.europa.eu>

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