

# GALICIA: Towards a RIS3



**Baiona (Vigo), Galicia  
6<sup>th</sup> November 2014**

# Questions you would like peers to discuss



- Main achievements so far in development and implementation of a regional innovation strategy for smart specialisation (RIS3)?
- Main bottlenecks in RIS3 development and past implementation
- Questions you would like peers to discuss after your presentation (*Please see also our suggestions at the end of the template*) :
  1. ....
  2. ....
  3. ....
  4. ....
  5. ....

**BUSINESS  
INDICATORS**

POPULATION: **2,8** millions

AREA: **29.575** m<sup>2</sup>

**1.500** km of coastal line

**ECONOMIC DATA**

LABOR FORCE: **1,1** million

GDP: **58.000** € millions

COMPANIES: **206.426**

NET EXPORTS: **125%**

BALANCE OF TRADE : **112,3 %**

**INFRAESTRUC-  
TUR  
ES**

AIRPORTS: **3**

PORTS: **127**

INDUSTRIAL SURFACE: **47** millions m<sup>2</sup>

**FURTHER DATA**

RENEWABLE ENERGY PRODUCTION: **94,5%**

LIFE EXPECTANCY: **82** years (UE: 80 years)

POPULATION OVER 65 YEARS: **23%**

WORLD HERITAGE SITE: **4**

MICHELING STARRED RESTAURANTS: **10**

## KNOWLEDGE CENTERS

UNIVERSITIES: **3**

EXCELLENCE INTERNATIONAL CAMPUS: **2**

TECHNOLOGY CENTERS: **21**

RESEARCH PUBLICATIONS: **18.042** (5th Spanish region)

## BUSINESS INDICATORS

CLUSTERS: **19** (some of them, more than 15 years)

TECHNOLOGY PLATFORMS: **17**

RESEARCHERS: **6.225** (5th Spanish region)

INNOVATING COMPANIES: **1.643** (6th Spanish region)

PRIVATE INNOVATION EXPENDITURE: **552 M€**

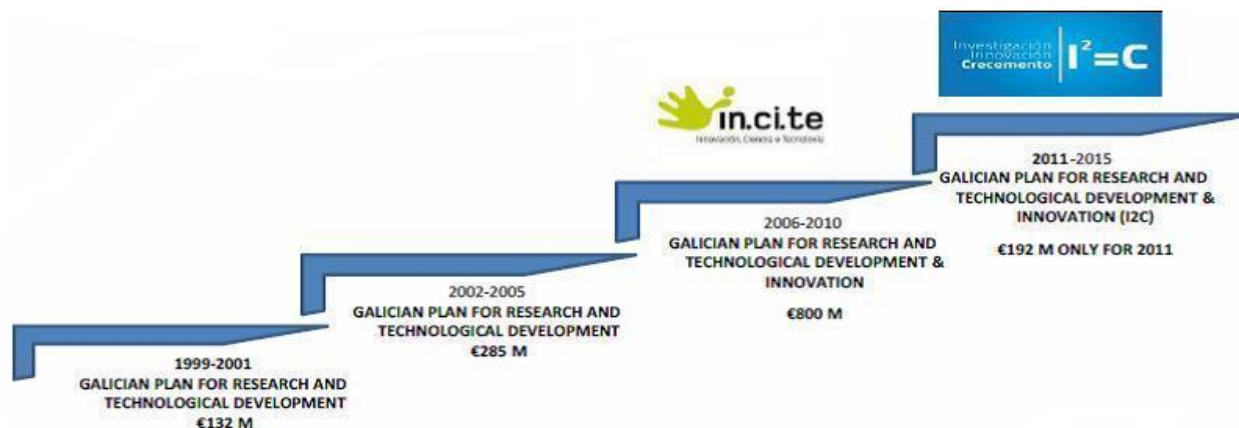
BIOTECH EXPENDITURE: **46 M€**

NUMBER OF FP7 PROJECTS: **171**

FP7 RATE RETURN: **>70M€**

## Introduction of Galicia's work on research and innovation

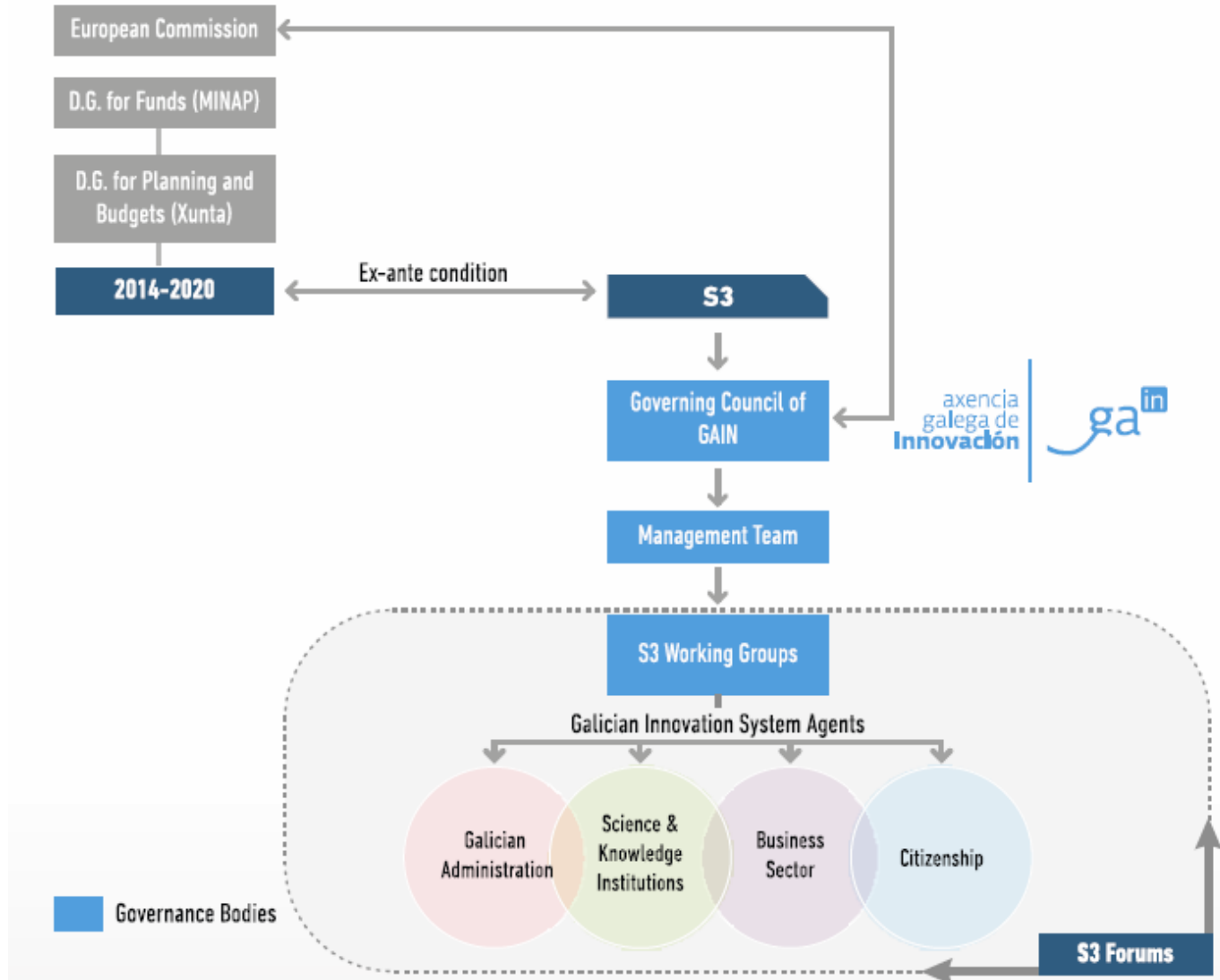
### Evolution of the Galician R&D&I plans



### Vision 2020

*To consolidate the economy of Galicia for 2020 on a socially recognisable route for improving growth and competitiveness based on transformation of the production model from a medium-low technological intensity production model to a model characterised by medium-high technological intensity, via absorption of Key Enabling Technologies (KET) into settled sectors, and by positioning the region as a benchmark in Southern Europe in providing knowledge-intensive services and products related to active ageing and a healthy lifestyle*

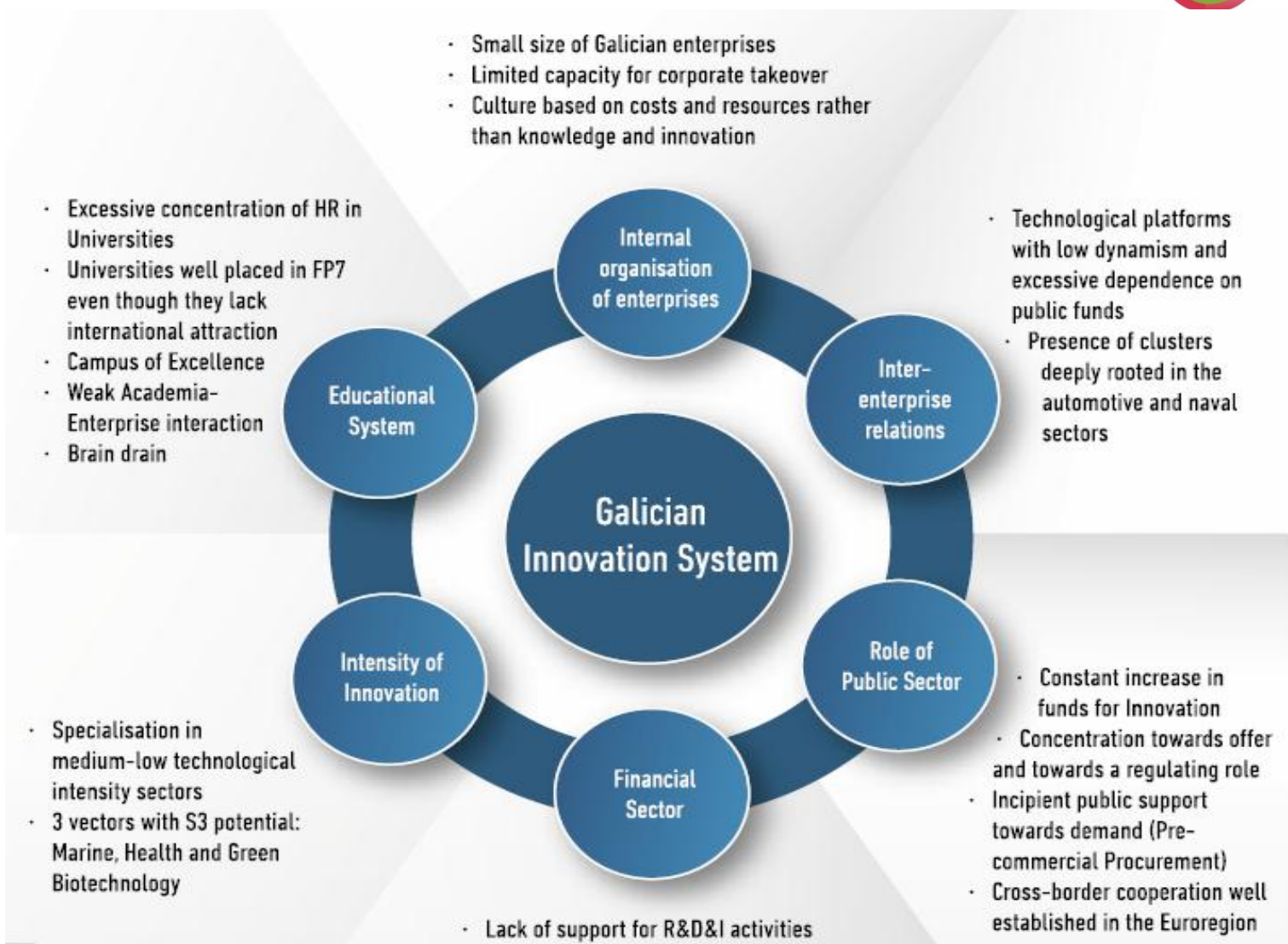
# Governance (I)



## Governance (II)

	Composition	Functions
<b>GAIN Governing Council</b>	<p>Made up of <b>12 members</b>:</p> <ul style="list-style-type: none"> <li>Regional Minister for Finance and Industry, acting as Chair</li> <li>10 members, one from each Xunta de Galicia Department</li> <li>One representative from the Galician Universities Council</li> <li>Council Secretary, assigned to the GAIN Manager</li> </ul>	<ul style="list-style-type: none"> <li>Management of the Strategy definition process</li> <li>Review and final Approval of S3, with prior approval from the Xunta de Galicia Council</li> <li>Supervision of objectives achievement</li> <li>Coordination with state RIS and Smart Specialisation strategies in other regions</li> </ul>
<b>Management Team</b>	Made up of the GAIN technical team, belonging to the Growth and Evaluation Area	<ul style="list-style-type: none"> <li>Day to day drawing up of the strategy</li> <li>Encouragement for working groups</li> <li>S3 Forums Organisers</li> </ul>
<b>Working Groups</b>	<p>Made up of various representatives from the <b>Agents of the Galician Innovation System</b> (members of the Xunta de Galicia, representatives from the enterprise, science and knowledge sector, as well as citizens and organisations representing a cross-section) specialised in the following <b>thematic fields</b>:</p> <ul style="list-style-type: none"> <li>Citizen Participation (WG1)</li> <li>Horizontal Policies (WG2)</li> <li>Health, Welfare and Life (WG3)</li> <li>Food, Agriculture, Fishing and Biotechnology (WG4)</li> <li>Energy, Environment and Services (WG5)</li> <li>ITC – Facilitating Technologies (WG6)</li> <li>Nanotechnologies, Materials and Manufacturing Technologies (WG7)</li> </ul>	<ul style="list-style-type: none"> <li>Identification of the current and future situation for the activity areas/sectors corresponding to each Working Group</li> <li>Proposal of potential niches and lines of action corresponding to their sectors/areas of activity</li> <li>Prioritisation of lines of action</li> </ul>
<b>Forums</b>	Plenary events open to all Galician Agents from the areas of science-technology-enterprise-citizens-Associations	<ul style="list-style-type: none"> <li>Ratification of key milestones in the Strategy definition process</li> <li>Publication of the definition process</li> </ul>

# SWOT

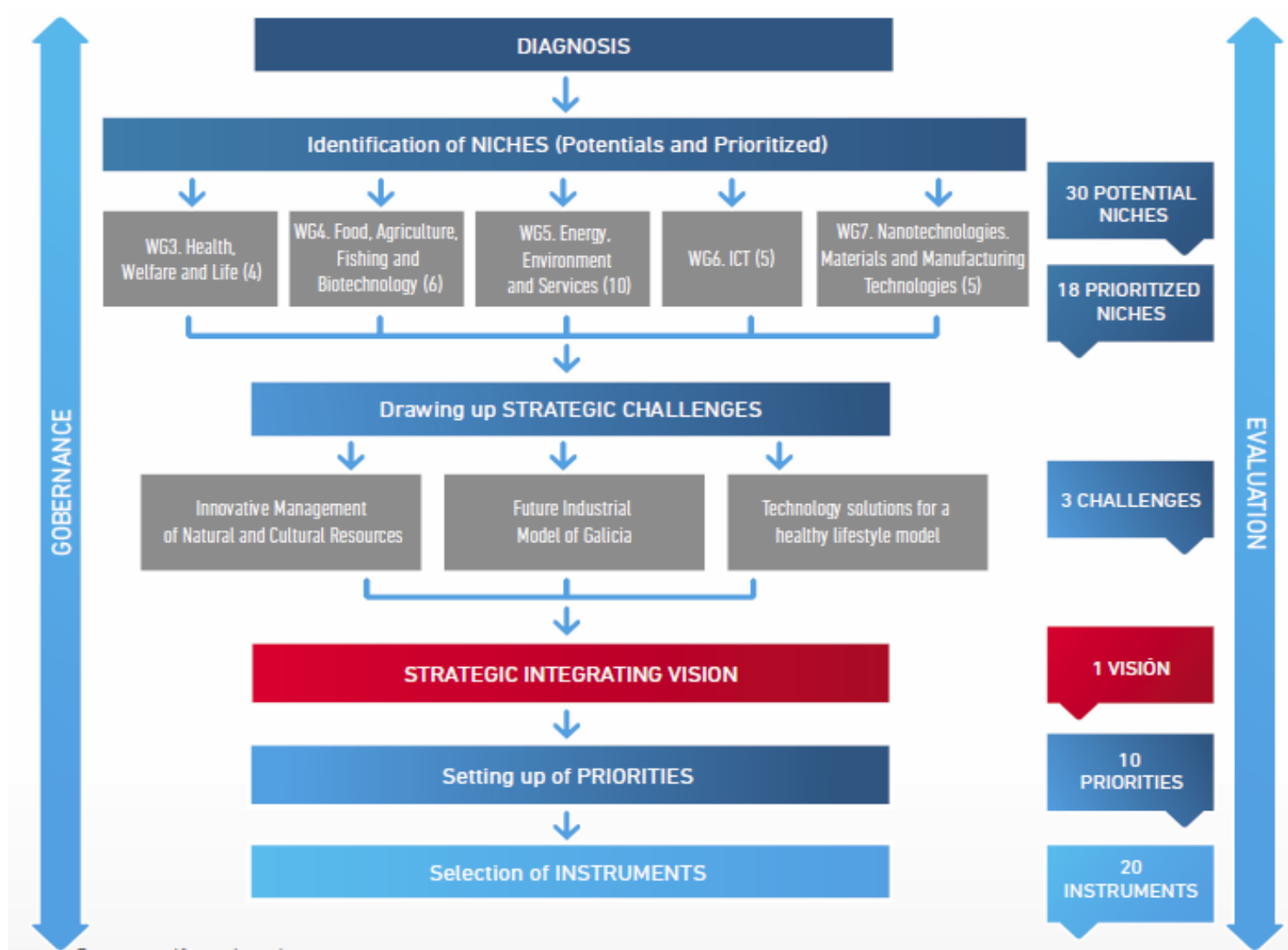




## Galician RIS3 Strategy Definition Process



# Galician RIS3 Strategy Definition Process RESULTS

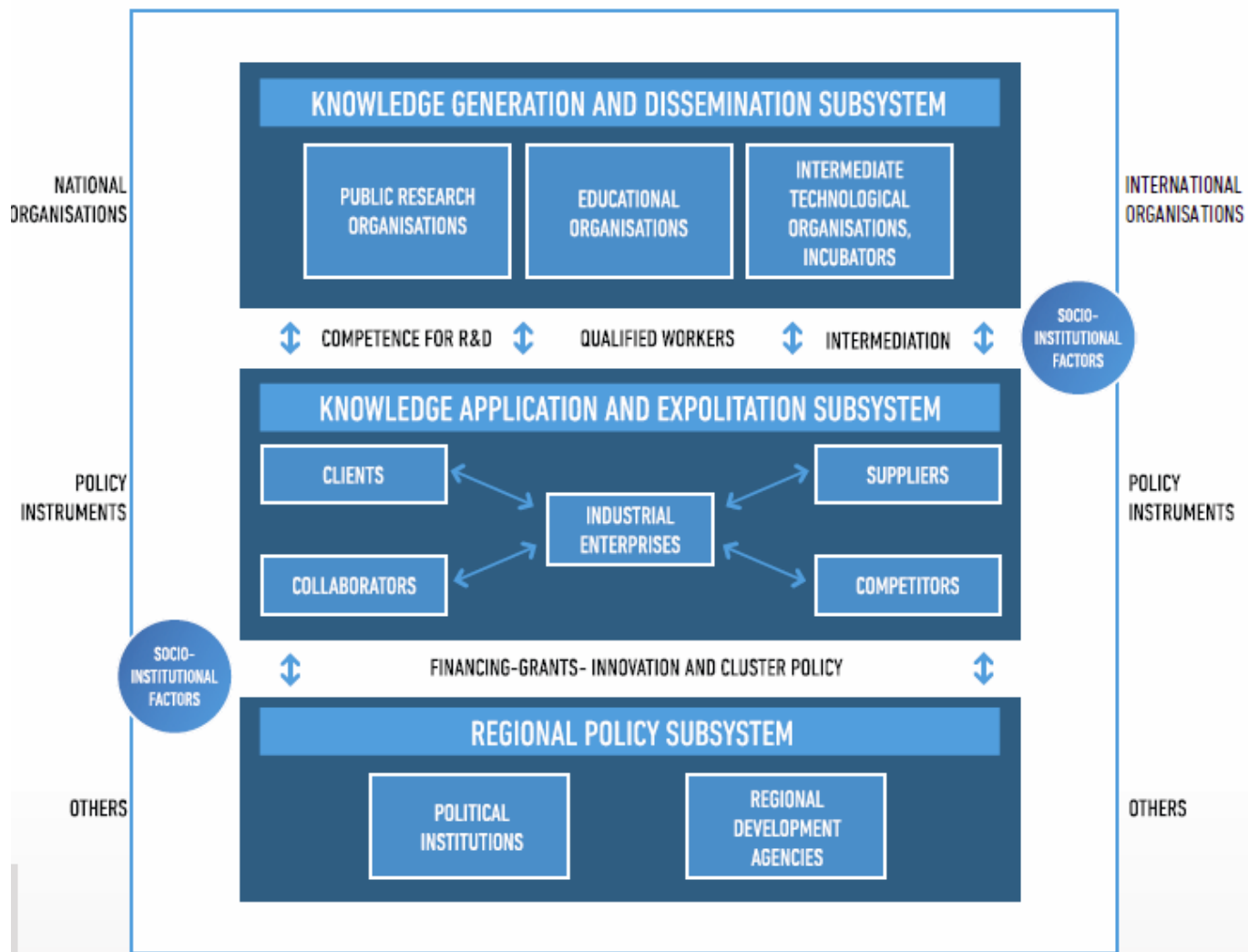


# Looking beyond your region's boundaries



- Does your analysis take into account the external context, national/international? How?
  - Have you assessed the positioning of your region's economic and innovation system within the EU?
  - Which techniques have been used?
  - To what extent have you considered how external knowledge can be harnessed for innovation within your region (e.g. circulation of ideas and mobility of researchers?)
- Have you assessed your region's work on Research and Innovation *vis-à-vis* other regions?
  - How has your region attempted to learn lessons from other regions?
    - Your border regions?
    - Other regions from your country?
    - Regions in other EU Member States?

# Composition of a Galician Innovation System and the existing cross relations

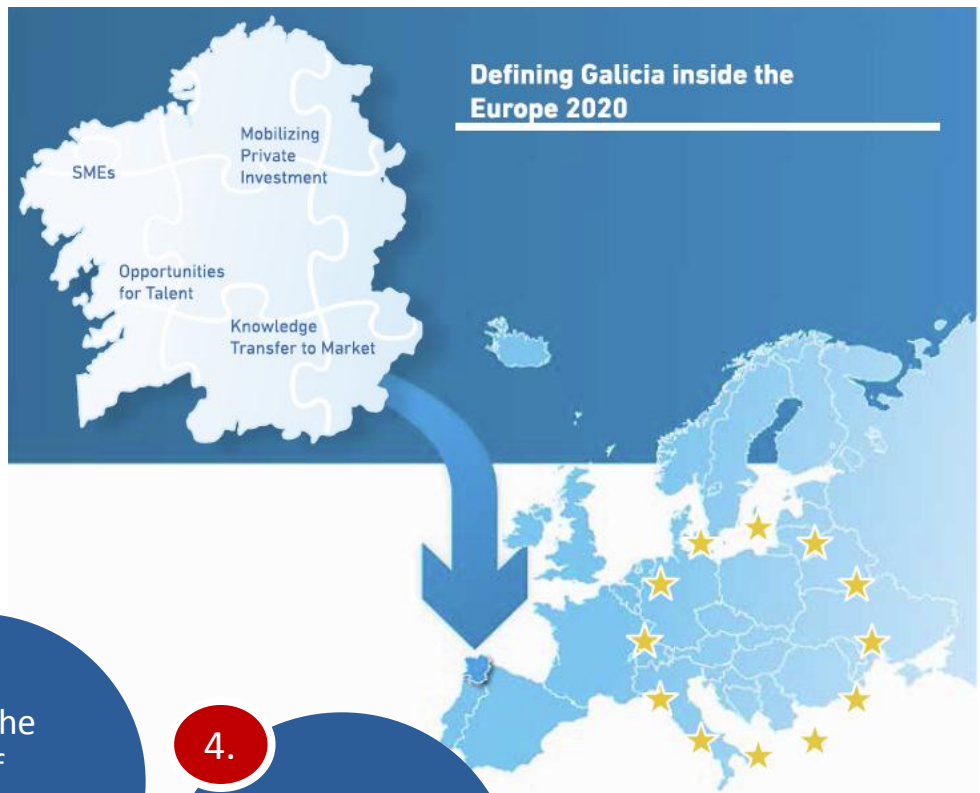


# Composition of the Working Groups



	Working Groups	Coordinator	Participants	Interlocutors
Transversal	1. Participation of Citizens	<ul style="list-style-type: none"> <li>Regional Dept. of Finance &amp; Industry</li> </ul>	<ul style="list-style-type: none"> <li>Vice-president's Office</li> <li>Deputy Directorate General for Emigration</li> </ul>	Universities (3) Technological Centres (6) Clusters (13) Local Entities/FEGAMP (1) Representatives from Business (1) Representatives from Xunta de Galicia-Funds Managers (15) Others (2) Citizens (180)
	2. Horizontal Policies Commission	<ul style="list-style-type: none"> <li>Regional Dept. of Finance &amp; Industry</li> </ul>	<ul style="list-style-type: none"> <li>Galician Institute for Economic Promotion</li> <li>Regional Dept. of Labour and Welfare</li> <li>Regional Dept. of Taxation</li> <li>Regional Dept. of Education and Culture</li> <li>Vice-president's Office</li> <li>Agency for Technological Modernisation of Galicia</li> </ul>	Universities (3) Clusters (2) Hospital Foundations and health related ones (3) Technological Centres (1) Independent health experts (3)
Sectors	3. Health, Welfare and Life	<ul style="list-style-type: none"> <li>Regional Dept. of Health</li> </ul>	<ul style="list-style-type: none"> <li>Regional Dept. of Labour and Welfare</li> <li>Regional Dept. of Education and Culture</li> <li>Agency for Technological Modernisation of Galicia</li> <li>Deputy Directorate General for Sports</li> <li>Regional Dept. of Rural and Marine Affairs</li> </ul>	Universities (3), Technological Centres (9), Clusters (4), Enterprises (4) Galician Agency for Rural Development (1)
	4. Food, Agriculture, Fishing and Biotechnology	<ul style="list-style-type: none"> <li>Regional Dept. of Rural and Marine Affairs</li> </ul>	<ul style="list-style-type: none"> <li>Regional Dept. of Education and Culture</li> <li>Regional Dept. of Health</li> <li>Agency for Technological Modernisation of Galicia</li> </ul>	Universities (3), Clusters (3), Associations (9), Technological Centres (4), Foundations (2), Enterprises (11), Independent Experts on Tourism and ICC (2)
	5. Energy, Environment and Services	<ul style="list-style-type: none"> <li>Regional Dept. of Finance &amp; Industry</li> </ul>	<ul style="list-style-type: none"> <li>Regional Dept. of Environment, Infrastructures and Territory</li> <li>Deputy Directorate General for Tourism</li> <li>Agency for Technological Modernisation of Galicia</li> <li>Vice-president's Office</li> <li>Regional Dept. of Rural and Marine Affairs, and</li> <li>Galician Energy Institute</li> </ul>	Universities (3), Clusters (1), Associations (5), Technological Centres (3), Other Centres (4)
Technicians Facilitators	6. ICT	Agency for Technological Modernisation of Galicia	<ul style="list-style-type: none"> <li>Galician Innovation Agency</li> <li>Galician Institute for Economic Promotion</li> <li>Regional Dept. of Education and Culture</li> </ul>	Universities (3), Clusters (5), Associations (2), Technological Centres (5), Spin-offs (2) 1 Independent Expert
	7. Nanotechnologies, Materials and Manufacturing Technologies	Regional Dept. of Finance & Industry	<ul style="list-style-type: none"> <li>Regional Dept. of Environment, Infrastructures and Territory</li> <li>Regional Dept. of Education and Culture</li> <li>Galician Institute for Economic Promotion</li> </ul>	

# Guiding Principles



1.

Innovative SMEs to be competitive

2.

Public investment to attract private investment

3.

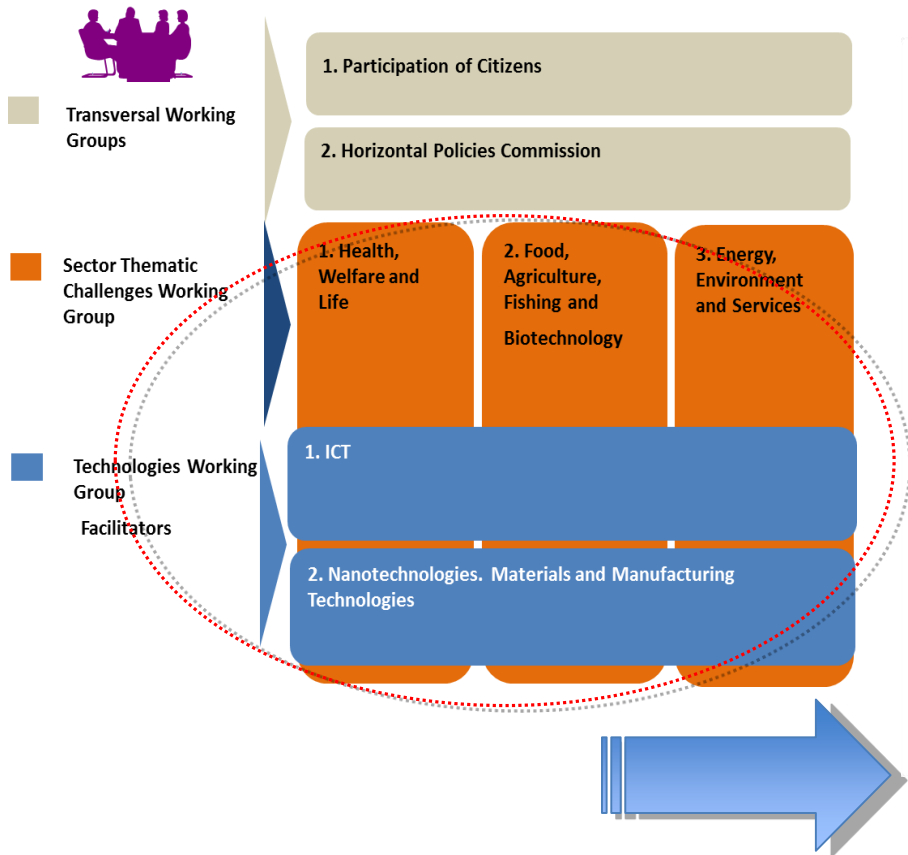
Promote the transfer of research to market

4.

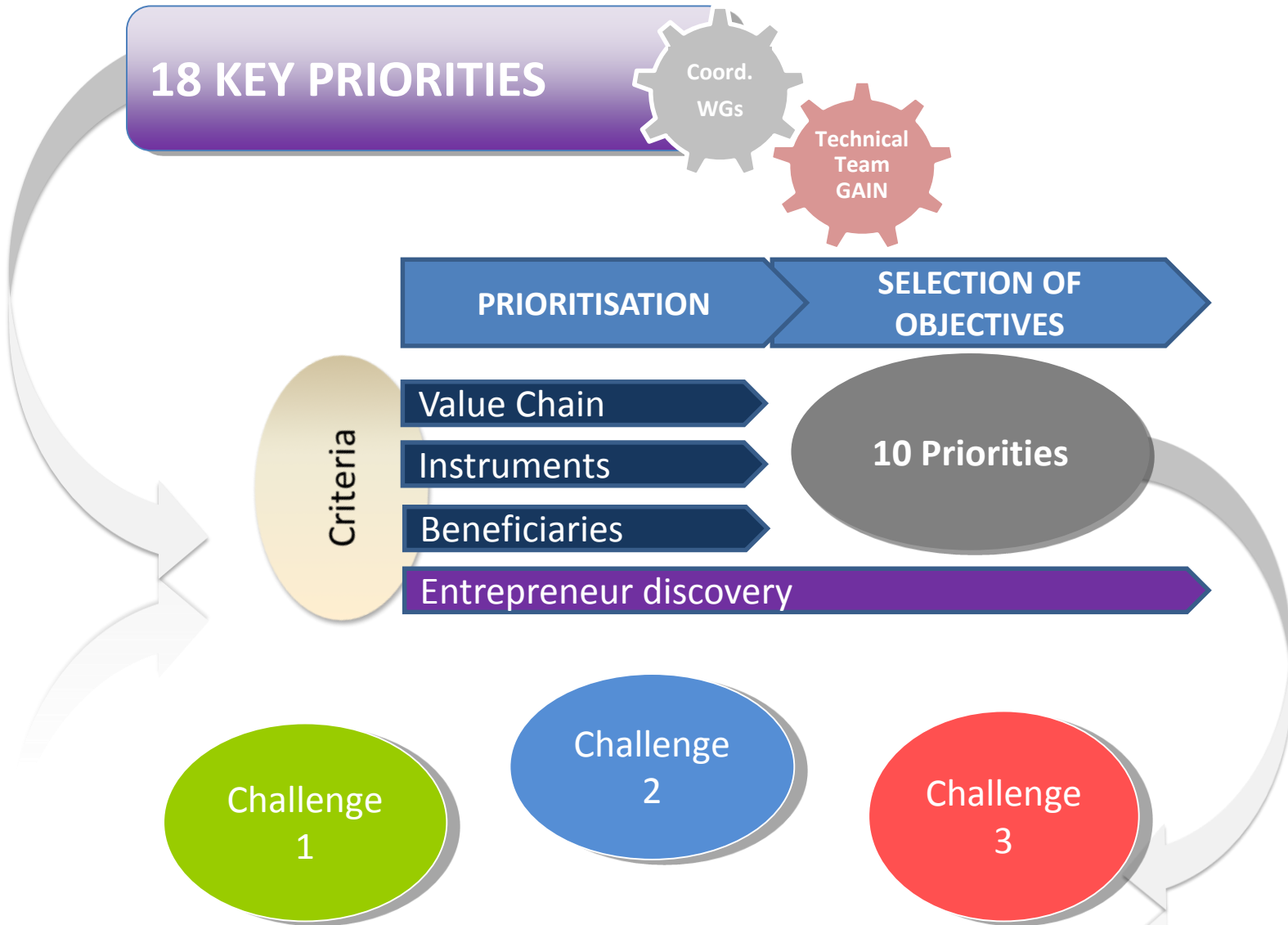
Opportunities for research and entrepreneurial talent

Guiding principles to drive growth in prioritized sectors

# Opportunities Identification Process



# Procedure for the establishment of the Strategic Objectives





# Challenges and Priorities



**Challenge 1:**  
**New model for innovative management of natural and cultural resources based on innovation**  
 Modernisation of **traditional Galician sectors** by introduction of innovations that provide **higher yield and efficiency** in use of endogenous resources and their reorientation towards **alternative high added value uses** in energy, aquaculture, drug, cosmetic, food and cultural activities.

CHALLENGE 1 PRIORITIES	
1.1	Valorization of by-products and waste generated by production chains linked to the sea, through the use of their components for cosmetic products; food additives; pharmaceutical applications; in order to achieve a significant decrease in generated waste and attain a position in the market for innovative products with added value <b>[Valorization-Sea]</b>
1.2	Development of the Galician aquaculture sector to convert the region into an international reference for the generation of new technology-based products and services applied to aquaculture <b>[Aquaculture]</b>
1.3	Diversification in the Galician energy sector in order to gain significant improvement in the efficiency of natural resources use in Galicia, giving priority to biomass and marine energy <b>[Biomass and Marine Energies]</b>
1.4	Modernisation of the Galician primary sectors (agriculture, fishing, livestock and forestry) aimed at sustainable improvement of the efficiency and profitability indicators for operations and creation of innovative products and services <b>[Primary Sectors Modernisation]</b>
1.5	Modernisation of the tourism sector and Galician cultural industries by means of intensive use of ICTs to achieve a tourist sector that is competitive at a European level based on cultural and nature tourism <b>[ICT-Tourism]</b>

## Challenges and Priorities

### Challenge 2:

#### New industrial model based on competitiveness and knowledge

Increase the technological intensity of the Galician industrial sector through hybridisation of Key Enabling Technologies.

### CHALLENGE 2 PRIORITIES

2.1	Diversification in the Galician <b>driving sectors</b> and its auxiliary sectors via an intensive use of Enabling Technologies [KETs], geared towards the supply of new processes and high value added products that enable us to explore new markets based on hybridisation, knowledge and technology. <b>[Diversification of Driving Sectors]</b>
2.2	To promote the competitiveness of the Galician industrial sector under the concepts of the "Factory of the Future" and Eco-innovation to improve efficiency and environmental behaviour in the industry. <b>[Competitiveness in the Industrial Sector]</b>
2.3	Boost ICTs as the driving sector of the Galician knowledge-based economy just like in the case of other KETs <b>[Knowledge Economy: ICT &amp; KETs]</b>

### Challenge 3:

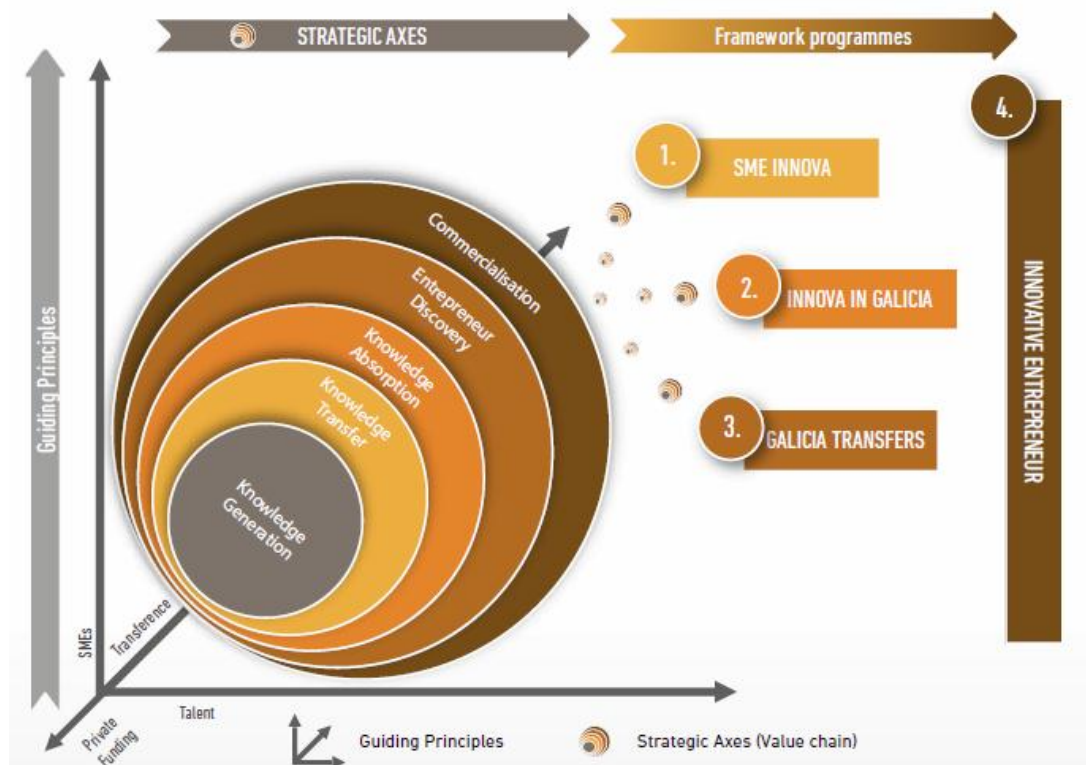
#### New healthy lifestyle model based on active ageing of population

Position Galicia in 2020 as a lead region in Southern Europe that offers knowledge intensive products and services linked to a healthy lifestyle model: active ageing, therapeutic application of fresh and marine water resources and functional nutrition.

### CHALLENGE 3 PRIORITIES

3.1	Galicia as the leading region in Southern Europe in the implementation of new technologies in the field of active ageing and healthy living, and in the promotion of personal autonomy <b>[Active Ageing]</b>
3.2	Diversification of the Galician food sector in order to position it as an international reference around innovation in nutrition as the key for healthy living <b>[Food &amp; Nutrition]</b>

# Implementation: Framework programmes



## Being the Framework Programmes description:

1. SME INNOVA is conceived as a support programme for knowledge absorption by SMEs, contributing to improve their competences and competitiveness, because SMEs are going to have a strategic role in the Galicia smart specialisation development. The articulation of this Programme has been based on the "SME Instrument" included in the European Commission HORIZON 2020 Programme.
2. INNOVA IN GALICIA which integrates new instruments conceived so that Public Investment acts as a driving force for mobilising and attracting private capital for Galician innovation processes.
3. GALICIA TRANSFERS which brings together instruments aimed at fostering the transfer of research from Knowledge Generation and Diffusion Agents, as main architects of talent fostering in the Galician innovation systems, into the market, within an open innovation framework.
4. INNOVATIVE ENTREPRENEURSHIP constructed as a specific support framework for entrepreneur discovery, based on improving the opportunities of innovative talent in areas, intensive in knowledge and/or technology, linked to regional specialisation niches.

## Implementation: Instruments

	Nº	Instruments	Acronym
	PEME INNOVA	1	Sectorial Innovation
2		Open Innovation Projects	Open Innov.
3		Technological Services Voucher	Technological Voucher
4		International Funding Voucher	Funding Voucher
5		Homologation /Certification	Homologation/Certification
6		Promoting Enterprise knowledge absorption programme	Absorption Capacity Prom.
	Nº	Instruments	Acronym
	INNOVA IN GALICIA	7	Development Attraction Fund Centres
8		Early Procurement Fund	Early Procurement
9		Demonstration projects	Demonstration projects
10		Strategic Public Private Projects	Mixed Units
11		2020 Horizon Cooperation for Developing Collaborative R&D&i Projects	H2020 complement
12		Financial Engineering Instruments for Private Capital Mobilization	Capital Mobilization
	Nº	Instruments	Acronym
	GALICIA TRANSFERS	13	Scientific and Technological Centres Transfer Contract Programme
14		Investment in knowledge and technology assets in Scientific and Technological Centres	Sc. & Tech. Investment
15		Test Concept	Test Concept
16		Innovative Public Procurement	Innov. Publ. Procurement
17		Fostering Industrial Property	Industrial Property
	Nº	Instruments	Acronym
	INNOVATIVE ENTREPR.	18	Innovation Acceleration Program
19		Retention, incorporation and talent mobility program	Talent
	Nº	Instruments	Acronym
	20	Diffusion and Technical Assistance	Technical Assistance

## Implementation: Instruments (financial or non-financial)



	Nº	Instrument	Financial refundable	Financial NON refundable	Non-financial
SME INNOVA	1	Sectorial Innov. <sup>(p)</sup>	●	●	
	2	Open Innov. <sup>(p)</sup>	●	●	
	3	Technological Vouchers <sup>(p)</sup>	●	●	
	4	Funding Vouchers		●	
	5	Homologation/Certification	●		●
	6	Absorption Capacity Prom.	●		
INNOVA IN GALICIA	7	Attraction Fund Centers	●		
	8	Early Procurement	●		
	9	Demonstration Projects	●		
	10	Mixed Units	●	●	
	11	H2020 Complement	●	●	
	12	Capital Mobilization	●	●	
GALICIA TRANSFERS	13	Sc. & Tech. Contract Program		●	
	14	Sc. & Tech. Investments <sup>(p)</sup>	●	●	
	15	Test concept		●	
	16	Innov. Publ. Procurement	●		
	17	Industrial property		●	
I E	18	Accelerator			●
	19	Talent		●	
	20	Technical Assistance			

<sup>(p)</sup> Partially Refundable

## Implementation: Priorities of the Instruments and Budget

### Mobilisation of Private Investment

- Commitment to **Financial Instruments** (Present in around 63% of the Instruments proposed)
- **Novel Instruments** to attract private investment

### Maximisation of Public Financing Impact

- **Thematic Concentration** of resources according to GDP
- **Alignment** with priorities of other **European Programs**



Union Europea  
Política de cohesión



European Investment Bank

### SMEs

BUDGET	TOTAL PER YEAR						TOTAL
	2014	2015	2016	2017	2018	2019	(2014-2020)
	M€	M€	M€	M€	M€	M€	M€
ERDF/ESF/EAFRD/EMFF (Regional Management and by Member State)	113	113	113	113	113	113	678
PUBLIC EQUITY (Regional co-financing and by the Member State)	28	28	28	28	28	28	168
PUBLIC EQUITY (Additional regional funds)	15	15	15	15	15	15	90
<b>TOTAL</b>	<b>156</b>	<b>156</b>	<b>156</b>	<b>156</b>	<b>156</b>	<b>156</b>	<b>936</b>

## Instruments (Interaction and Private Capital Mobilisation)

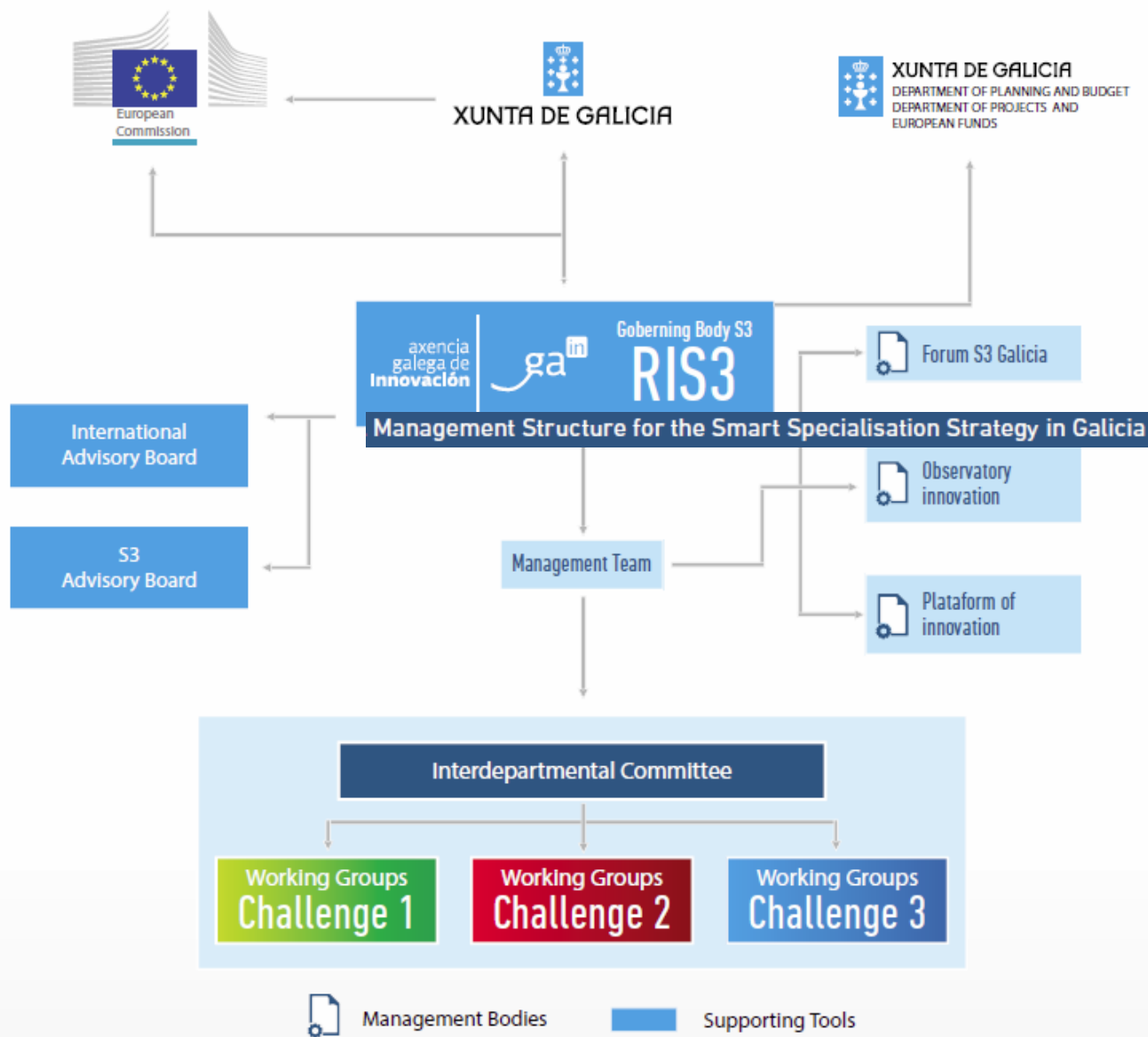
Interaction between Galician S3 Strategy Instruments and other Funding Programmes.

	Nº	Instrument	HORIZON 2020	COSME	FEI/BEI	TERRITORIAL COOPERATION	OTHER
SME INNOVA	1	Sectorial Innov.	●	●			
	2	Open Innov.	●	●			
	3	Technological Vouchers		●			
	4	Funding Vouchers	●	●			
	5	Homologation/Certification	●	●	●		●
	6	Absorption Capacity Prom.		●			
INNOVA IN GALICIA	7	Attraction Fund Centers	●			●	
	8	Early Procurement		●			
	9	Demonstration Projects		●			
	10	Mixed Units	●				
	11	H2020 Complement	●				
	12	Capital Mobilization	●		●		
GALICIA TRANSFERS	13	Sc. & Tech. Contract Program				●	
	14	Sc. & Tech. Investments				●	
	15	Test concept	●				
	16	Innov. Publ. Procurement		●		●	
	17	Industrial property	●				
I E	18	Accelerator	●			●	
	19	Talent	●			●	
	20	Technical Assistance					

Share of Instruments with Capacity for Private Capital Mobilisation over the Total.

INSTRUMENTS WITH CAPACITY FOR PRIVATE CAPITAL MOBILISATION	Nº	%
Instruments with very high capacity for mobilisation	1	5%
Instruments with high capacity for mobilisation	10	53%
Instruments with moderate capacity for mobilisation	8	42%
Instruments with modest capacity for mobilisation	0	0%







# Management Structure



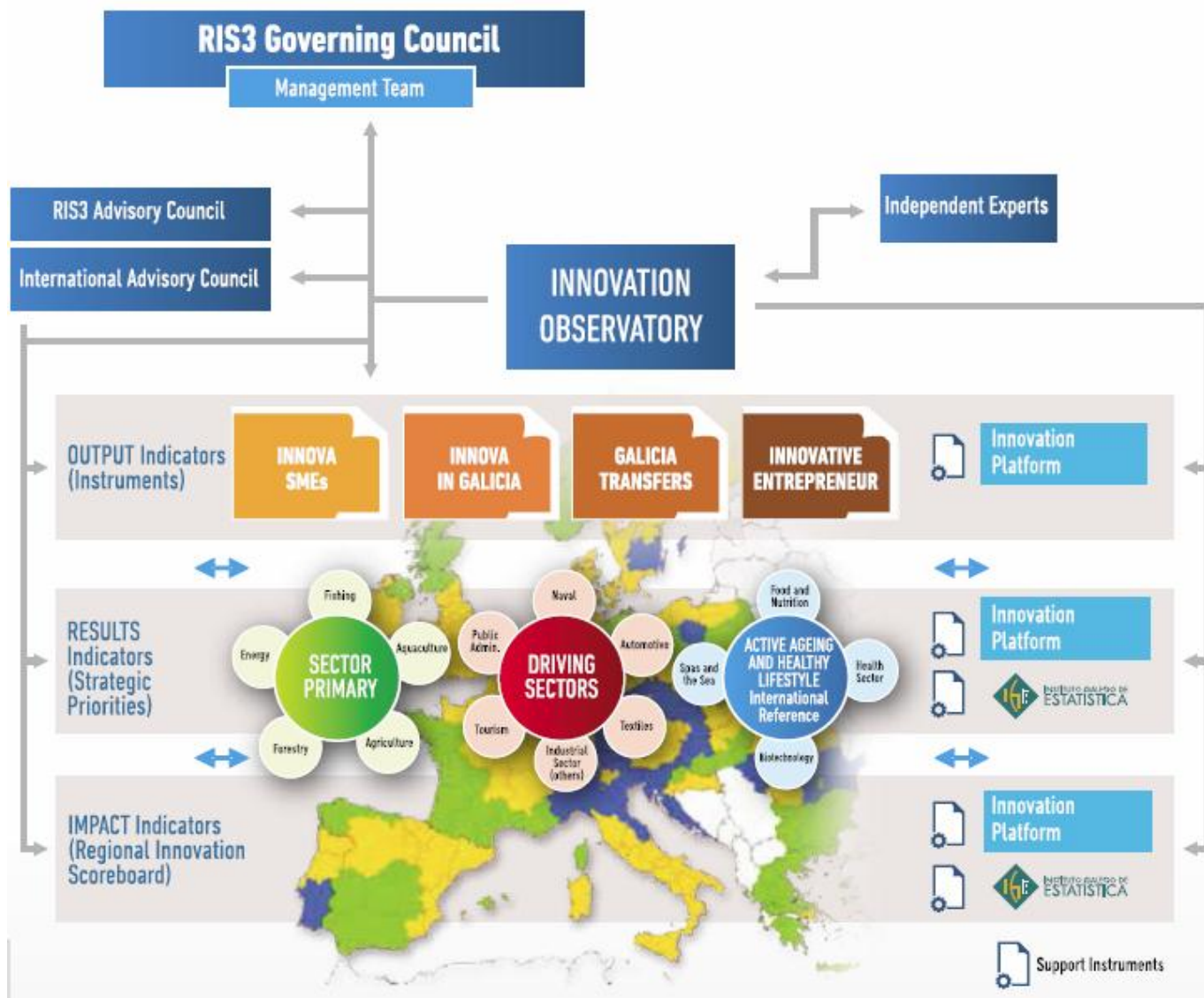


# Evaluation System (I)

## SCOREBOARD

INDICATORS	PERFORMANCE Indicators (outputs)	RESULT Indicators	IMPACT Indicators
	Monitoring of indicators associated to each INSTRUMENT	Monitoring of indicators associated to each PRIORITY	Monitoring of indicators associated to CHALLENGES & VISION
EXAMPLES OF INDICATORS	<ul style="list-style-type: none"> <li>Nº of R+D+I Projects promoted in prioritized areas</li> <li>Nº beneficiary organizations (enterprises, research centers, etc.) in prioritized areas</li> <li>% Public budget executed by sector</li> <li>% Private budget captured by sector</li> </ul>	<ul style="list-style-type: none"> <li>Scientific Specialisation Indicators (Research Groups, scientific production)</li> <li>Technological Specialisation Indicators (patents; International R&amp;D&amp;I Projects, Technology-Based enterprises )</li> <li>Economic Specialisation Indicators (Gross Added Value)</li> </ul>	<p>INPUTS indicators:</p> <ul style="list-style-type: none"> <li>Education</li> <li>Investment in R&amp;D&amp;I</li> </ul> <p>OUTPUTS indicators:</p> <ul style="list-style-type: none"> <li>Scientific</li> <li>Technological</li> <li>Economic</li> </ul> <p>ECONOMIC IMPACT indicators:</p> <ul style="list-style-type: none"> <li>Employment</li> <li>Added Value</li> <li>Business Innovation</li> </ul>
TARGET VALUES	Target Value (2016; 2018; 2020)	Initial Value (2013) Target Value (2016; 2018; 2020)	Initial Value (2013) Target Value (2016; 2018; 2020)
MONITORING TOOLS	 Innovation Platform 	 Innovation Platform  INSTITUTO GALEGO DE ESTADISTICA + Other Regional and/or National Entities	 Innovation Platform  INSTITUTO GALEGO DE ESTADISTICA + Other entities...

# Evaluation System (II)



# Your self-assessment

Please self-assess your state of preparation concerning the ex-ante conditionality using RIS3 wheel. Information and a link to the tool that will generate your wheel is available here:  
<http://s3platform.jrc.ec.europa.eu/ris3-assessment-wheel>

Where are you on the different dimensions?



# Summary and next steps

- What is needed (in the short and medium term) to develop and implement a good RIS3 in your region?
  - What are your region's main RIS3 challenges/success criteria?
  - What advice and activities would be useful to facilitate this process?
  - What support would you need?
- How aware of the processes and supportive are your politicians, the regional/national administrations, the business community in your region, your national government?

## Question X: <repeat & phrase here your question>

- **Why:** <here, tell briefly why this is an important question>
- **What has been done:** <here, tell what has been done to date in your region to address this question/issue>
- **What worked:** <here, tell what worked well and how>
- **What did not work:** <here, tell us what did not work and why>

**This slide is only for your information:** To help you identify the right and relevant friendly questions for discussion about your issues and needs, please consider the questions below – or other issues where you might need input.

- In which areas do you need new ideas, methods, operational models or know-how to get there?
  - To what extent do you have networks with regions in other countries which you consider relevant to your work on S3?
- Who would you like to work with to make these innovations?
  - Who are your equal regions, and relevant partners in future dialogues?
  - Who do you feel can benefit from your advice and ideas (based on your achievements and good practices)?
  - From which regions would you look for ideas or relevant advice?
- Are you considering to build a formal/informal network with the regions present at this workshop for discussing other issues in the future?
  - How are you planning to do that?