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Universidades
Españolas

RIS3: The Spanish Case Study

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EUA RIS3 Workshop

Universities in regional innovation ecosystems:
coherent policies for Europe beyond 2020

University of Tartu, Estonia, October 17th 2017

RIS3 – The Spanish Case Study | About Spain...

Basic Facts

Population: 46.77 million **Area :** 505.940 km² **GDP per capita:** €23,200 (Spain) €25,000 (European average)

R&D investment: 1.22% GDP (Spain 2015) 1,4% GDP (Spain 2010, -22%) – COTEC 2017 UE-28: 1,95 GDP%; OECD: 2,4% GDP (2015)

Strengths

- High number of qualified graduates
- Clusters of regional excellence - Campus de excelencia (Universities involvement in regional development)
- A highly qualified scientific and technological system .
- A large experience in cross-border programs.
- Good results in European projects participation (H2020, ERC Marie Curie, etc.)
- Very attractive country for students' mobility

Weaknesses

- Severe economic crisis (with fiscal and salary adjustments)
- High unemployment rate (20,9% general,12,5% population with high education studies) (Source: INE 2015)
- Moderate GDP growth (below 3%, FMI 2016)
- Brain drain (7,8% of university graduates in 2009/10 were working abroad in 2014 - INE 2015)
- High percentage of micro companies (Spain: 94,1%, Germany: 81,8%, UK: 89,5%)
- Low investment and participation of the private/industry sector in R&D&I
- High level of public debt
- Low number of researchers/1000 employed people (6,61 vs 7,87 UE 2015)
- Slow rate of economic recovery (Bloomberg, El Economista, 2013):
 - Low attention to R&D&I
 - Difficult access to financing
 - Rigid labour relations and excessive bureaucracy.

RIS3 - The Spanish Case Study | Spanish Higher Education System

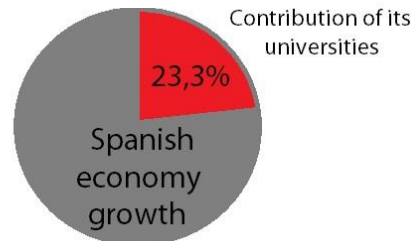
MAPA DE UNIVERSIDADES ESPAÑOLAS



50 Public -34 Private
2015-16: 1.500.000 students
140.000 graduates

Universities and Scientific Production
65 % of the Spanish scientific production
#10 World #5 Europe

- Over 40% of **entrepreneurs come from university** (GEM2015)
- **H2020 – 4th position return raised 9,8% 2014/2016**
- **Universities 19,5% (2nd after enterprises)**



For every euro destined

Spanish University System

2,5 €

Spanish society

Source:

-Contribución económica del SUE 2012 – Ministry of Education, Culture and Sports and IVIE

-Datos y Cifras MECD. 2015-2016

RIS3 - The Spanish Case Study | About RIS3 in Spain



Spain is divided into 17 regions/autonomous communities

Universities are a competence of regional governments.



However,

Research and innovation are, essentially, a competence of the central government (except in the Basque Country)



Multiple systems/regions coexist in the country, and they are very asymmetric.

The relationship between universities and their regional governments strongly influence the different university policies

Therefore, the degree of involvement of universities in RIS-3 in Spain is heterogeneous

The Spanish Secretary of State for Research, Development and Innovation has tried to perform an exercise of coordination between Spanish Central Administration (AGE) and Autonomous Regions (CCAA), thus:

- The priorities of the various **regional** RIS3 usually **fall into** the priorities of the “**national strategic plans**”.
- Most of these priorities appear in the whole RIS3 Strategies

Source: Crue-CPU-EUA workshop Nov.2015. Presentation Carmen Vela, Secretary of State for Research, Development and Innovation



Universities “feel” that, although the Spanish Central Administration has tried to coordinate the RIS3 process, **more efforts could have been done to promote universities’ participation**

Crue Spanish Universities pushed for the competent authorities to insist to regional authorities about the importance of university participation

RIS3 - The Spanish Case Study | CRUE – EUA collaboration in the RIS3 Strategy

Expert Group on Research and Innovation Strategies for Smart Specialisation (RIS3)- Madrid Workshop (2015)

- Workshop on “Universities promoting regional innovation across Europe”
- Convened jointly by Crue/CPU and EUA and kindly hosted by the Autonomous University of Madrid (November 24, 2015)
- Six case studies from regions in Spain, France, Portugal and Germany
- Discussion on the thematic areas of:
 - The role of universities in the design and implementation of Smart Specialisation (RIS3)
 - Coordination of regional, national and European programs
 - Regional perspectives on Smart Specialisation



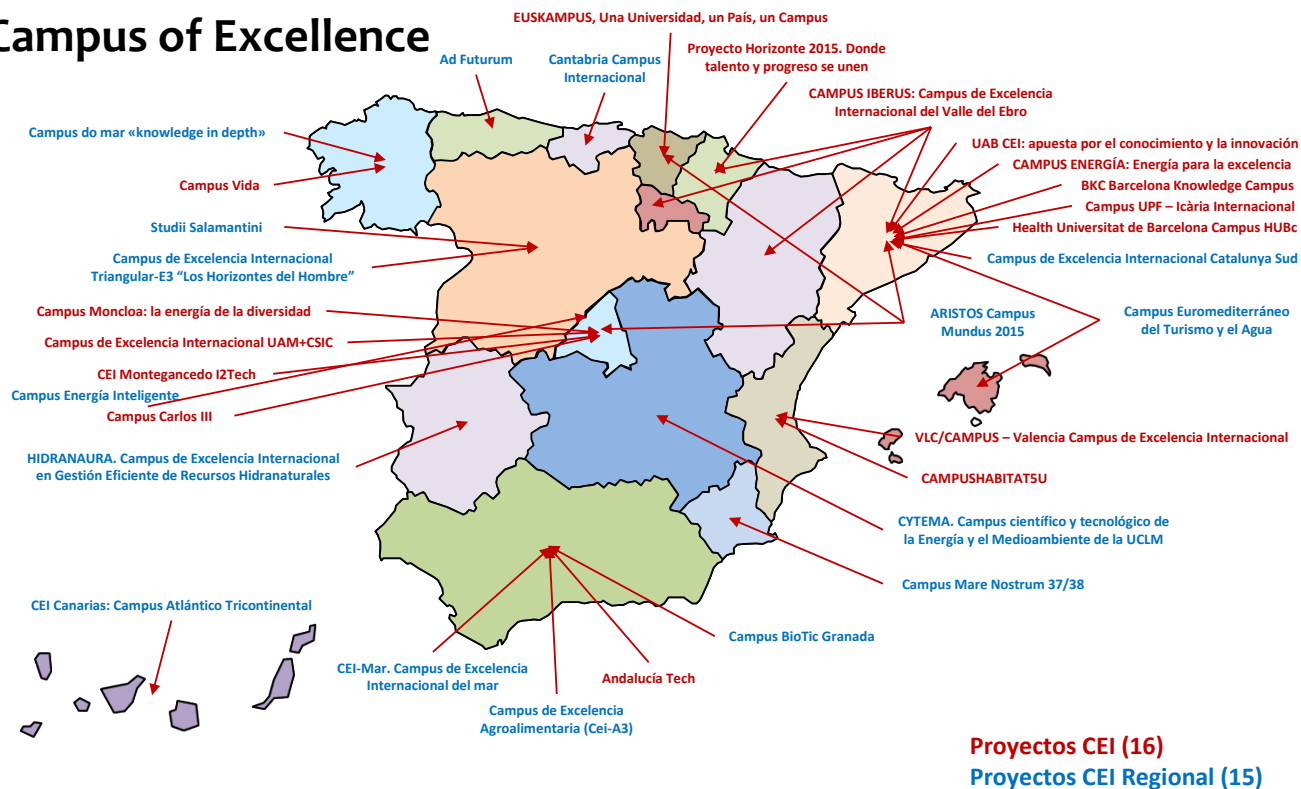
About RIS3 in Spain

- The Spanish Universities were **very interested in the new RIS3 initiative**.
- In 2013 the R+D Crue Commission **promoted a working group for RIS3**.
- Most of the Universities **contacted their regional governments** in order to participate in the definition of regional RIS3.
- **Meetings and workshops** (mentioned before) **were promoted** at the Spanish level
 - The role of the university in the intelligent specialization strategy for innovation. CRUE_CYD. Madrid 14- July 15, 2014.
 - Working day of RIS3 discussions, Barcelona, June 3, 2015

RIS3 - The Spanish Case Study | About RIS3 in Spain

Universities - International Campus of Excellence

Knowledge Field	N° of CEI
Biomedicine / Health	18
Biotechnology	11
Sea and Marine Sciences	4
Natural Sciences (Physics, Materials, Chemistry)	5
Heritage and Culture	7
Information and Communication Technologies	6
Environment & Sustainability	14
Energy	8
Agriculture, food & Nutrition	8
Social sciences & Humanities	13



Source: Crue-CPU-EUA workshop Nov.2015. Presentation Juan M^a Vazquez, Universidad Murcia.

- Aggregation
- Internationalization
- Specialization

RIS3 - The Spanish Case Study | RIS3 Survey

In order to know in more detail the current situation, Crue Spanish Universities conducted a survey containing 10 questions devised in order to know the level of involvement of universities in RIS3, and in the different regions:

- ☐ **Question 1: What is the current status of RIS3 development in your region?**
 - 1) Has the Strategic Plan been approved?
 - 2) Has the Operational Program been approved and implemented?
 - 3) Have calls been launched? Are they ongoing or resolved?

- ☐ **Question 2: Concerning the involvement of universities:**
 - 1) Has your university participated in the initial design of the strategy?
 - 2) Has it participated in the management committee or the monitoring committee?
 - 3) Has it participated in the design of the calls?

- ☐ **Question 3: Is the RIS3 strategy aligned with the strategy of the campus of excellence in your region?**

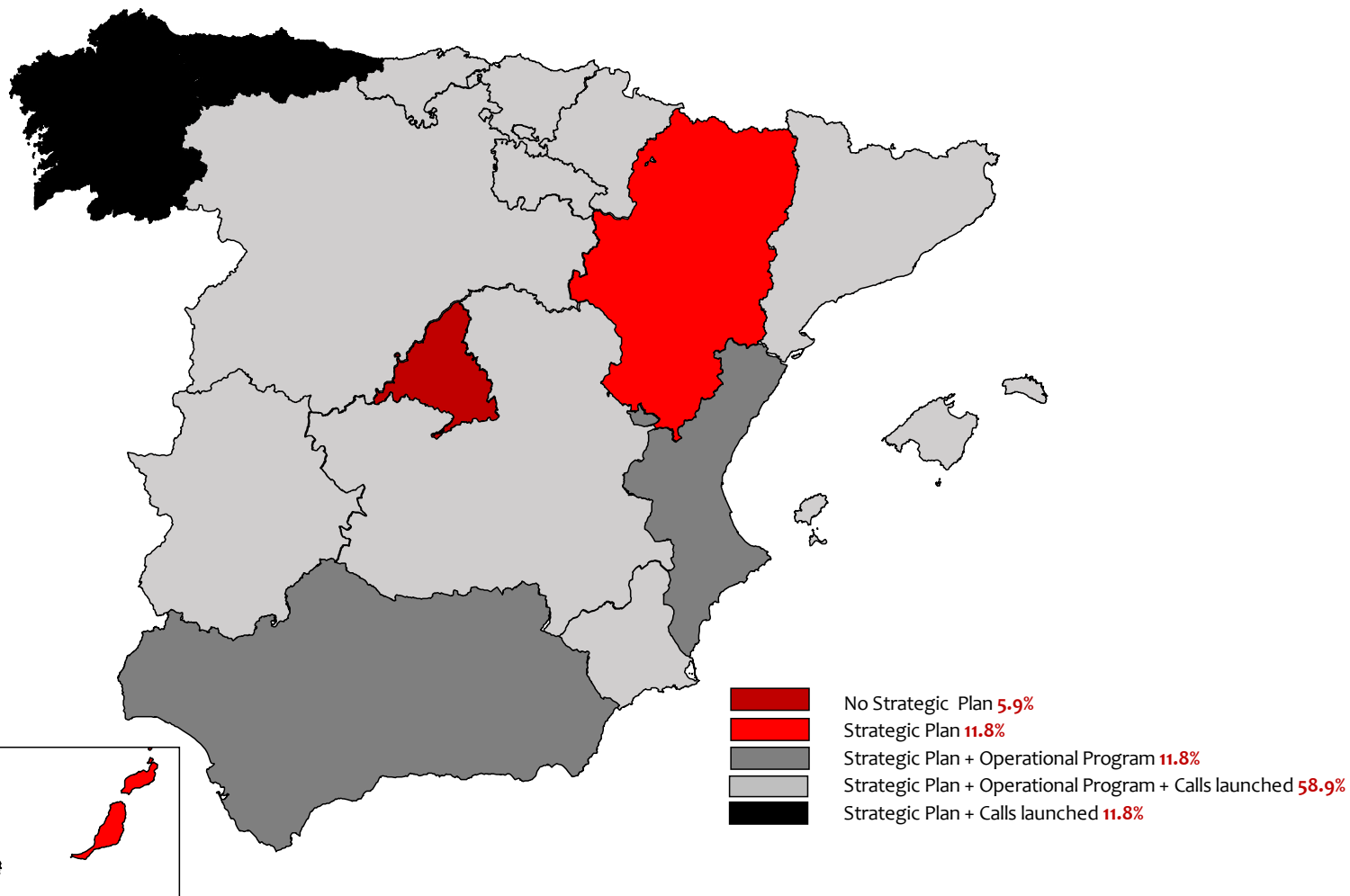
- ☐ **Question 4: Has the RIS3 contributed to a greater collaboration between universities and businesses?**

- ☐ **Question 5: What changes has RIS3 implied on the use of the structural funds (ESIF)?**

RIS3 - The Spanish Case Study | RIS3 Survey

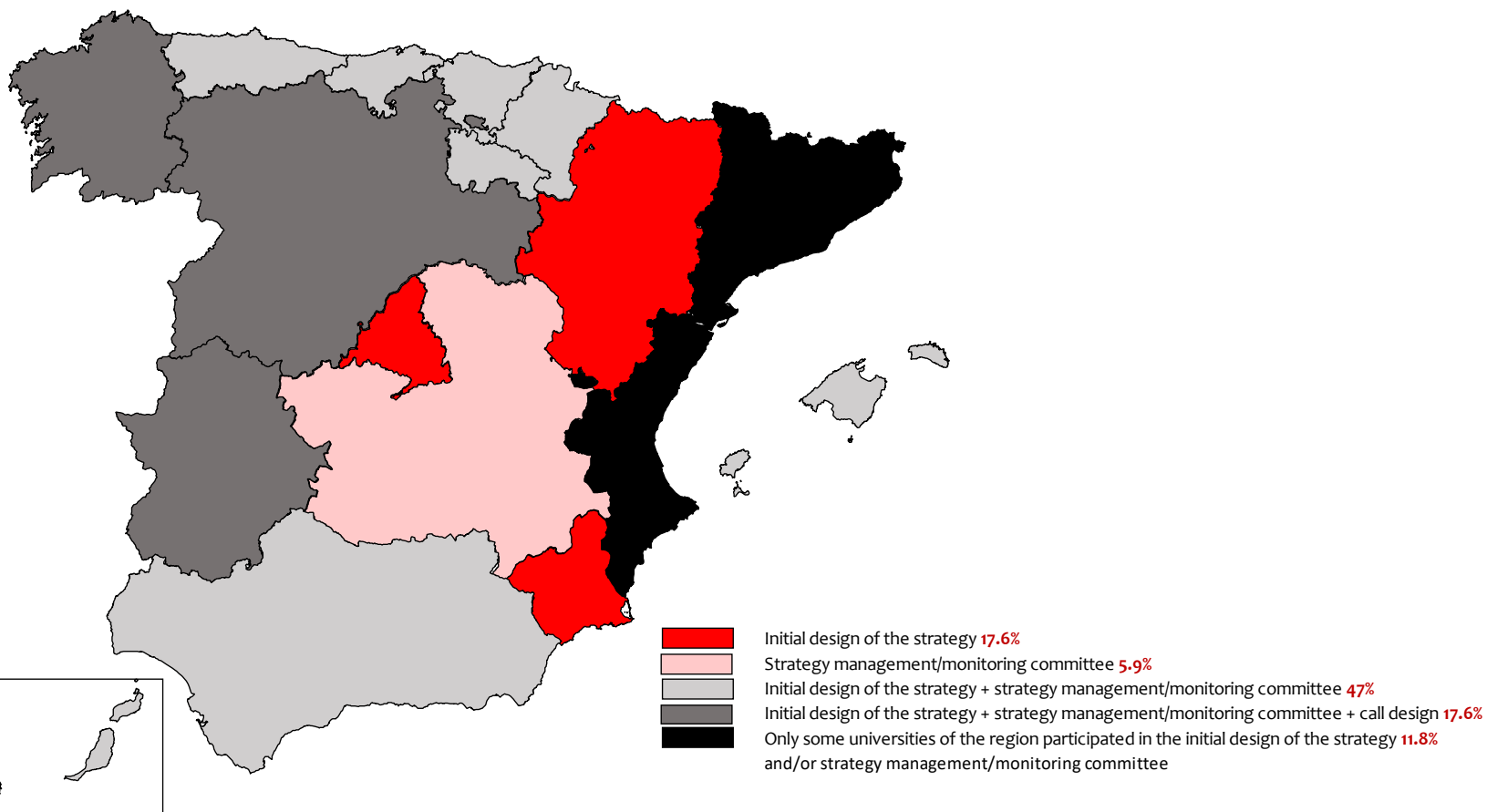
- ☐ **Question 6: Have research and innovation been prioritized over other actions (e.g. infrastructures)?**
- ☐ **Question 7: Have actions been launched specifically addressed to research and universities?** If possible, indicate them, as well as their main characteristics.
- ☐ **Question 8: Have any programs been launched in which the active participation of universities is a fundamental condition or an incentive in their evaluation?** If possible, indicate them, as well as their main characteristics.
- ☐ **Question 9: In your region, do R&D not aligned with the RIS3 strategy have any type of funding?**
- ☐ **Question 10: Please, indicate the main positive and negative aspects arising from the existence of RIS3 in your region.**

RIS3 - The Spanish Case Study | Question 1: What is the status of RIS3 development in your region?



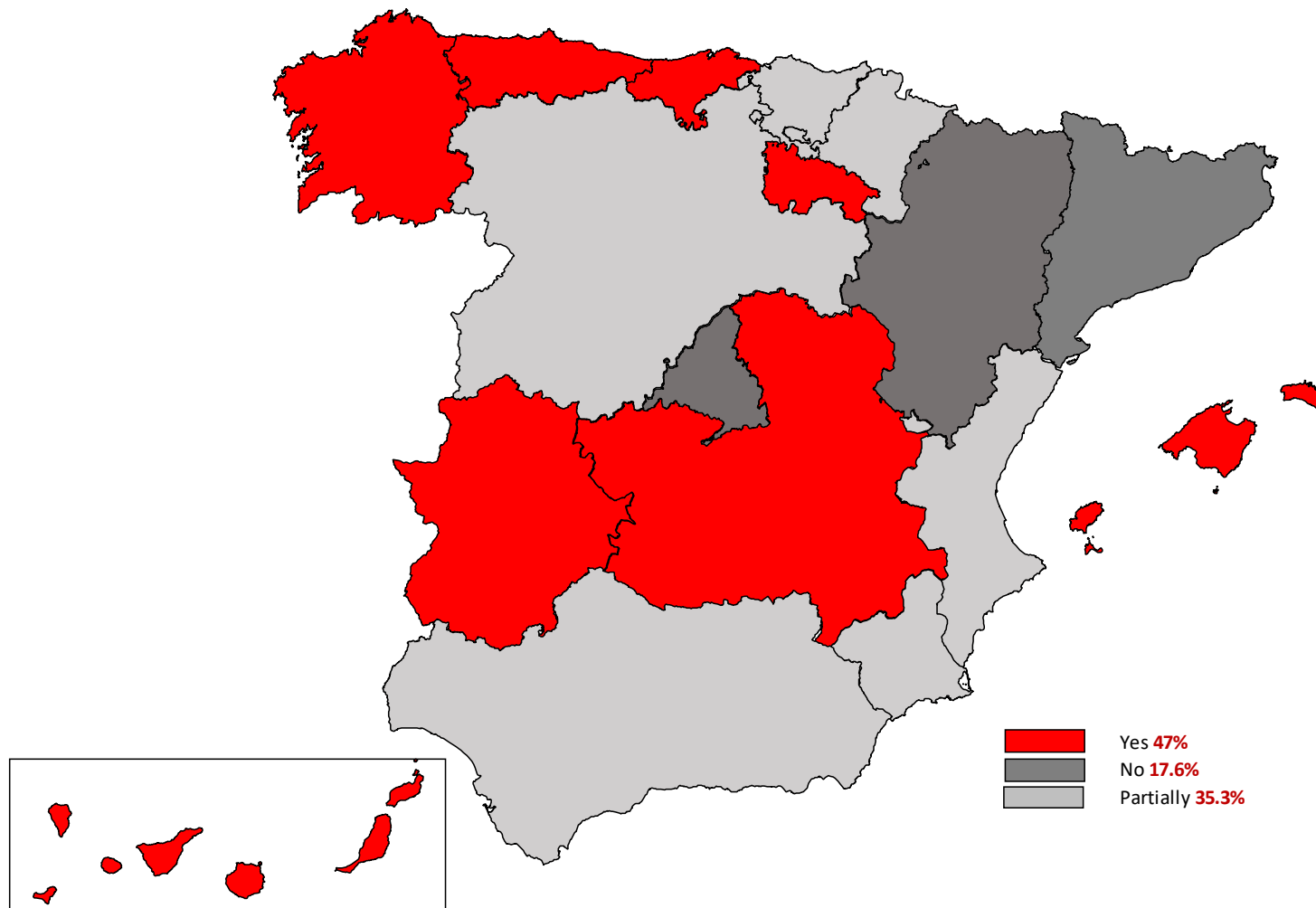
Source: Crue Spanish Universities

RIS3 - The Spanish Case Study | Question 2: Concerning the involvement of universities



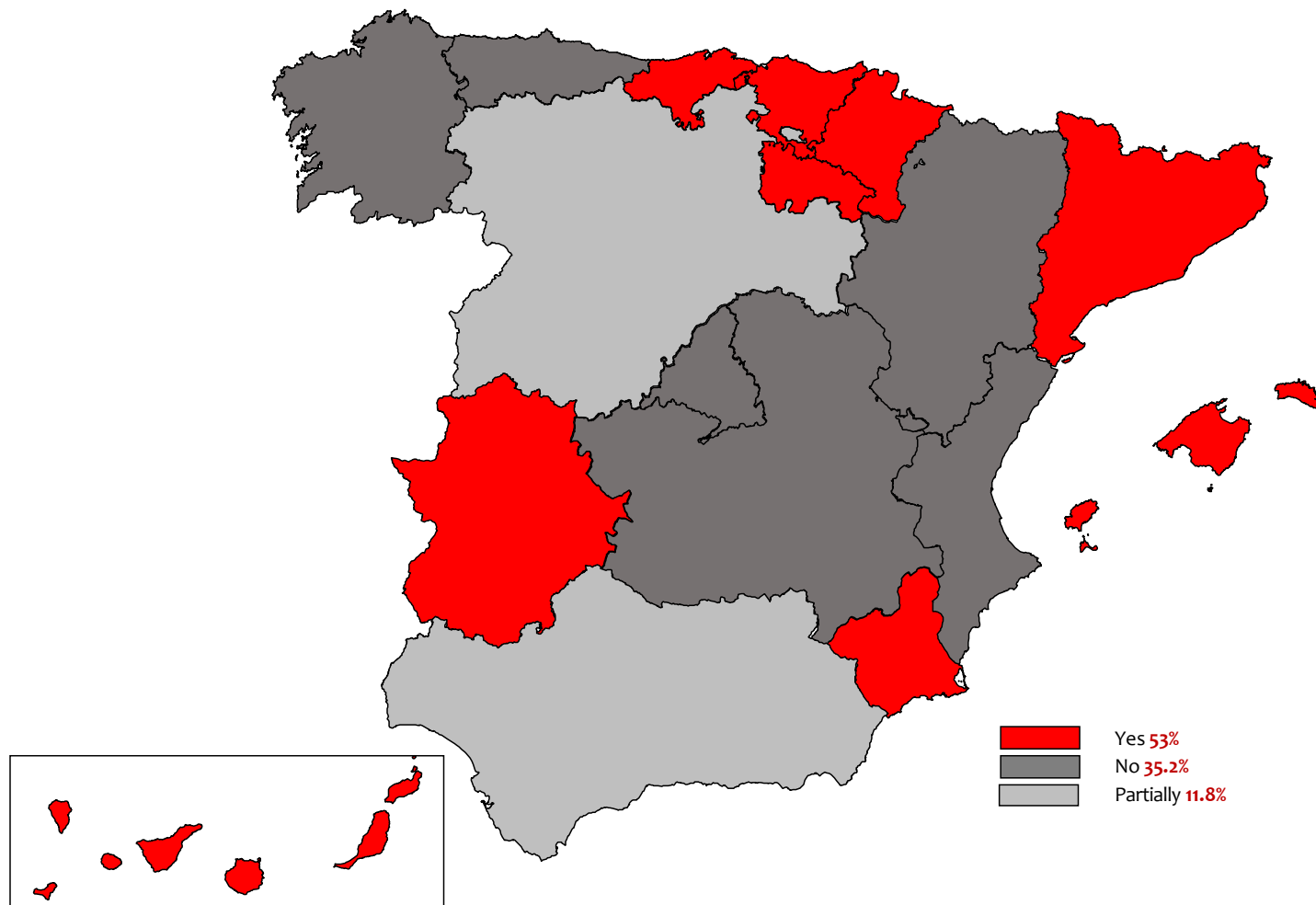
Source: Crue Spanish Universities

RIS3 - The Spanish Case Study | Question 3: Is the RIS3 strategy aligned with the strategy of the campus of excellence in your region?



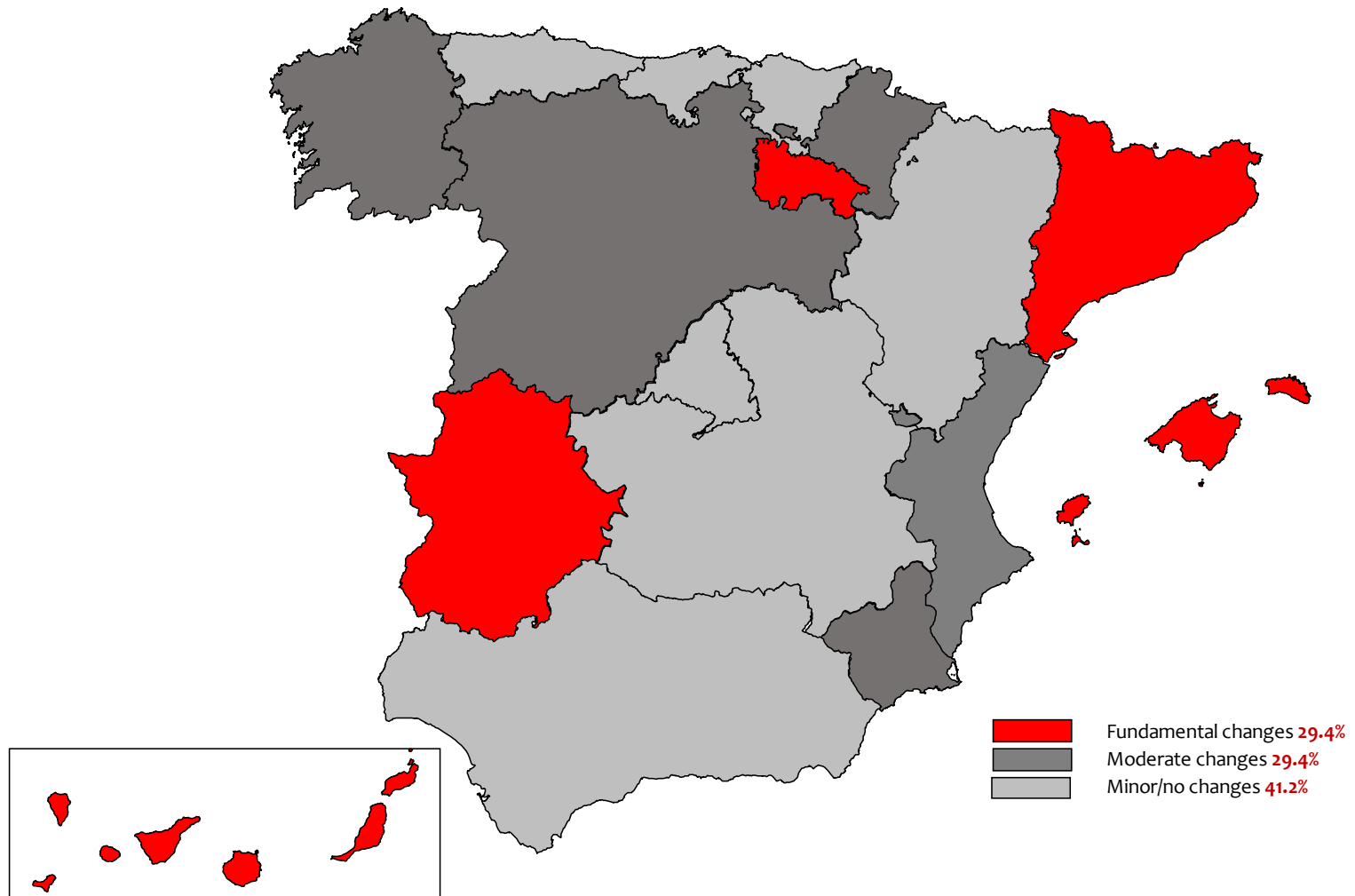
RIS3 - The Spanish Case Study |

Question 4: Has the RIS3 contributed to greater collaboration between universities and businesses?



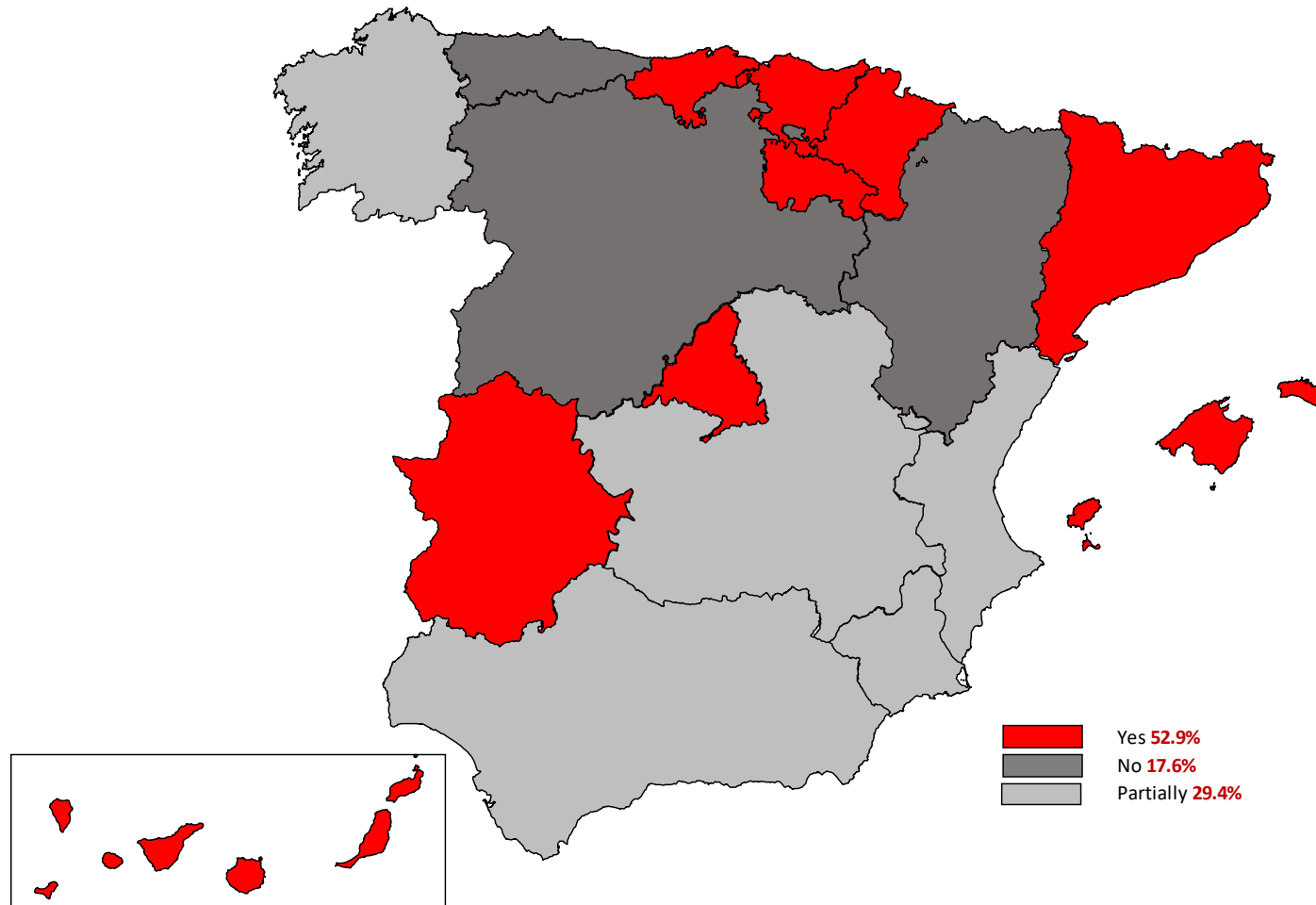
Source: Crue Spanish Universities

RIS3 - The Spanish Case Study | Question 5: What changes has RIS3 made in the use of structural funds?

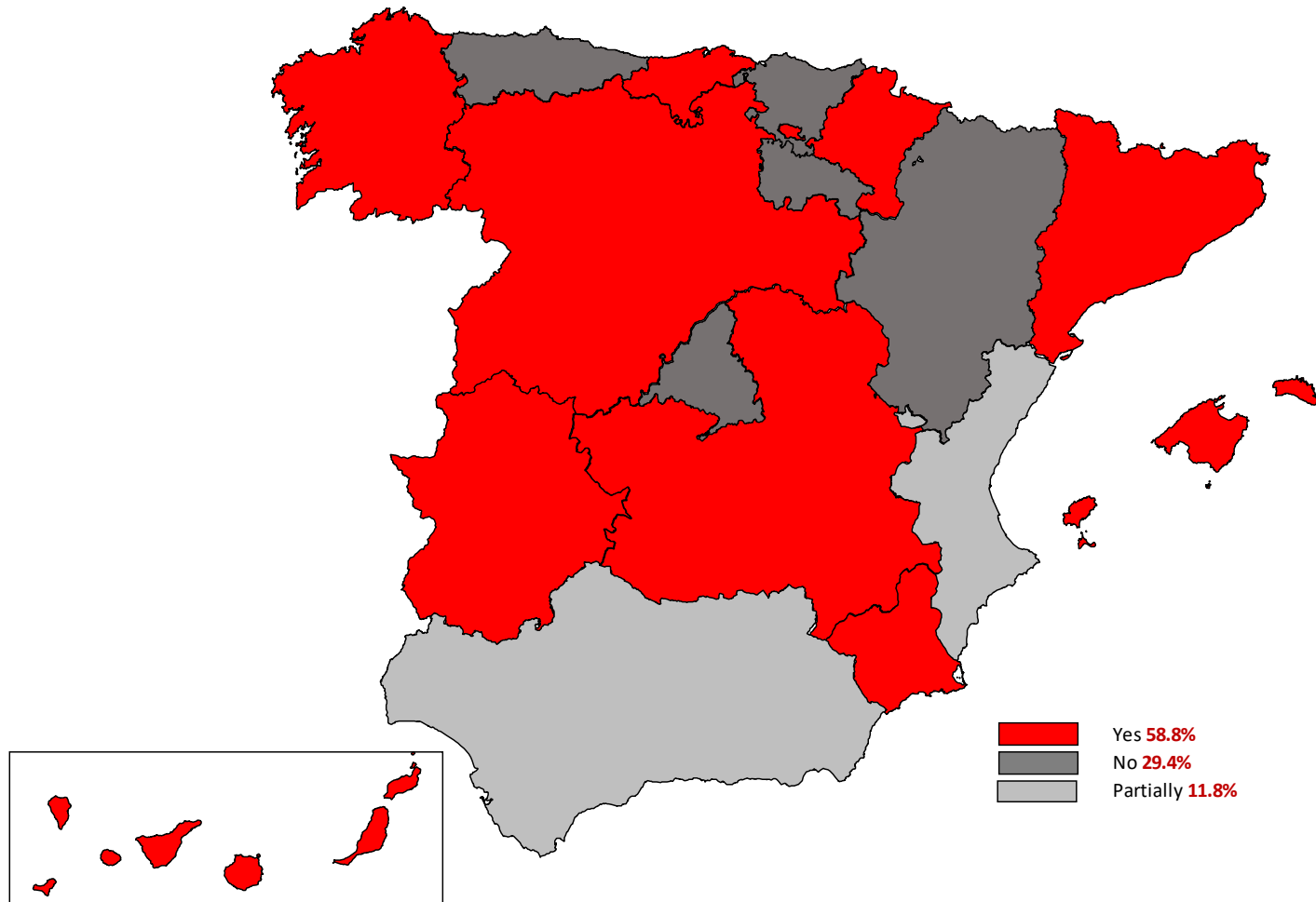


Source: Crue Spanish Universities

RIS3 - The Spanish Case Study | Question 6: Has research and innovation been prioritized over other actions (e.g. infrastructures)?



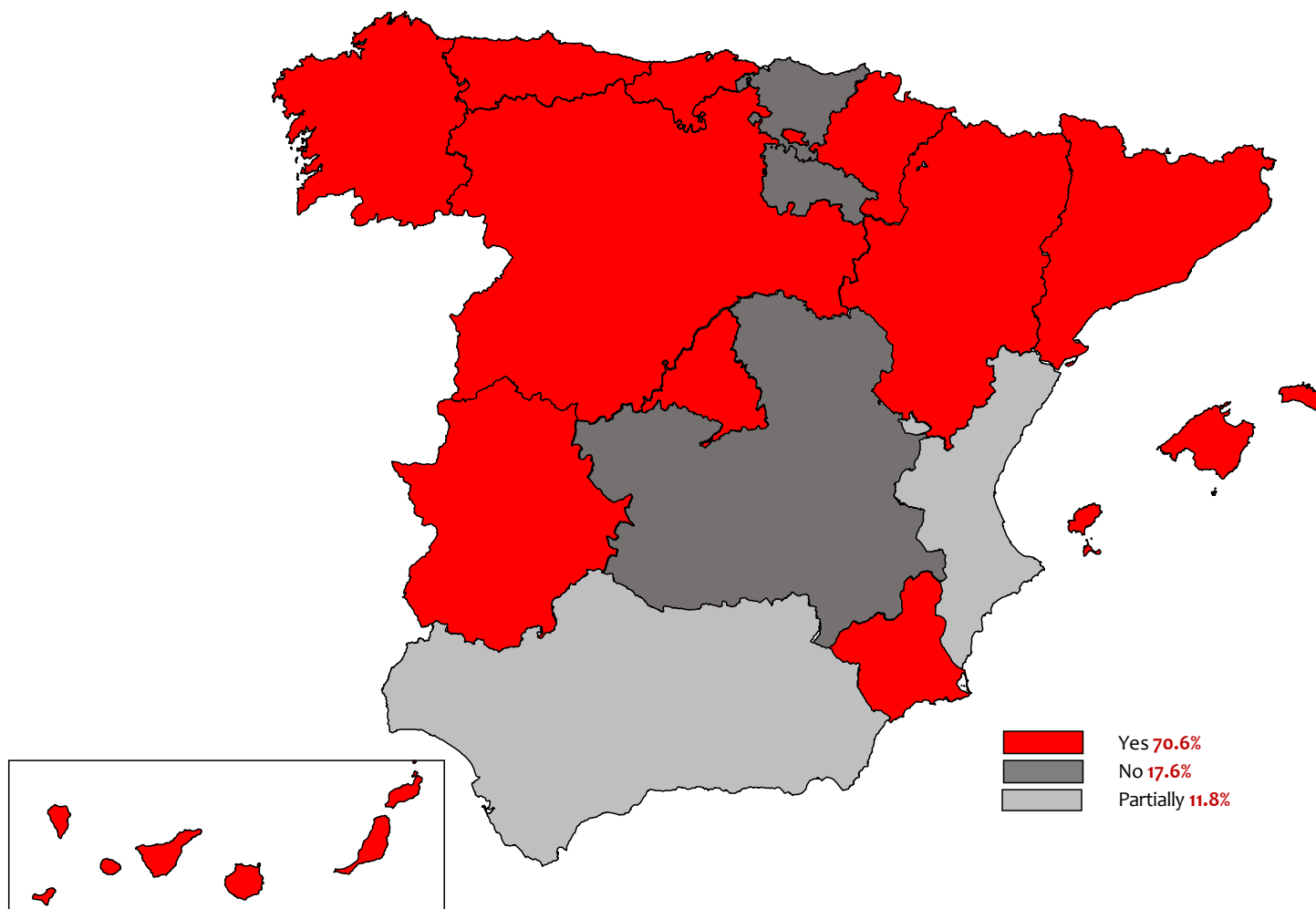
RIS3 - The Spanish Case Study | Question 7: Have specific actions been launched for research and universities?



Source: Crue Spanish Universities

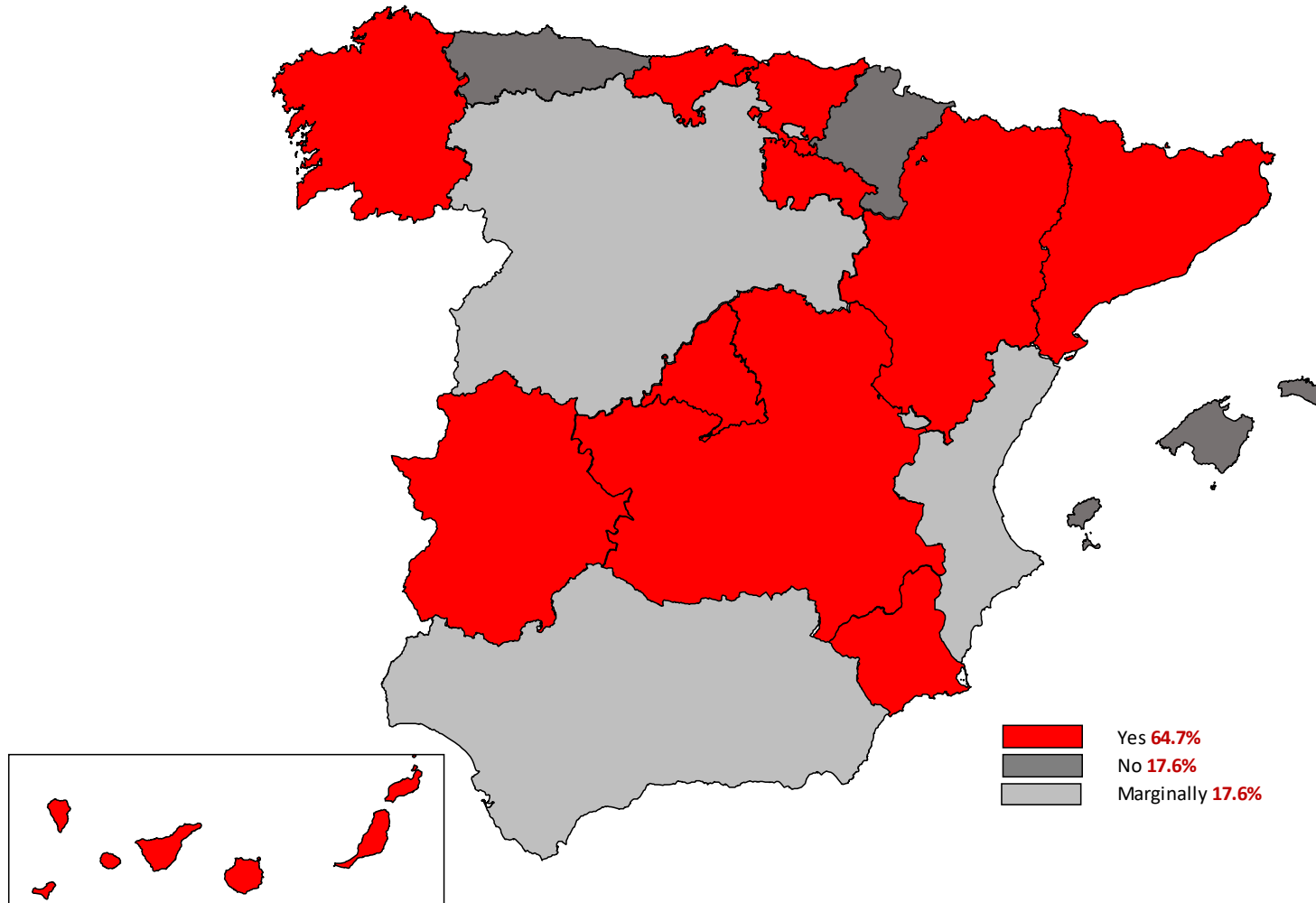
RIS3 - The Spanish Case Study |

Question 8: Have any programs been launched in which the active participation of universities is a fundamental condition or an incentive in their evaluation?



RIS3 - The Spanish Case Study |

Question 9: In your region, do R&D not aligned with the RIS3 strategy have any type of funding?



Source: Crue Spanish Universities

RIS3 - The Spanish Case Study | Conclusions

- ☐ Big differences between regions and universities' involvement in RIS3
- ☐ Positive aspects:
 - ✓ Greater focusing: joining efforts in a common direction
 - ✓ Clear and common priorities
 - ✓ Increase of funding for R&D
 - ✓ More cooperation between public and private agents
 - ✓ Higher participation of universities in R&D
 - ✓ Inclusion of knowledge in the economic model

RIS3 - The Spanish Case Study | Conclusions

Negative aspects:

- ✓ Basic science and humanities (low TRLs), as well as non-RIS3 aligned research, are penalized
- ✓ Excessive focus on transfer, to the detriment of research
- ✓ Complex management and bureaucracy
- ✓ The highest returns and benefits are for the business sector
- ✓ Weight of the business sector is, in general, much higher than that of the Universities when it comes to implementing RIS3



Universities are a critical player in local research, innovation and development, and therefore in RIS3, in Spain, although there is room for improvement.

Thank you!

