



"Science is the soul of prosperity of nations and the living source of all progress"

Funding opportunities for post doc researchers in Spain

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1. The Spanish Strategy: a general framework for ST&I policies

- The **SPANISH STRATEGY FOR ST&I 2013-2020** sets out Government's long term policy for ST&I and approaches to maximize their economic and social benefits. It outlines «service to society» as the driving force behind scientific and technological advancement and therefore the need to accelerate the flow of research and knowledge into the economy.
- The **SPANISH STRATEGY** exemplifies an effort to align national policies with the objectives sought by the European Union as regards ST&I as well as to define our own priorities as result of a solid analysis of our strengths, opportunities, weaknesses and threats.





2. The context

- Spain faces one of the greatest economic challenges of recent decades, forcing to adopt major structural reforms in ST& and to increase the economic impact of R&D investments.
- Consequently, the National Reform Programs (2012, 2013 and 2014) refer to the **ST&I** as the building block for “**boosting economic growth and competitiveness**” by encouraging the creation of capabilities and focusing on human resources.
- The **SPANISH STRATEGY** states policy actions and goals across boundaries to avoid the separation between research and innovation.



1. The Spanish Strategy: a general framework for ST&I policies

**Estrategia Estatal de
Innovación (e2i) 2010-2015**

Innovación

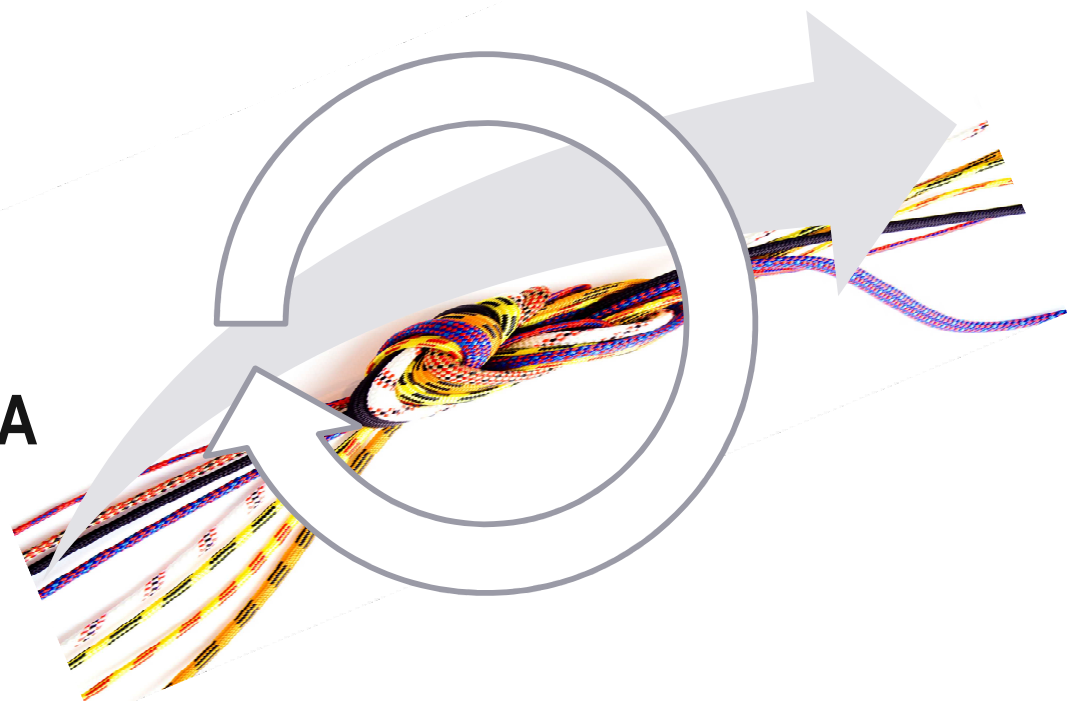


Investigación

**Estrategia Nacional
de Ciencia y
Tecnología (ENCYT)
2007-2015**

IDEA

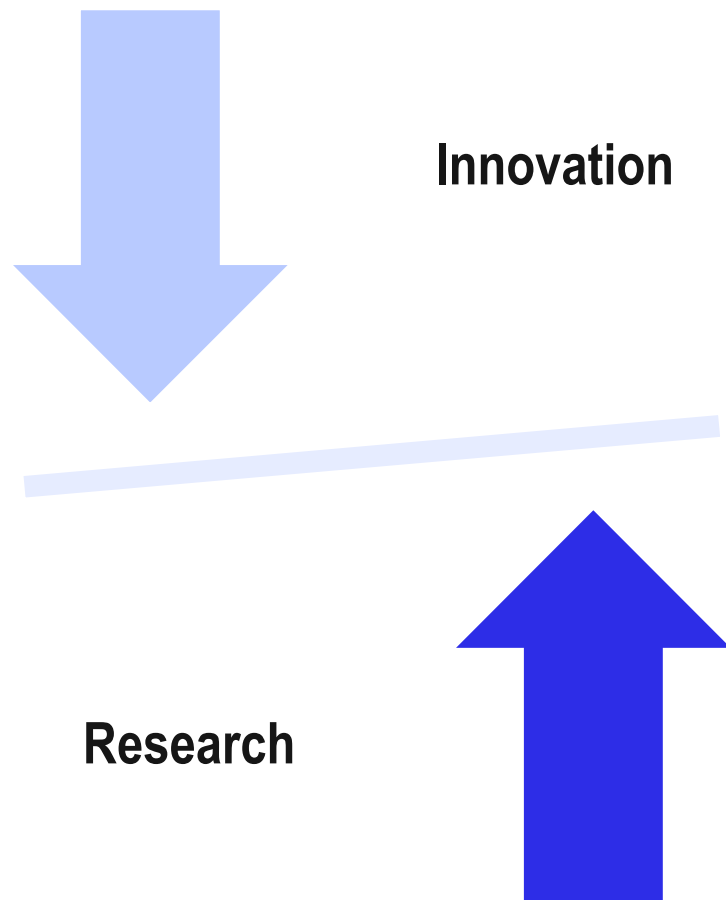
MERCADO



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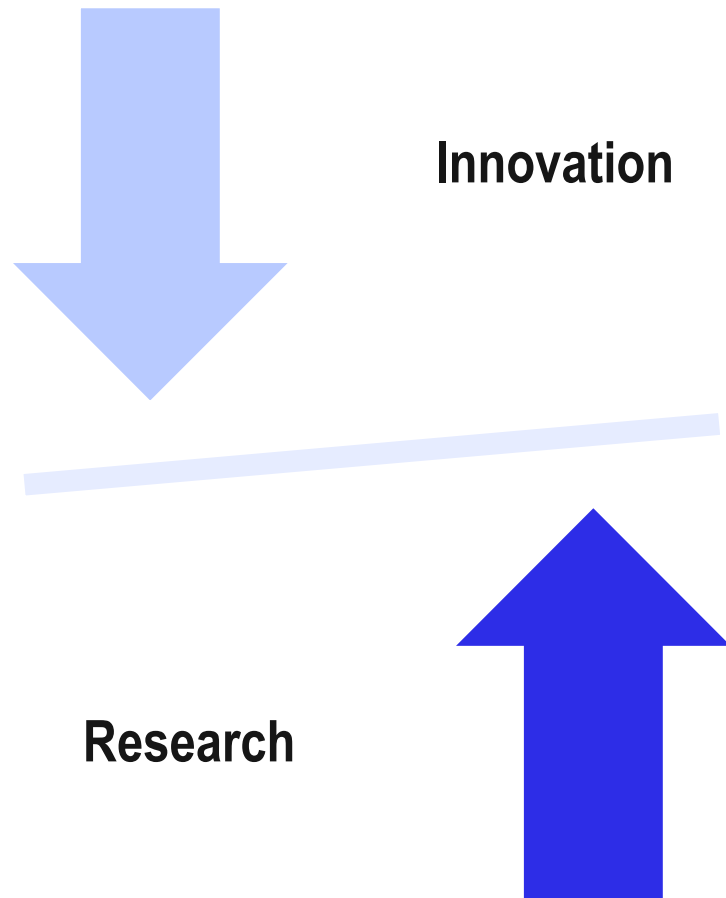
4. Main features of the Spanish ST&I System: **Strengths**



1. **R&D PERFORMING INSTITUTIONS**
2. **RESEARCHERS AND R&D PERSONNEL HIGHLY QUALIFIED**
3. **INTERNATIONAL** recognition [impact] of **SCIENTIFIC PRODUCTION**
4. Access to **ADVANCED** scientific and technological **INFRASTRUCTURES** –national and international-.
5. **SCIENTIFIC, TECHNOLOGICAL AND BUSINESS LEADERSHIP** in areas of **STRATEGIC INTEREST WORLDWIDE** such as biotechnology, renewal energy, ICT, etc.
6. **NETWORK INFRASTRUCTURES.**
7. **HUMAN CAPITAL**



4. Main features of the Spanish ST&I System: **Weaknesses**



1. Low levels of **R&D SPENDING**
2. **BUSINESS R&D** significantly below EU-27.
3. **GOVERNANCE OF PUBLIC INSTITUTIONS**
4. **SMALL SIZE RESEARCH GROUPS** and barriers to achieve critical mass.
5. **LACK OF flexible FUNDING SCHEMES FOR TECHNOLOGY-BASED AND INNOVATIVE COMPANIES.**
6. **ST&I REGIONAL DISPARITIES**
7. **KNOWLEDGE MANAGEMENT AND** Lack of SMEs' absorptive capabilities.
8. **SMALL NUMBER OF INNOVATIVE BUSINESS FIRMS**
9. **BARRIERS TO MOBILITY** of R&D personnel



6. Drivers and of the Spanish Strategy for ST&I 2013-2020



**Talent , Training,
Skills and Job
Opportunities**



**Towards knowledge
excellence**



**Business
Leadership in ST&I**



Societal Challenges

From the lab to the market place



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6. Drivers and funding

- Funding (2013) across the main drivers of the Strategy: TALENT; EXCELLENCE; BUSINESS AND SOCIAL CHALLENGES.
- It only refers to competitive funding thru contracts, grants and competitive schemes (including top up).



6. Drivers and funding

	Total	SUBSIDIES	LOANS
TALENT AND EMPLOYABILITY	350.696.891	250.696.891	100.000.000
EXCELLENCE	498.250.000	147.750.000	350.000.000
BUSINESS LEADERSHIP	831.900.000	140.900.000	691.000.000
SOCIETAL CHALLENGES	2.183.344.080	499.944.080	1.683.400

Strategic Action in Health: 87.433.080 and
Strategic Action in Digital Society and
Economy: 555.600.000

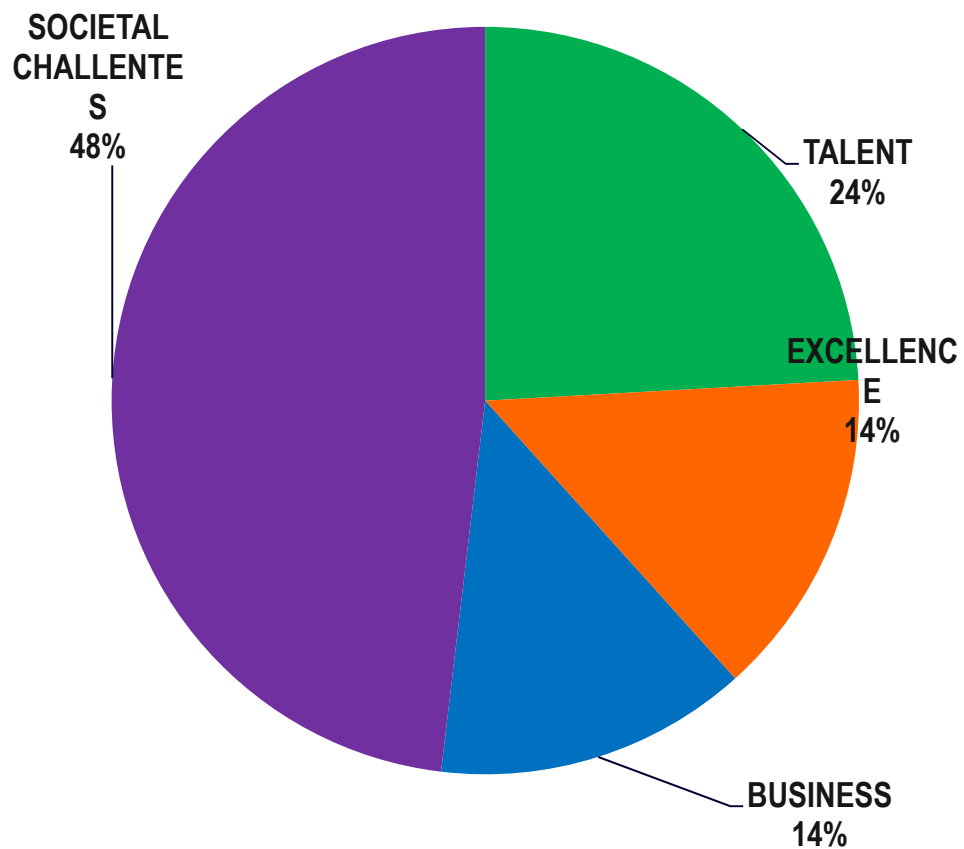


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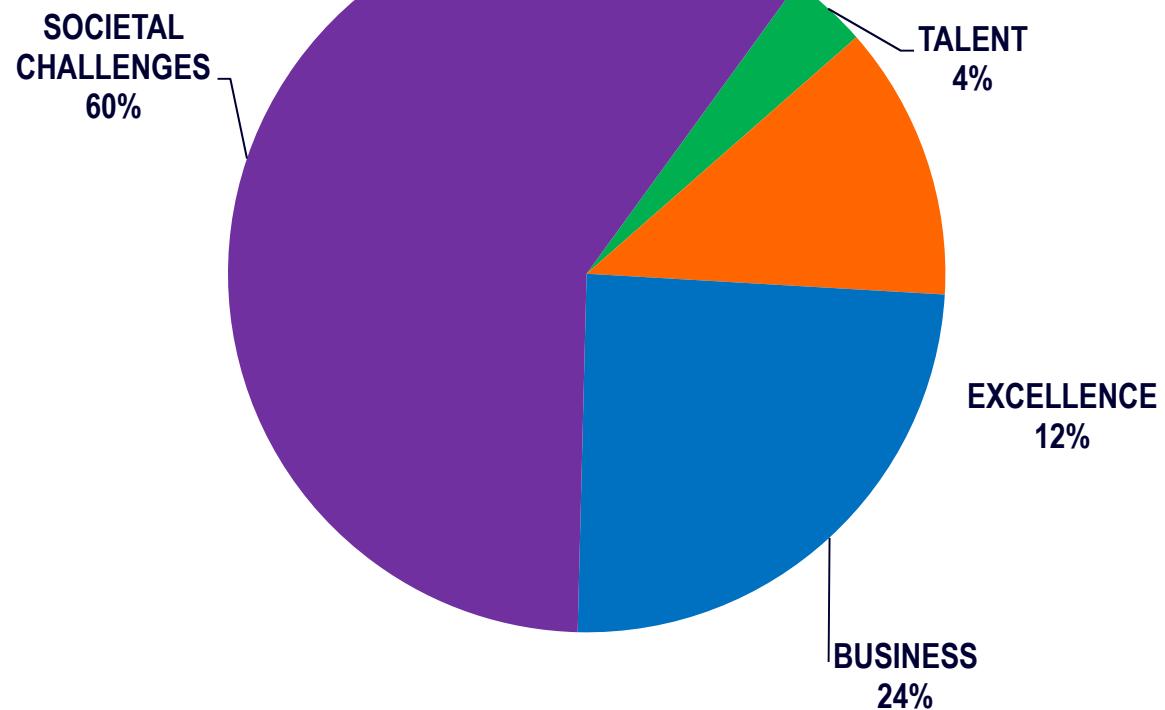
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6. Drivers and funding

Distribution of subsidies/grants



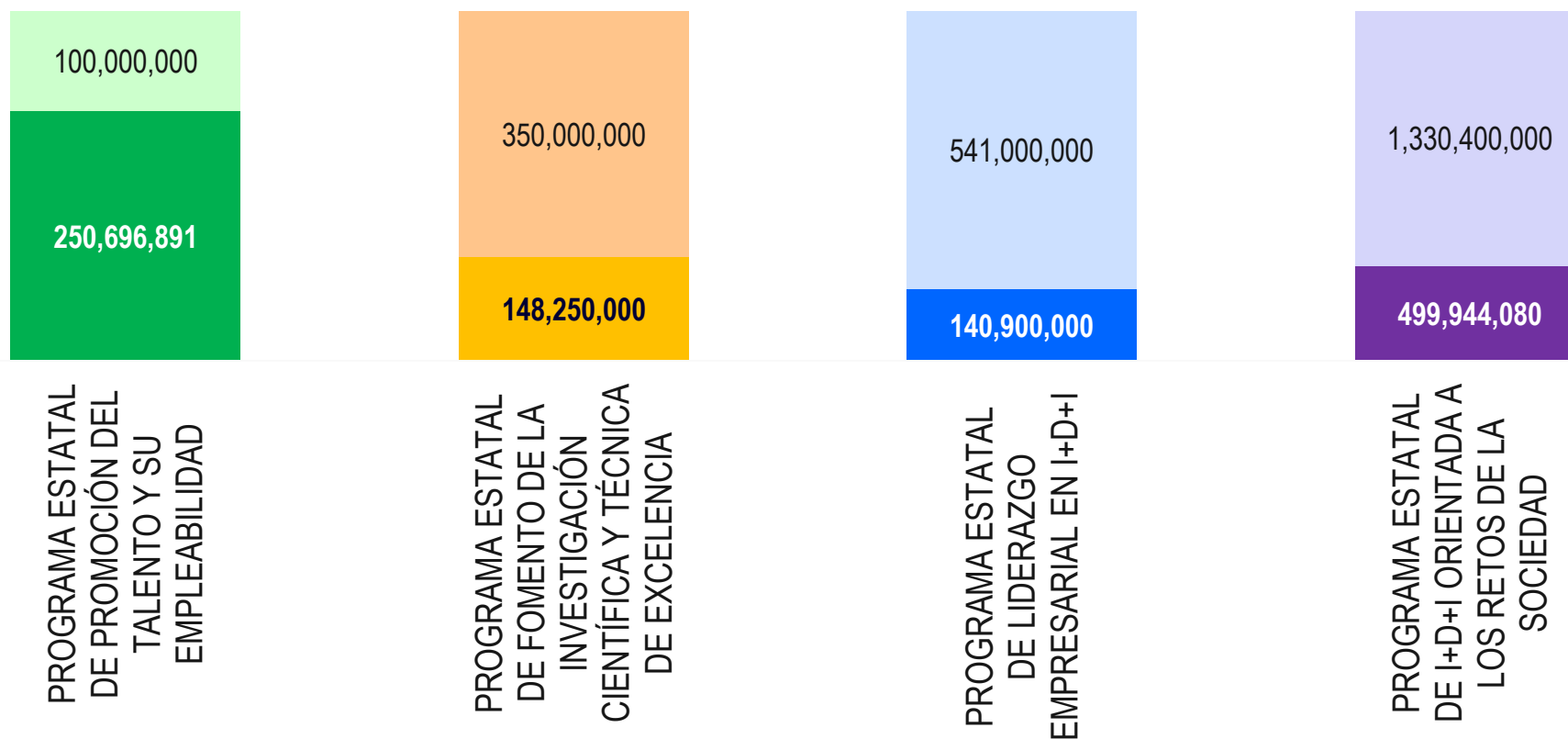
Distribution of loans



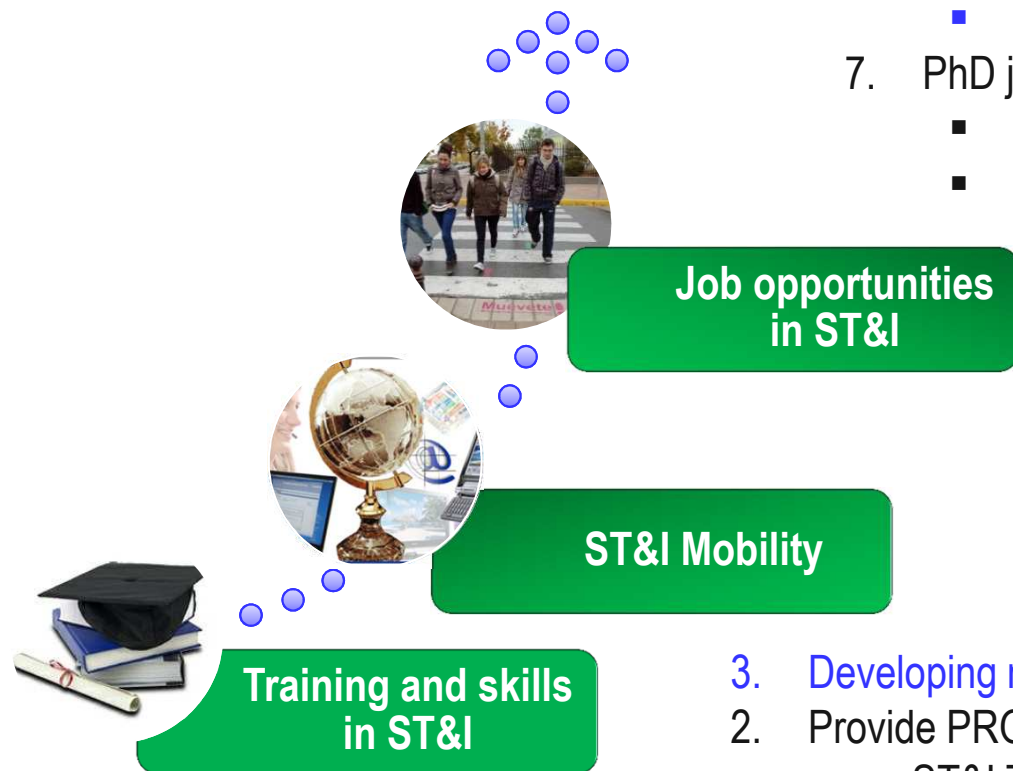
6. Drivers and funding

DISTRIBUTION OF FUNDS

■ Capítulo VII (Subvenciones) ■ Capítulo VIII (créditos financieros)



7. NATIONAL PROGRAM OF TALENT AND EMPLOYABILITY



9. Distinguished Professors
8. ST&I employment opportunities within public and private organizations:
 - ST&I technicians
 - ST&I managers
7. PhD job opportunities:
 - Public Research Organizations
 - Business Firms
6. Foster international mobility:
 1. Inflows –international attraction of talent-
 2. Outflows –as part of the research career-
5. Among public research organizations and across public and private ST&I performers
4. **Scientific/academic careers and opportunities**
3. Developing new BUSINESS/INDUSTRIAL PhD Programs
2. Provide PROFESSIONAL SKILLS for the ST&I System:
 - ST&I Technicians
 - ST&I Management
1. Strong and highly competitive pre doctoral and **post doctoral** TRAINING





7. NATIONAL PROGRAM OF TALENT AND EMPLOYABILITY

- Administrative simplification.
- Portability
- New schemes:
 - PhD contracts (1.020)
 - PhD contracts in Severo Ochoa Centers of Excellence (80)
 - Marie Curie Cofund
 - Schemes based on StG
 - Post doctoral contracts: 2 years
 - Post doctoral incorporation –young researchers: 2 years
 - Ramon y Cajal (5 years) and additional benefits (40,000 E +110,000 E)
 - And new initiatives to foster employability and attract talent:
 - 1,000 new employments in R&D
 - New opportunities for young post doc within research projects



7. NATIONAL PROGRAM OF TALENT AND EMPLOYABILITY

	Total	GRANTS	LOANS
PhD Contracts	79.074.000	79.074.000	
Post doc contracts	11.250.000	11.250.000	
TRAINING	90.324.000	90.324.000	
Ramón y Cajal	54.005.000	54.005.000	
Torres Quevedo	15.000.000	15.000.000	
EMPLEA	101.500.000	1.500.000	100.000.000
Technicians	6.720.000	6.720.000	
I3	3.250.000	3.250.000	
COFUND CURIE	2.000.000	2.000.000	
INCORPORATION	182.475.000	82.475.000	100.000.000



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7. NATIONAL PROGRAM OF TALENT AND EMPLOYABILITY

- PhD contracts: (1) better social benefits; (2) 1.020 contracts - 20.600 €/año+academic taxes+mobility aid- and (3) linked to R&D projects and Severo Ochoa Centers of Excellence. Severo Ochoa Centers also have a programme supported by La Caixa.
- **Ramón y Cajal** (175) include new incentives: **wage+ 40.000 Euros for individual research + 110.000 Euros** for further incorporation..
- COFUND CURIE: co-funding contracts under *Cofund Marie Curie* schemes
- **EMPLEA** -specialists in technology and knowledge management within business firms-



7. NATIONAL PROGRAM OF TALENT AND EMPLOYABILITY

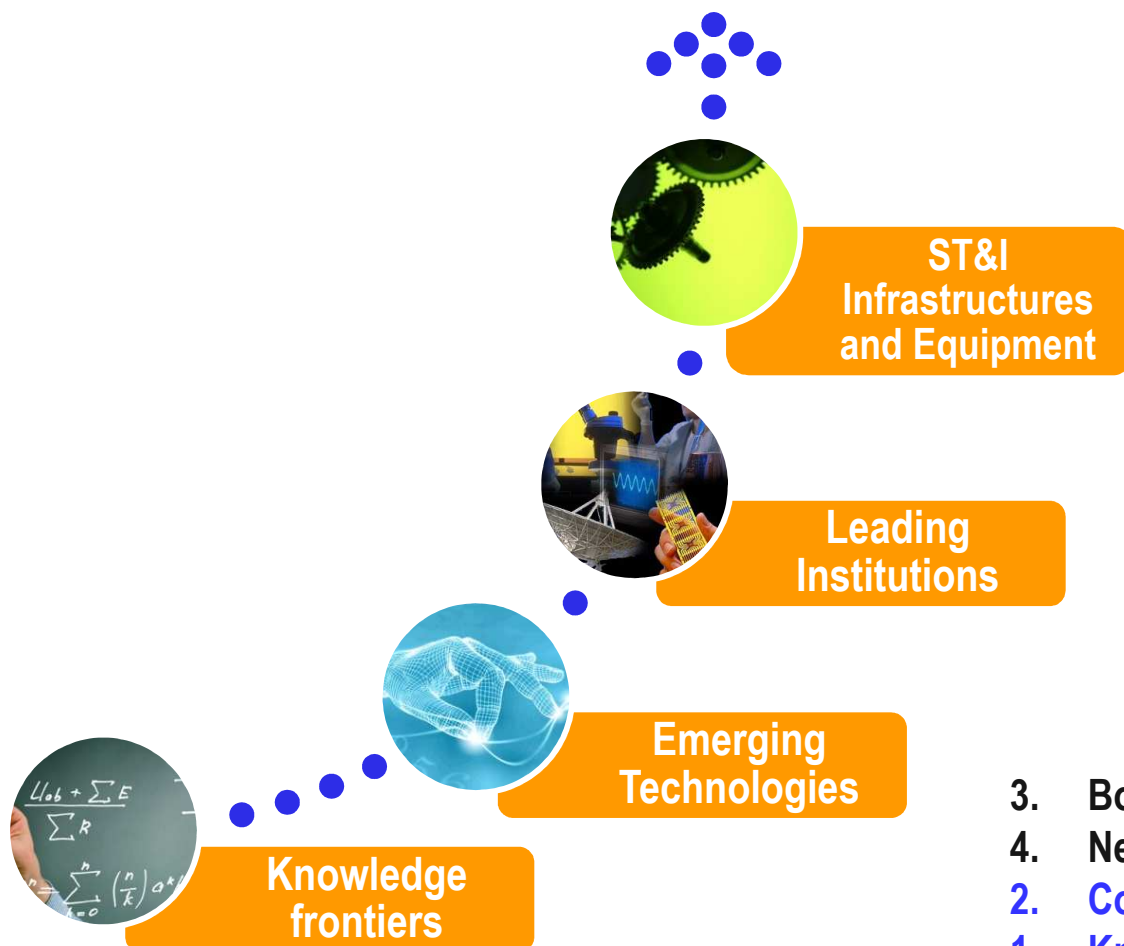
	Total	Capítulo VII	Capítulo VIII
PhD training in foreing institutions	7.000.000	7.000.000	
PhD mobility (universities)	2.571.700	2.571.700	
Junior and senior faculty mobility (EDU)	7.526.300	7.526.300	
Mobility (bilateral cooperation)	722.346	722.346	
INCOPORATION	17.820.346	17.820.346	



8. Other areas of interest



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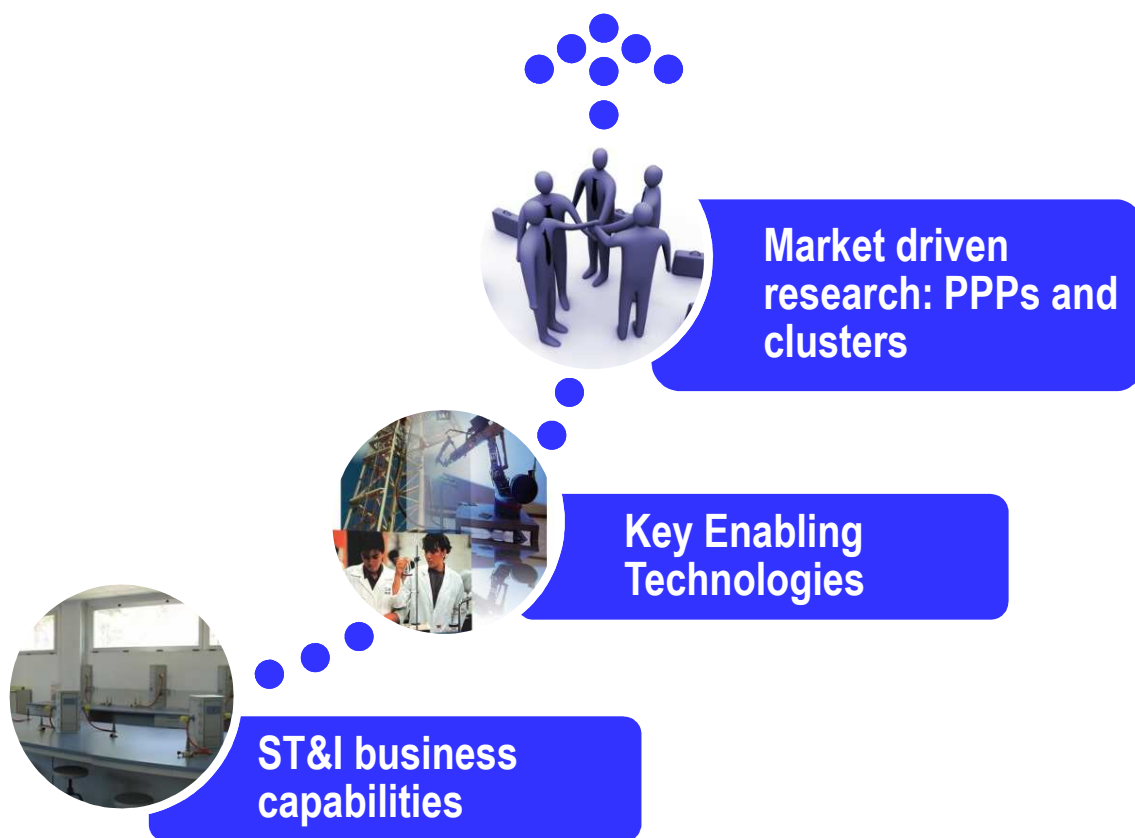
9. Large Research Infrastructures: National and International Roadmaps coordination
8. ST&I equipment and small infrastructures to support research activities
7. Scientific institutions and international leadership as drivers to prompt ST&I
6. Governance and restructuring of Public Research Organizations
7. Scientific specialization, increasing competition and international collaborations
5. From blue skies projects towards proof of concepts and exploratory exercises to advance knowledge production and its potential for further development
3. Bottom-up process
4. New funding opportunities for scientific breakthroughs
2. Convergence ERC initiatives
1. Knowledge creation –basic and blue sky research based on scientific excellence and long term results



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8. Other areas of interest



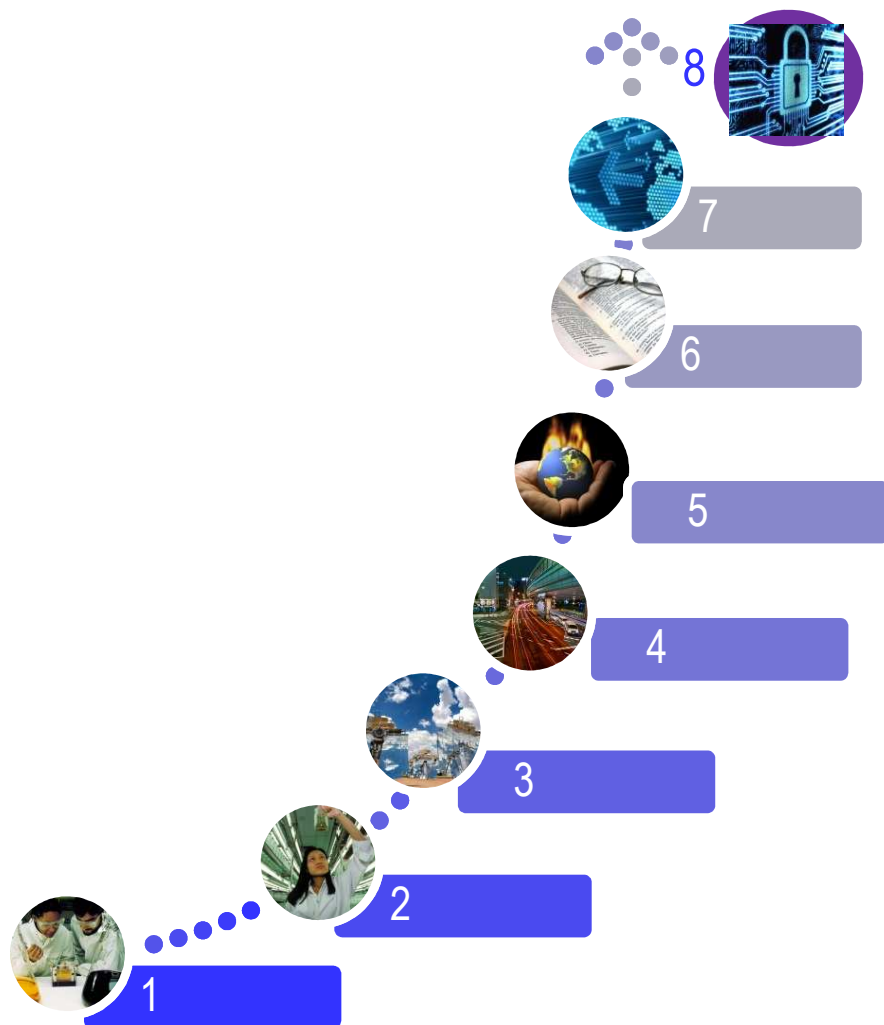
8. PPPs to foster:
 - ST&I applications
 - Entrepreneurial capabilities
 - Business engagement
7. Market oriented research
6. Strategic focus on KETs - nanotechnology, fotonics, microelectronic, advanced production systems, new materials, chemistry, ITCs- and business applications
5. Adoption and diffusion of horizontal technologies and potential cross industry applications
4. Foster competitiveness in strategic industrial and economic sectors thru ST&I
3. Innovative firms internationalization
2. Significant increase in SMEs engagement in ST&I activities
1. Business firms capabilities to perform ST&I projects



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8. Other areas of interest



1. **Health, demographic change and wellbeing**
2. **Food security, sustainable agriculture, marine and maritime research & the bio economy**
3. **Secure, clean and efficient energy**
4. **Smart, green and integrated transport**
5. **Climate action, resource efficiency and raw materials**
6. **Social changes and innovative societies**
7. **Inclusive and secure societies**
8. **Society and Economy of the Digital Age**

The promotion of R&D&I directed at the challenges of society arises from the need to respond to the problems we face, and the objective of the SPANISH STRATEGY is to promote the scientific, technological and business leadership of Spain in all those segments with a high potential for growth at global level.

CHALLENGES cover large fundamental areas which determine unique spaces for the multidisciplinary and inter sectoral collaboration.

The search for solutions to respond to the global CHALLENGES mobilizes major effort in terms of basic scientific research, development and innovation developed by research groups in the public sector and in business and in collaboration.

