Basque Country

RIS3 EUSKADI
&
ADVANCED MANUFACTURING STRATEGY
Basque Industry 4.0

MANUMIX INTERREG EUROPE

1st Learning Journey

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2. Scope of advanced manufacturing in the region
   - Priority areas
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Basque Country´s general figures

BIGlittle
BASQUE COUNTRY

30,459€
GDP per capita
(119 EU 28: 100)

23.5%
Industrial GDP
(EU average: 19.3%)

130
Productivity per employed person
EU 28:100

1,660
Internationalized Companies

31.9%
Exports to GDP ratio

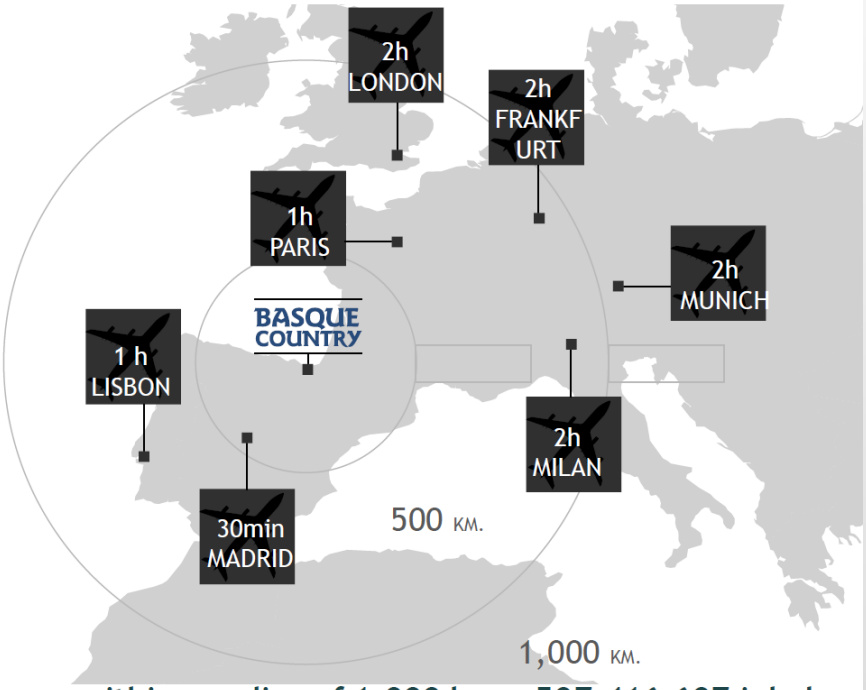
2.03%
R&D expenditure on GDP

0.981
Human Development Index

30,000
Researchers

Population 2,173,210

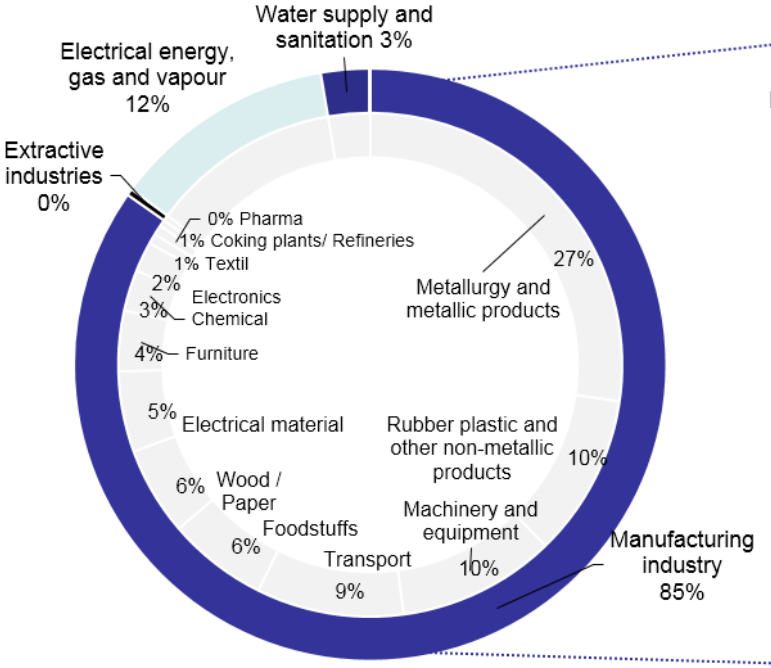
Surface 7,234 sq. Km.



Market access within a radius of 1,000 km 507,416,607 inhabs.

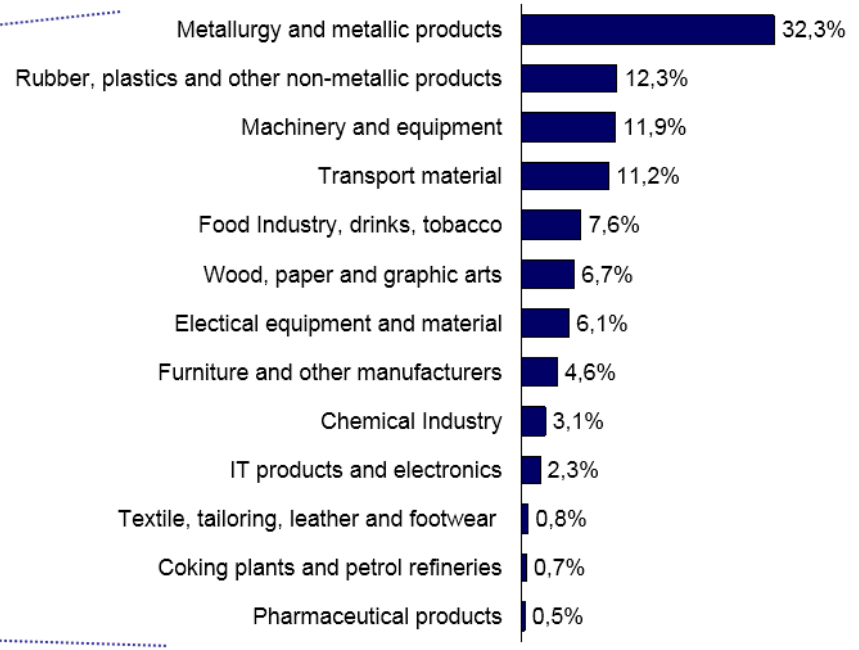
Basque Country´s general figures

GAV Distribution by sector (%, 2012)*



(*) basic prices and current euros (base 2010)
Source: Eustat

Distribution of the manufacturing GAV by activities (%, 2012)*



(*) basic prices and current euros (base 2010)
Source: Eustat

Basque Country: leading hub

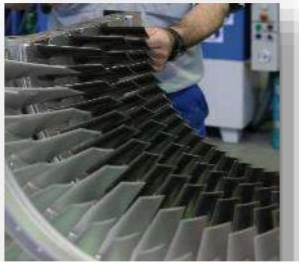
ENERGY

68,000 Jobs,€44,000 M
IBERDROLA, GAMESA

AUTOMOTIVE

36,583 Jobs, €15,004 M
CIE, GESTAMP, MERCEDES

AEROSPACE



12,546 Jobs, €1,755 M
ITP, ROLLS ROYCE, SENER

RAILWAY

14,176 Jobs. €2,600 M
CAF, TALGO; BOMBARDIER

MARITIME

14,210 Jobs, €2,150 M.
VICINAY, ZAMAKONA

MACHINERY

5,672 Jobs, €1,180 M
DANOBAT; IBARMIA

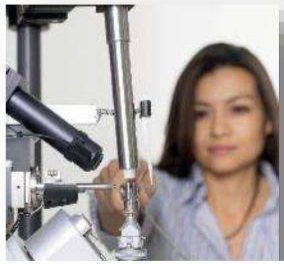
ELECTRONICS &ICT

10,840 Jobs, €2,840 M
IBERMATICA; EUSKALTEL; ZTE

ECOINDUSTRIES

20,000 Jobs, €4,000 M
IDOM; ACCIONA; FCC AMBITO

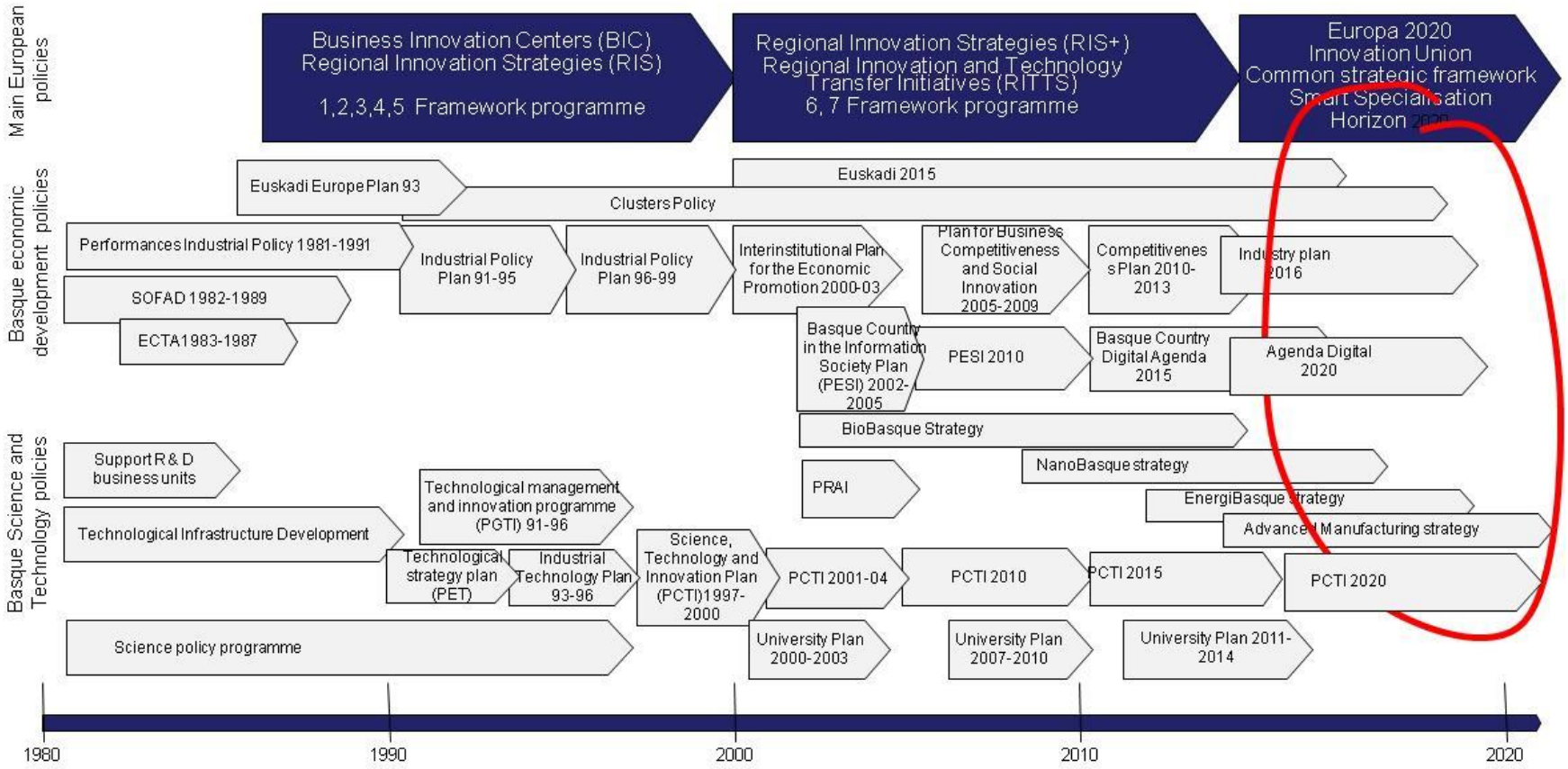
BIOSCIENCES



2,700 Job, €376 M
GRIFFOLS; ROXALL; NORAY

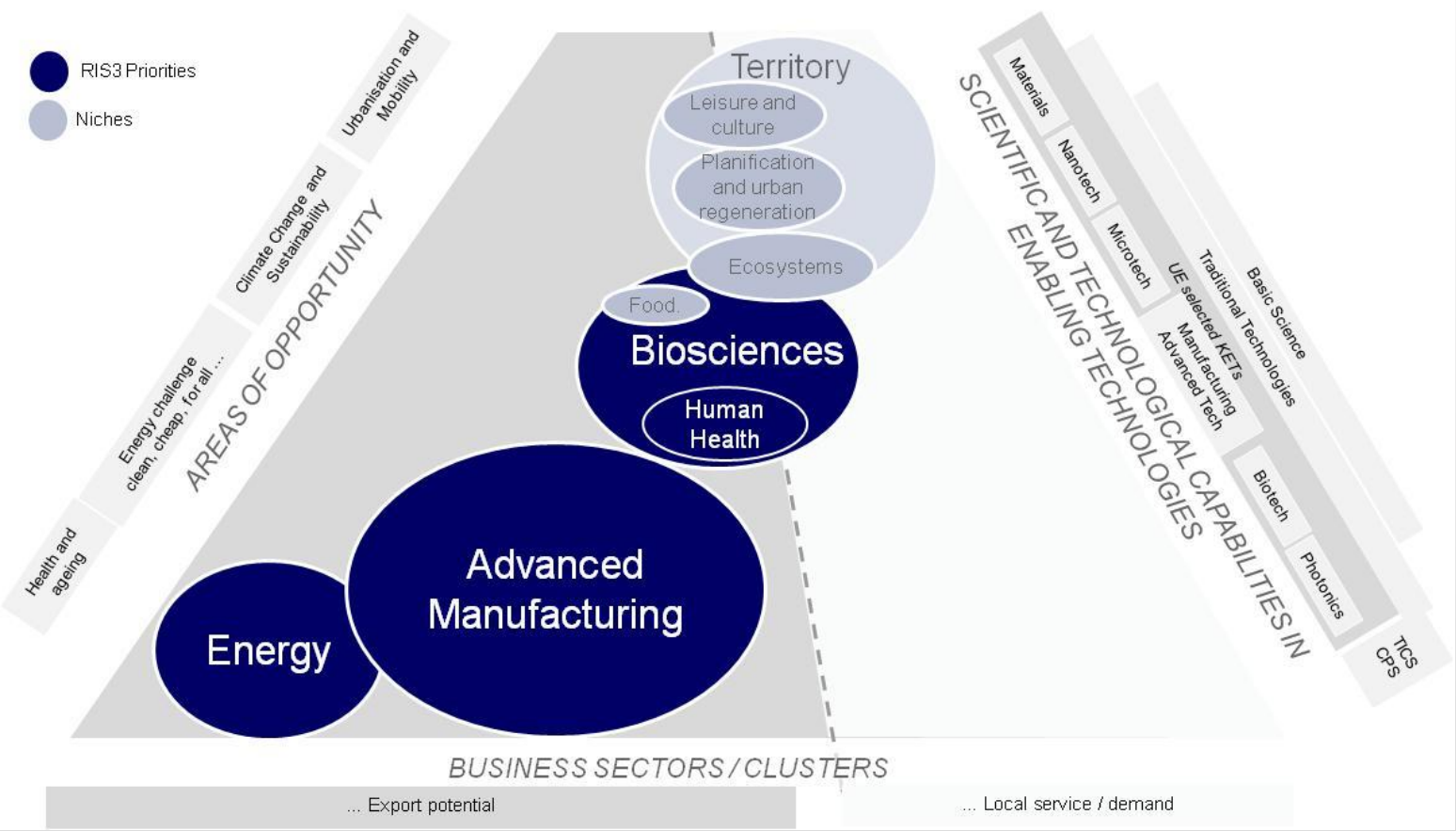
Industrial Policy in Basque Region

- RIS3 strategy is a natural extension of Basque historical policies in this area.
  - Basque Country has a long history defining economic development strategies over the last 35 years.
  - Consecutive plans and strategies, responding to specific needs of each stage, have progressively sought modernization, competitiveness, specialization, diversification and sophistication of Basque economy.



Priorities for specialisation
Vertical priorities. RIS3 euskadi

- Three smart specialization priorities have been selected: **Advanced Manufacturing, Energy and Biosciences (mainly human health)**. Additionally, some niches related with the Territory have been identified



Main challenges

- Main challenges identified during the Advanced Manufacturing Strategy definition

Manufacturing main challenges

Final challenges (Basic strategy)	To shorten the deadlines from knowledge generation to the market	To industrialize in large scale products and processes based on emerging technologies
Action challenges (Action lines)	To train, educate and attract the needed professional profiles	To generate infrastructures for the development of pilot experiences To develop the means to produce and industrialize products and services based on emerging technologies
Support challenges (Governance)	• To improve the effectiveness and efficiency of policies to boost R&D in manufacturing • To use the challenges posed by global megatrends (aging, climate change, resource scarcity) to design and develop competitive technologies, products and processes.	• To coordinate business sector, scientific and technological agendas • To advance in agent cooperation within and across sectors as well as locally and internationally • To deepen the value of intangibles associated with the design and generation of brands

Scope

Joining visions, steps and strategies requires a really intensive-cooperation driven process

Advanced Manufacturing Strategy Mision

To strengthen the position of the Basque Country as an economy with an industrial base through the promotion of knowledge intensive manufacturing

Advanced Manufacturing Strategic Objectives

SO1. To help and guide Basque companies towards more knowledge intensive manufacturing activities which have greater added value

Integration of KETs

SO2. To promote multi-disciplinary and technological convergence in a structured fashion so as to develop best-in-class manufacturing capacities and solutions while optimizing existing resources

Global value chains– Cluster 2.0

SO3. To integrate local and international value chains to meet the challenges of Advanced Manufacturing using the sum of the particular capacities of each sector and its companies

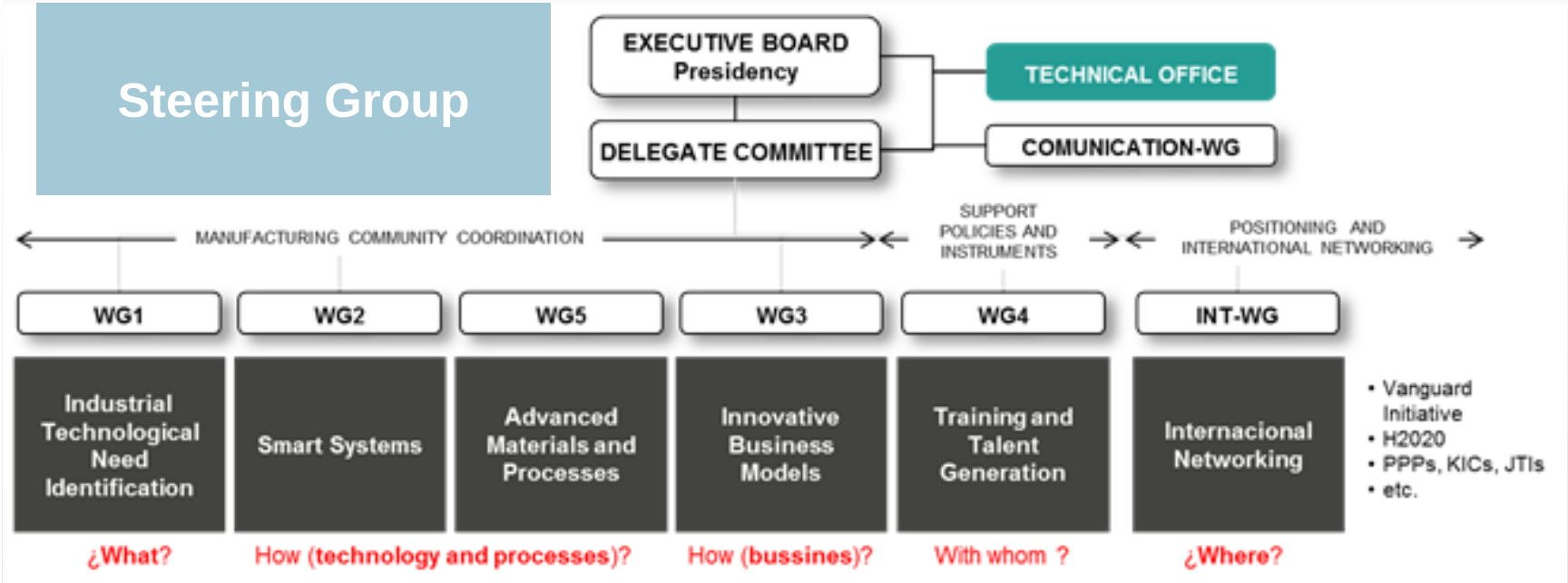
Scaling Up

SO4. To foster collaboration and support as a catalyst for the industrialization of the results of R+D+i in Advanced Manufacturing

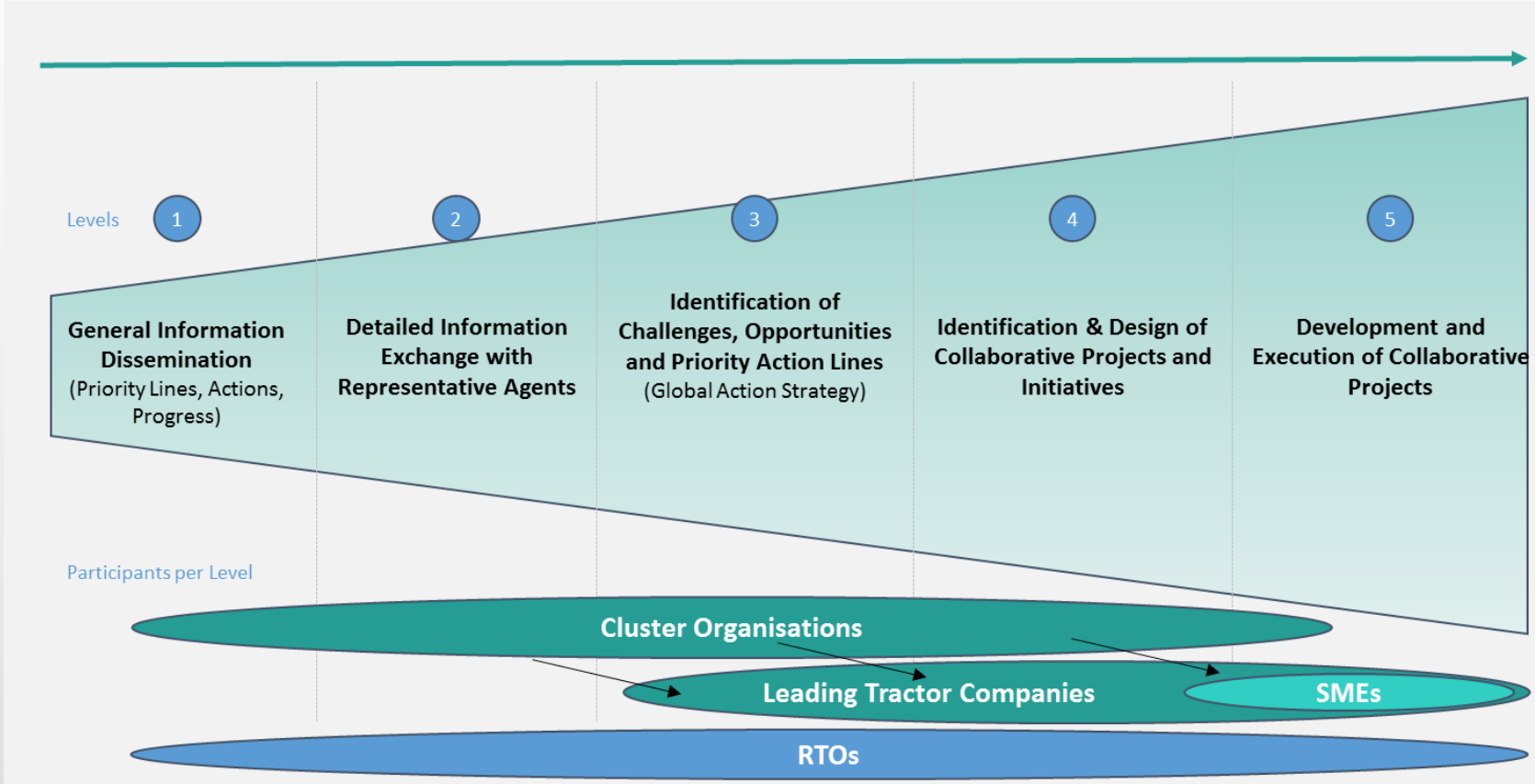
SO5. To support education and job training in technologies and management systems related to Advanced Manufacturing

Private-public collaboration

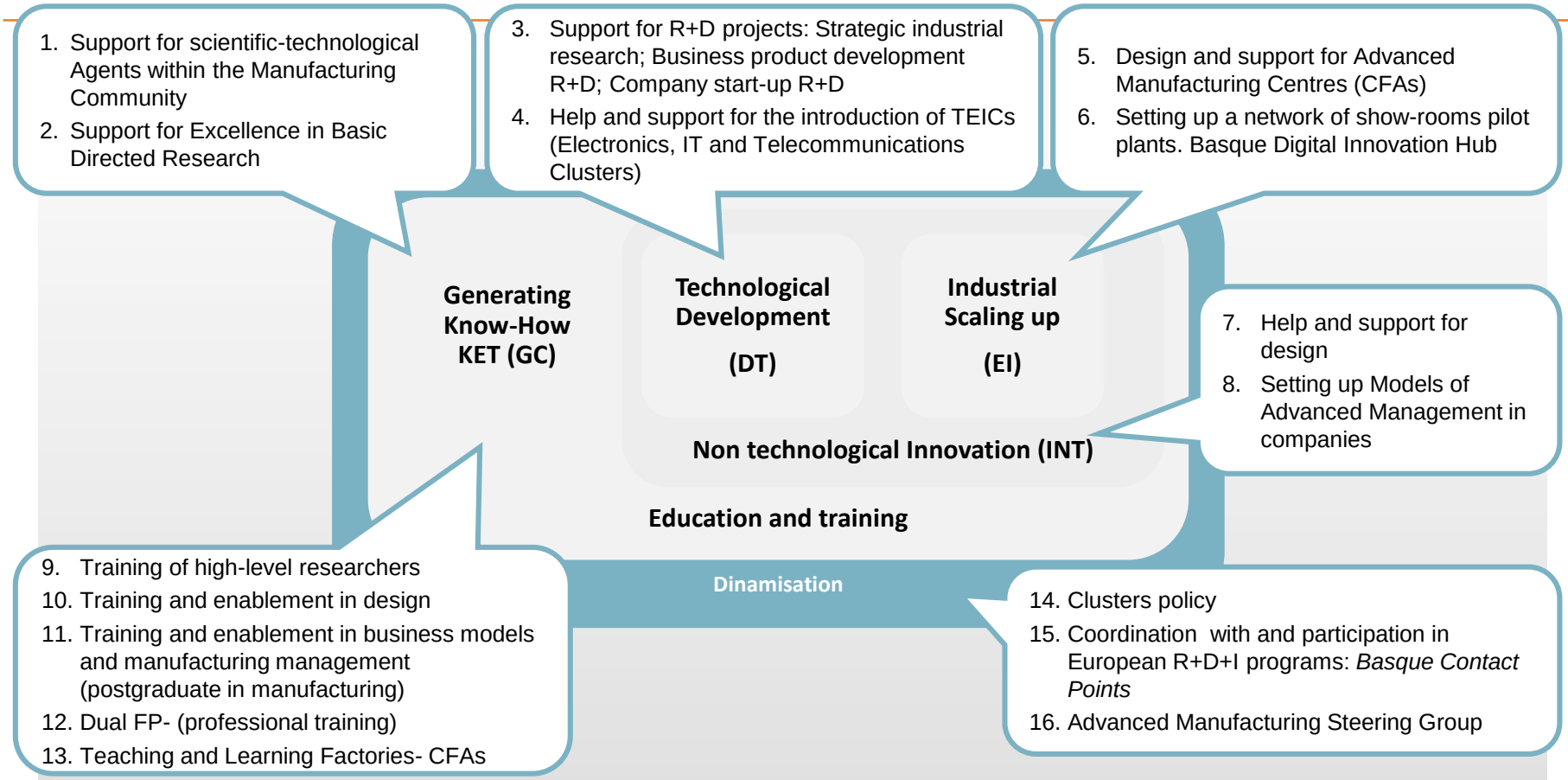
The aim of the Steering Group is to define and implement an orderly action plan aimed at responding in the short and medium-term to technological, business, organization and talent development priorities established by tractor industrial sectors in Euskadi, for increase their competitiveness and take advantage of future opportunities presented globally



RIS3 Implementation
Stakeholders involvement



RIS3 Implementation
16 action lines – 6 core themes



Applying a transversal approach involving various Government Departments and public companies to undertake responsibility for the programmed actions

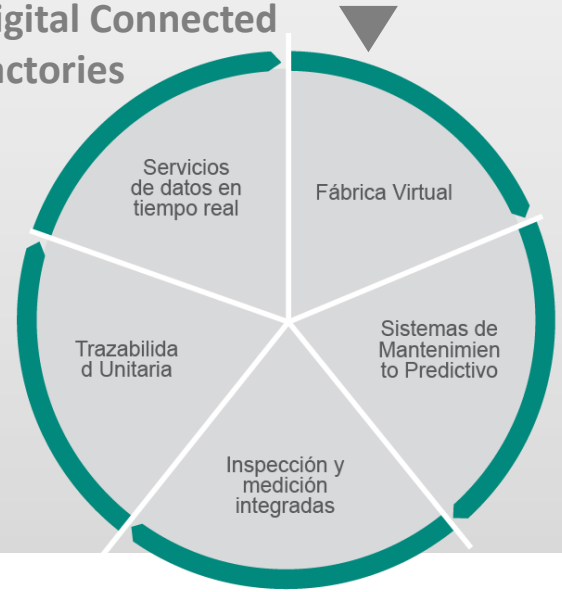
Technology Areas

A commitment to technological development in Advanced Manufacturing is crucial to maintain competiveness in industry and to secure positioning in market niches with greater added value.

Energy efficiency

Flexible, smart and efficient manufacturing systems

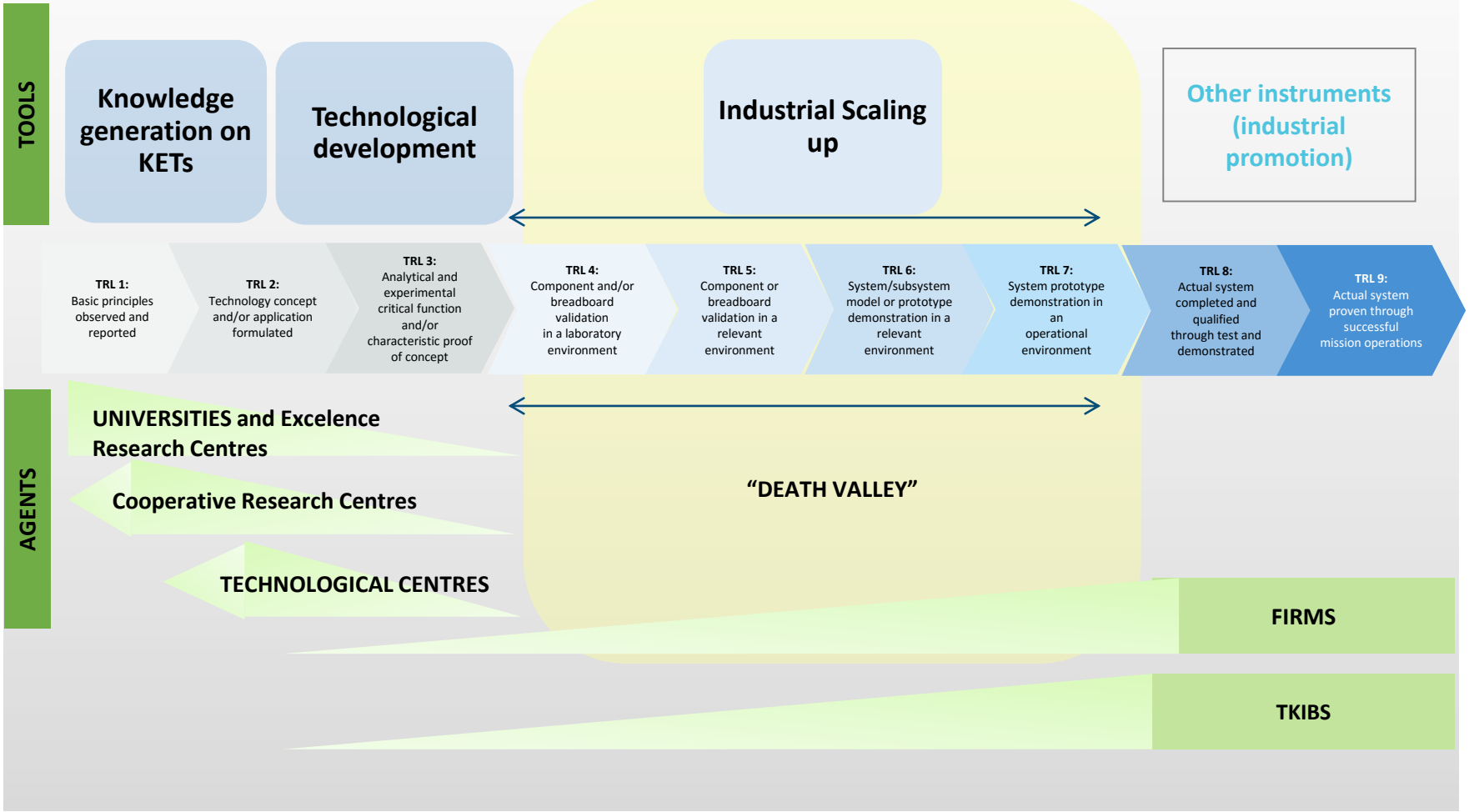
Digital Connected Factories



Advanced Materials and Processes

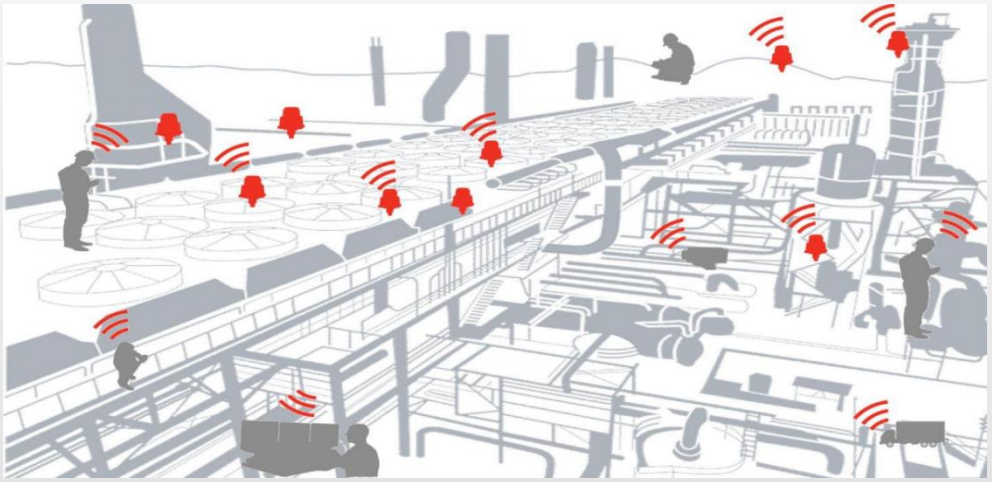
RIS3 Implementation Instruments

R&D support instruments have been focused on the support of knowledge generation within the Basque Science and Technology Networks and support of R&D activity within firms



RIS3 Implementation
New Instruments

Technology transfer R&D in EICTs towards Industry



Technology Transfer Projects of **"technological suppliers"** (such as agents of the Basque Science, Technology and Innovation Network) to manufacturing **industrial companies**, in the area of EICTs (Electronics, Information and Communications Technologies) applied to **Advanced Manufacturing**, which have a demonstration effect and which will therefore accelerate the transfer to the market of the results of R&D projects in EICTs.

RIS3 Implementation
New Instruments

Technology transfer R&D in EICTs towards Industry

1 | TECHNOLOGY AND INNOVATION
Basque Industry 4.0

PERIOD:
Pending publication-June 2017

PURPOSE

Support for Industrial Research and Experimental Development Projects that involve technology transfer from technology suppliers to industrial companies, in the realm of EICTs applied to Advanced Manufacturing, which have a demonstrative effect and make it possible to accelerate the transfer of results from R&D projects on EICTs into the market.

INTENDED FOR

Industrial manufacturing companies

SUBSIDY DESCRIPTION

The Projects must be related with one of the following areas, within the scope of the CPSs (Cyber Physical Systems) applied to advanced manufacturing: Cybersecurity and Industrial Communications - Cloud Computing - Big Data - Advanced Analytics and Business Intelligence - Collaborative Robotics - Augmented Reality - Artificial Vision - Sensor Systems - Design and Additive Manufacturing in metallic and advanced materials (ceramics, composites, etc.).

SUBSIDY TYPE

Subsidy figures: 25% of the eligible expenses and investments approved + 15% when the project involves effective cooperation between a company and one or more research and knowledge dissemination entities, up to a limit of €150,000 per project.

Eligible expenses and investments:

- Hourly-based work time expenses of the "R&D Agent" (for example, the agents in the Basque Science, Technology and Innovation Network), including assistance and consultation at the industrial plant.
- Hourly-based work time expenses of the "implementer" (consulting and engineering firms).
- Costs of acquiring Industrial Property offered by the RVCTI agent.
- Investments and/or expenses on hardware and software.
- Internal personnel costs of the beneficiary company assigned to the project which is given the Subsidy.

The maximum annual funding per company shall be €200,000.

REQUIREMENTS

The projects must be classified from a level of TRL 5 to TRL 9.
Minimum budget of the projects: €75,000

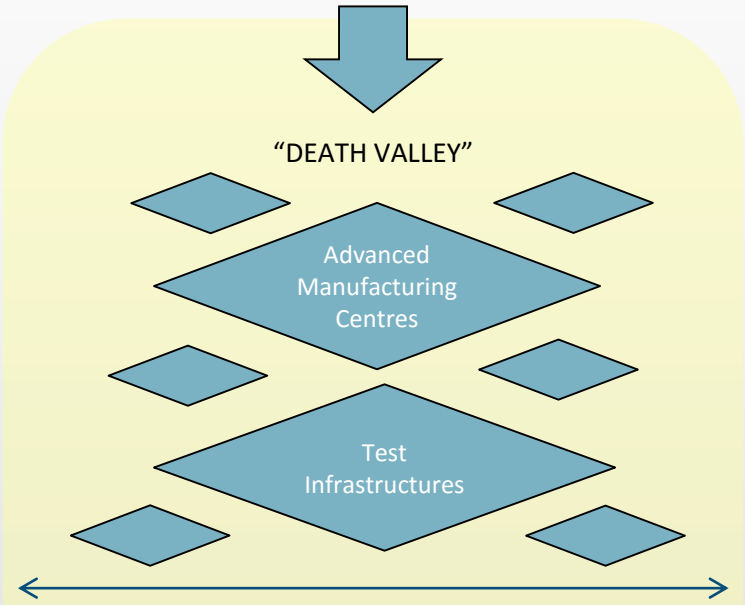
Year 2017 Subsidies Brochure
902 702 142 I info@spri.eus

RIS3 Implementation
New Instruments

ADVANCED MANUFACTURING CENTRE MODEL

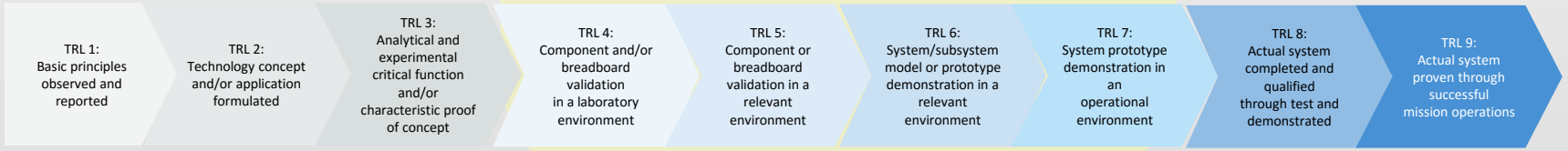
PUBLIC-PRIVATE COLLABORATION

. Public support for initial investment
. Cluster manages the infrastructure
. Research Entity operates the facility
. Industry Consortium supports operation
. Open access to any user



windbox
ADVANCED TEST & VALIDATION CENTRE FOR WIND POWER

CFAA

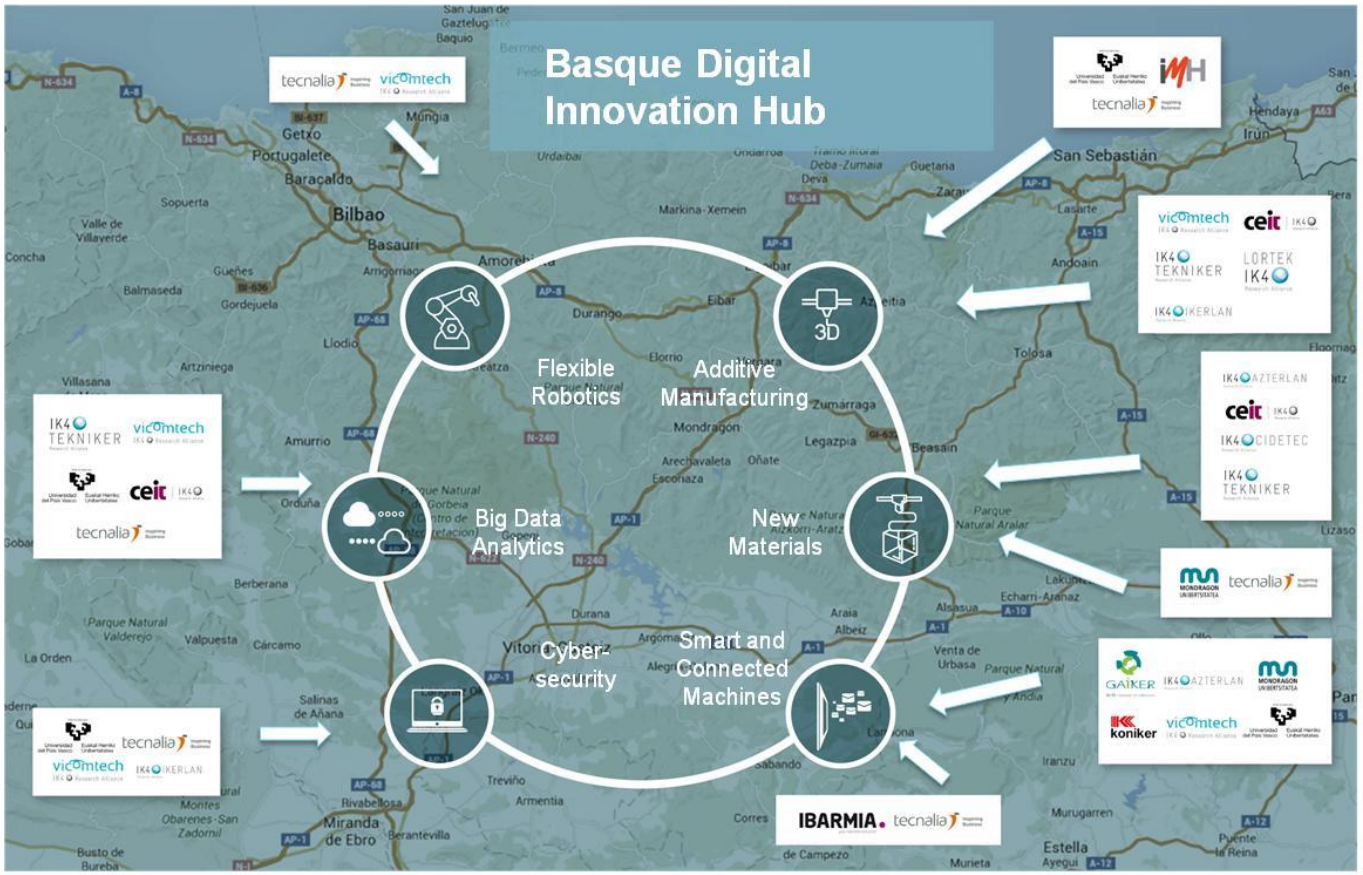


RIS3 Implementation
New Instruments

The first startup accelerator offering access to high-level Industry 4.0 customers

RIS3 Implementation
New Instruments

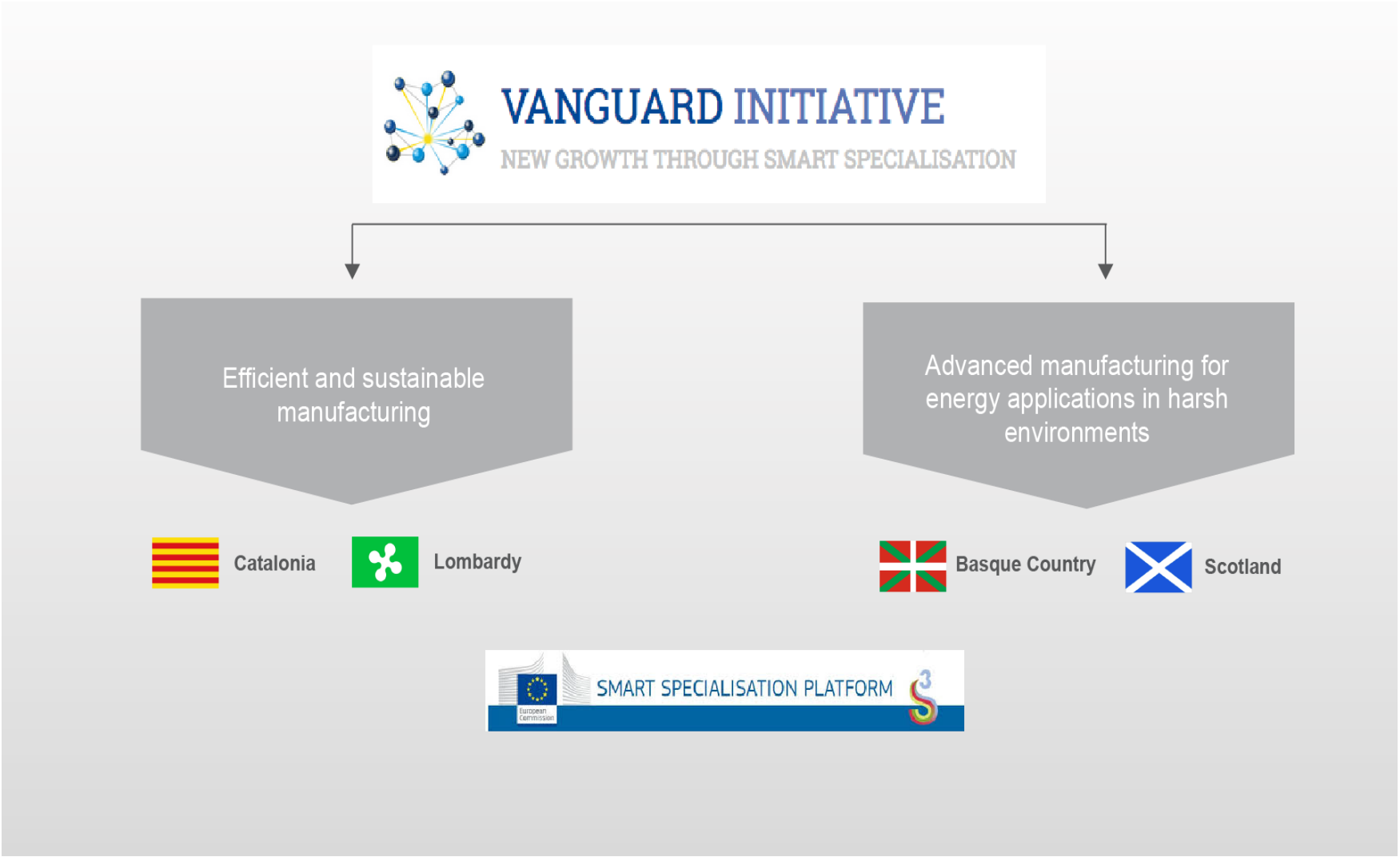
BDIH consists on a digitally linked network of Competence Centers with R&D infrastructures, pilot lines and technical expertise specialized in different areas of Advanced Manufacturing



R&D projects	Product/process/service demonstration	Industrial Scaling Up	Showroom	Training

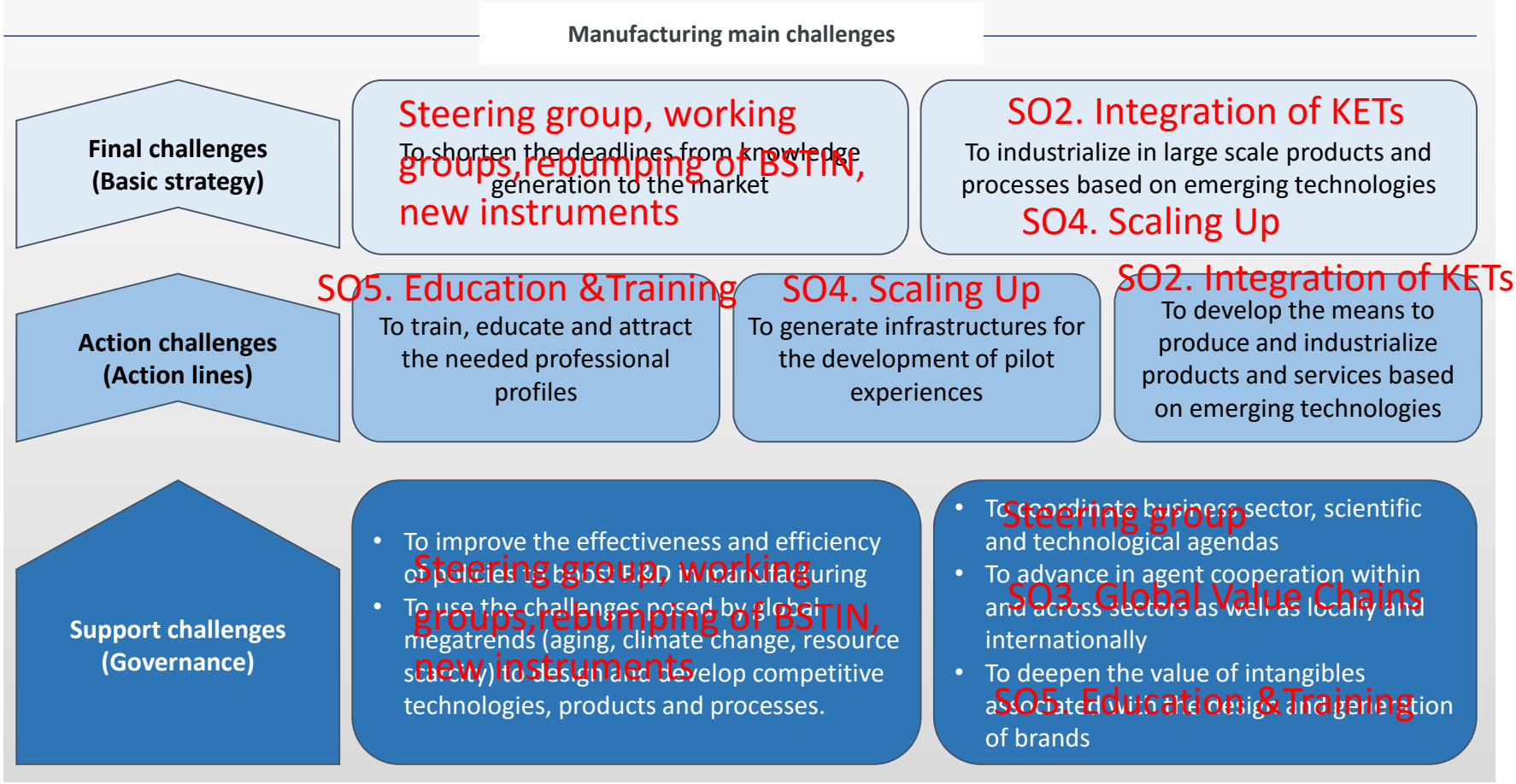
RIS3 Implementation Instruments

Interregional cooperation



Main challenges

- Main challenges identified during the Advanced Manufacturing Strategy definition and relation with Basque Indsutry 4.0 strategy



Thank you

Eskerrik Asko

Muchas Gracias

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