

“the EU Research Framework Programme, according to preliminary European wide estimates, it represents some 20% to 25% of all project-based funding in Europe”\*



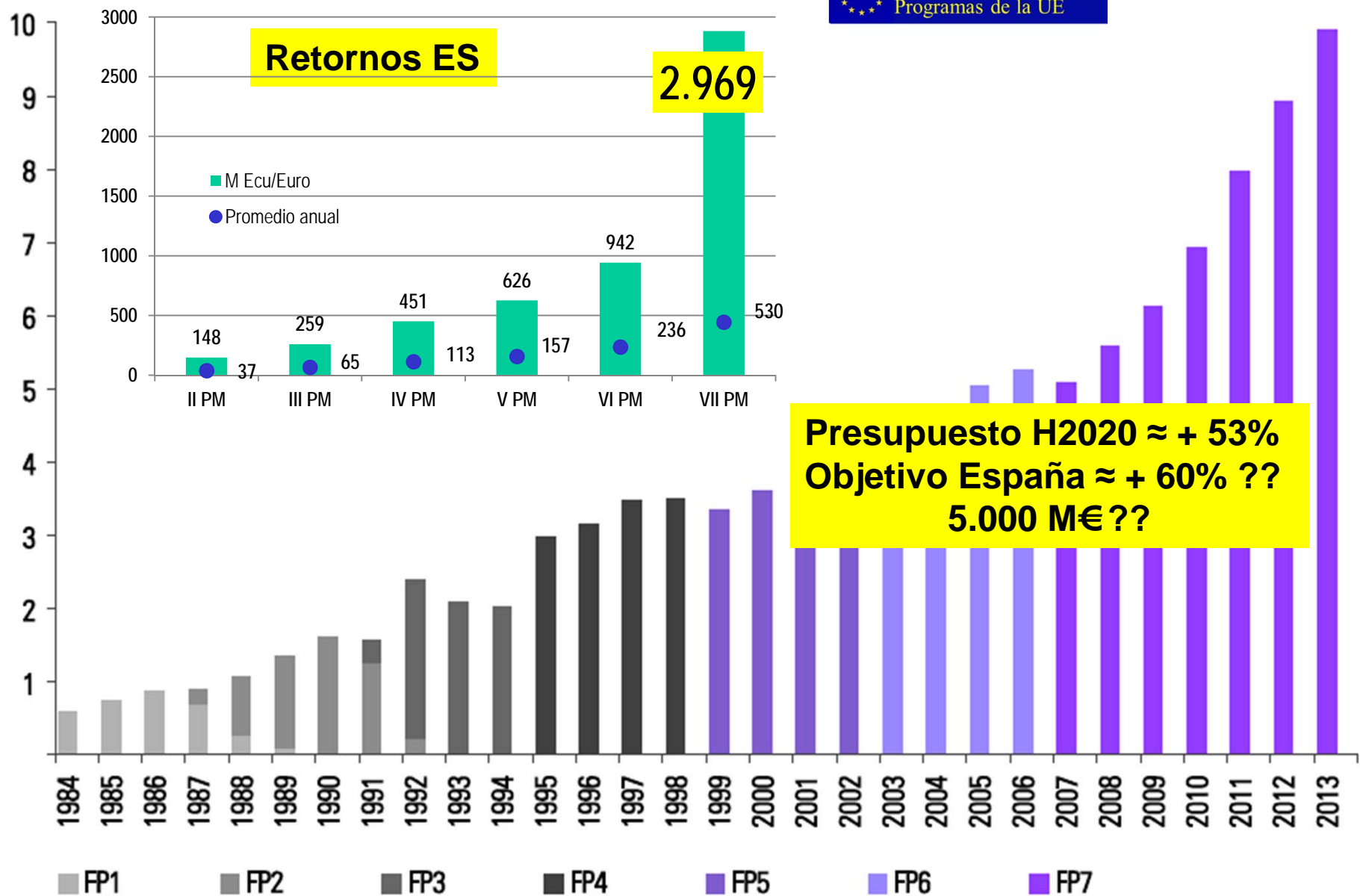
# HORIZONTE 2020 DE LA VISIÓN GENERAL A LAS OPORTUNIDADES DE LA UNIVERSIDAD

Universidad Complutense de Madrid  
9 de Enero 2014

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\* Innovation Union Competitiveness report 2011. Executive Summary

Figure 2: Average annual FP budgets (in EUR billion, at current prices)



Source: European Commission (COM(2004) 533, 786/2004/EC, COM(2005) 119 final), see Table 1

# UCM y el VII PM: resultados

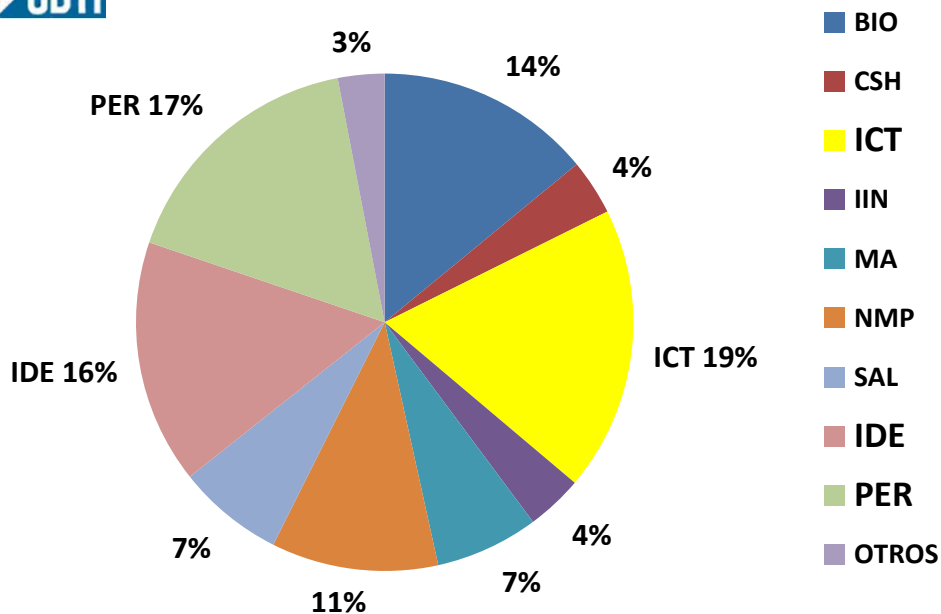
	Actividades	Líderes	Subv M€	Nº Univ ES	Nº Uni UE
VI PM	39	3	7,3	11	181
VII PM	85	15	24,5	8	167

Programa	Subv. Euro	%	Nº	%
BIO	3.483.510	14%	11	13%
CSH	894.965	4%	7	8%
ICT	4.589.298	19%	17	20%
IIN	909.446	4%	5	6%
MA	1.666.992	7%	5	6%
NMP	2.688.542	11%	7	8%
SAL	1.721.686	7%	5	6%
IDE	3.935.000	16%	2	2%
PER	4.159.020	17%	20	24%
OTROS	751.542	3%	6	7%
Total	24.800.000	100%	85	100%

En el VII PM la UCM ha obtenido subvenciones por valor de 24,5 M€ y ocupa la 8ª posición entre las universidades Españolas y la 167 de las europeas. Con respecto al VI PM sus retornos se han multiplicado por 3,6 y ha subido 3 y 14 posiciones respectivamente.



UCM VII PM Subv



Sólo se lideran 4 consorcios; el promedio de participación es de 260 k€; hay 14 participaciones <100 k€. Se han obtenido 2 ERC

# CDTI H2020= IMPULSO A GRUPOS DE INVESTIGACIÓN, EMPRESAS, ADMINISTRACIONES Y USUARIOS

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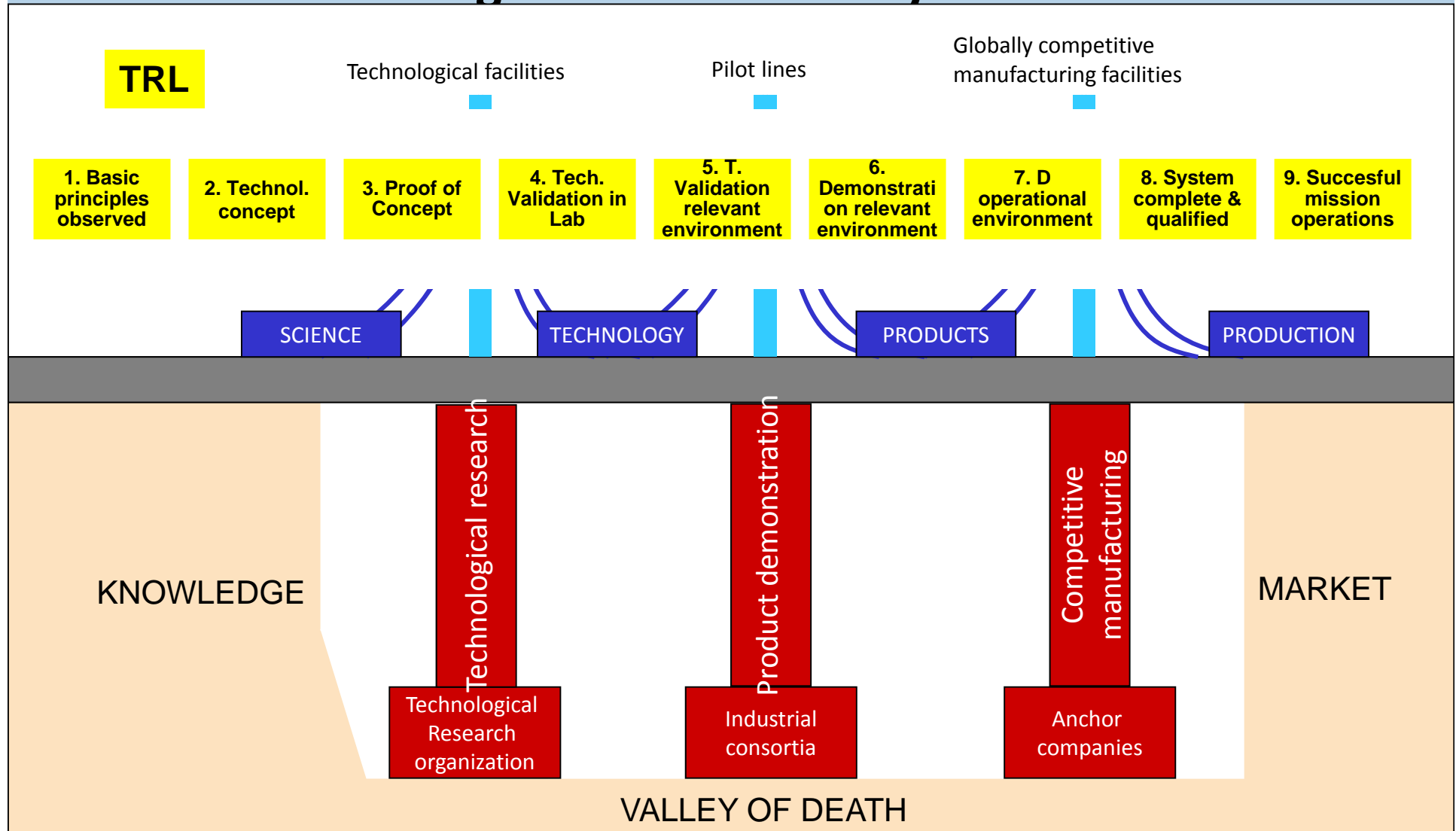
Impulso del CDTI

## 4. While remaining a top player in terms of knowledge production and scientific excellence, Europe is losing ground as regards the exploitation of research results



- The EU is the first producer of peer-reviewed scientific publications in the world, with 29 % of the world production in 2009, ahead of the United States (22 %), China (17 %) and Japan (5 %).  
In terms of scientific excellence, during the period 2001-2009, the EU as a whole increased its share of total scientific publications in the top 10 % most cited in the world from 10.4 % to 11.6 %, the world average being by definition at 10 %. This means that Europe's capacity to produce high-impact scientific publications, which is a proxy for scientific quality, is 16 % above the world average and has been increasing since 2000. In spite of such recent progress **the United States is still performing one third better than Europe in terms of R&D excellence**, with 15.3 % of US publications among the world's 10 % most cited.
- In terms of development of competitive technology, Europe is losing ground in a context of increased competition. Today, the world share of PCT patents is at a comparable level for the EU, the United States and the five leading Asian countries (all at 25-30 %). However, the rate of growth in the number of PCT patent applications over recent years in Japan and South Korea is almost double that of the EU.

# The bridge above the Valley of Death\*



\*HLG Expert Working Document: Mastering and deployment KETs. Building the bridge to pass across the KETs "valley of death" for future European innovation and competitiveness (08/01/2014)





# Key Enabling Technologies (KET): definitions

**KETs range: Micro- and nanoelectronics , Nanotechnology, Industrial biotechnology, Photonics, Advanced materials, Advanced manufacturing technologies .**

*KETs are knowledge intensive and associated with high R&D intensity, rapid innovation cycles, high capital expenditure and highly-skilled employment. They enable process, goods and service innovation throughout the economy and are of systemic relevance. They are multidisciplinary, cutting across many technology areas with a trend towards convergence and integration. KETs can assist technology leaders in other fields to capitalise on their research efforts (1).*

*KETs are technologies that will be crucial to the development of a multitude of new products and processes in many different industries and fields of application. They are seen as the route to new and better products and processes, capable of generating economic growth and employment and strengthening the competitiveness of the economy (2).*

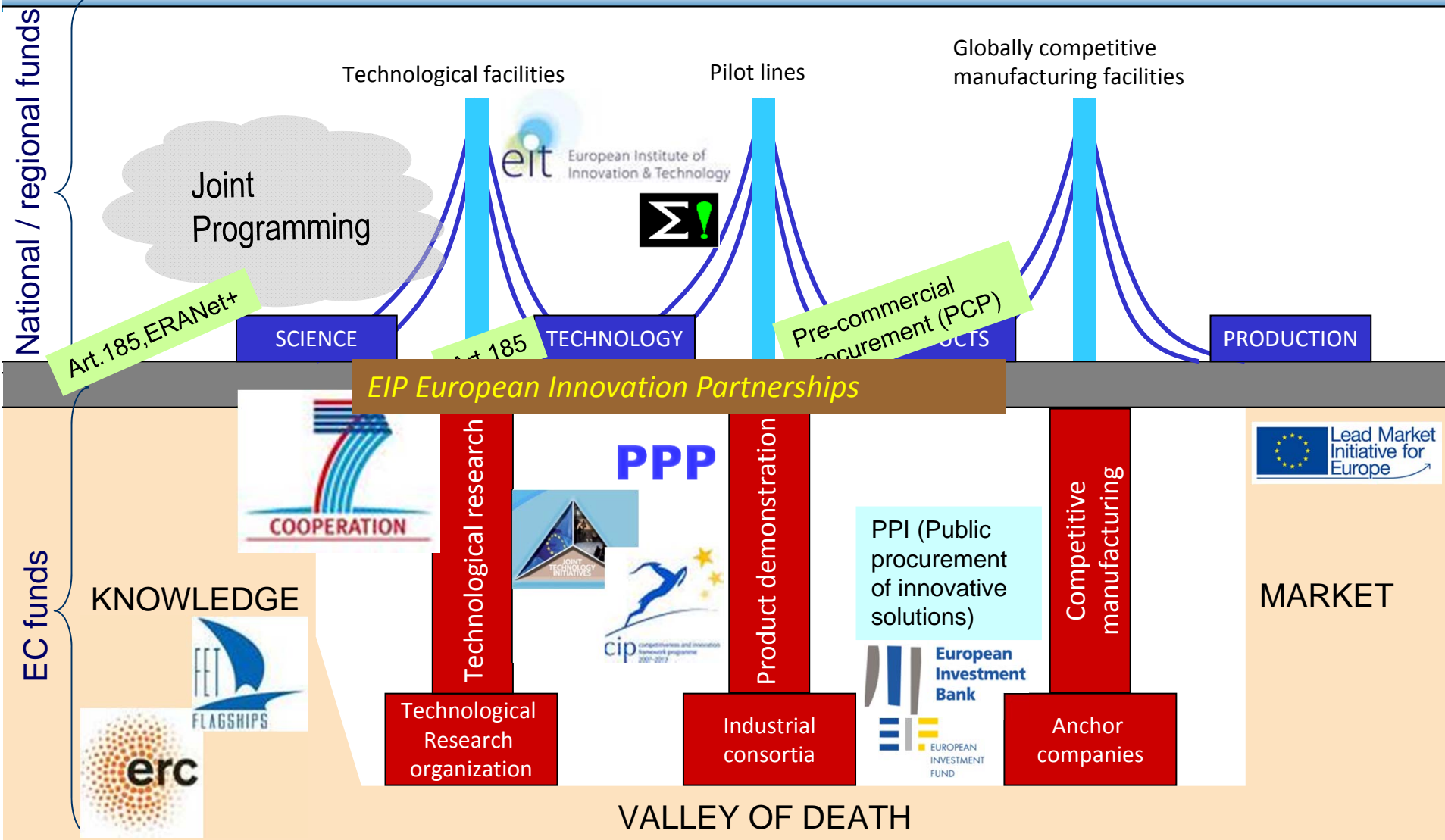
An important notion concerning the individual KETs definitions is that they have a different scope, in that they address either a technology, material, application, or industrial sector. This scope seems defined by the use of the specific definition.

(1) HLG on KET (2011), "Final report", EC, Brussels.

(2) EC (2011), European Competitiveness Report - 2011, Brussels

Horizon 2020.  
Some hints to  
get knowledge  
to market

# The bridge above the Valley of Death: FP7 status based on EXCELLENCE





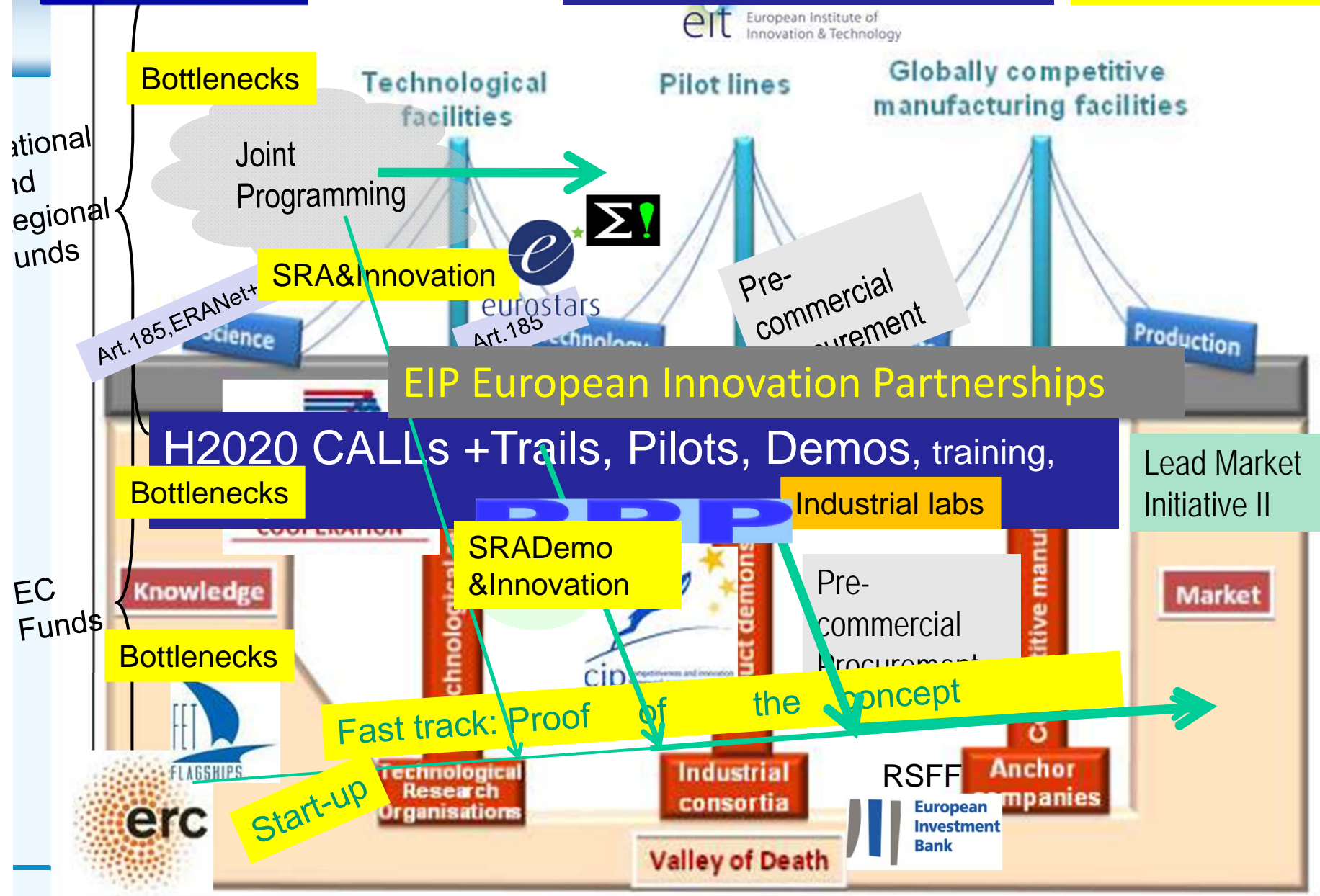


Figure 8: A European integrated initiative to pass through the KETs v

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## ÍNDICE

Entorno global

## Impacto en el H2020

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Impulso del CDTI

## PALABRAS CLAVE H2020:

EXCELENCIA, COMPETITIVIDAD,

COMPETIR COLABORANDO

ALIANZAS

INVESTIGADORES+ EMPRESAS+ USUARIOS

**THE ACTIVITIES SHALL COVER THE FULL CYCLE FROM FUNDAMENTAL RESEARCH TO MARKET**, with a new focus on innovation-related activities, such as piloting, **demonstration activities**, test-beds, prototyping, **large scale product validation**, support for **public procurement**, design, **end-user driven innovation**, social innovation, knowledge transfer and **market take-up of innovations** and standardisation..

Probablemente una de las mayores  
fuentes de subvenciones para proyectos en España

¿Avanzar en el conocimiento?  
¿en un entorno internacional?



- **Compartir riesgos**
- **Conocimiento y Tecnología**
- Acceso a la Información
- Imagen
- Apertura a mercados
- Financiación

- **Procesos**
- **Productos**
- **Servicios**
- **Plantas piloto**
- **Normalización**
- **Formación**

Consorcios

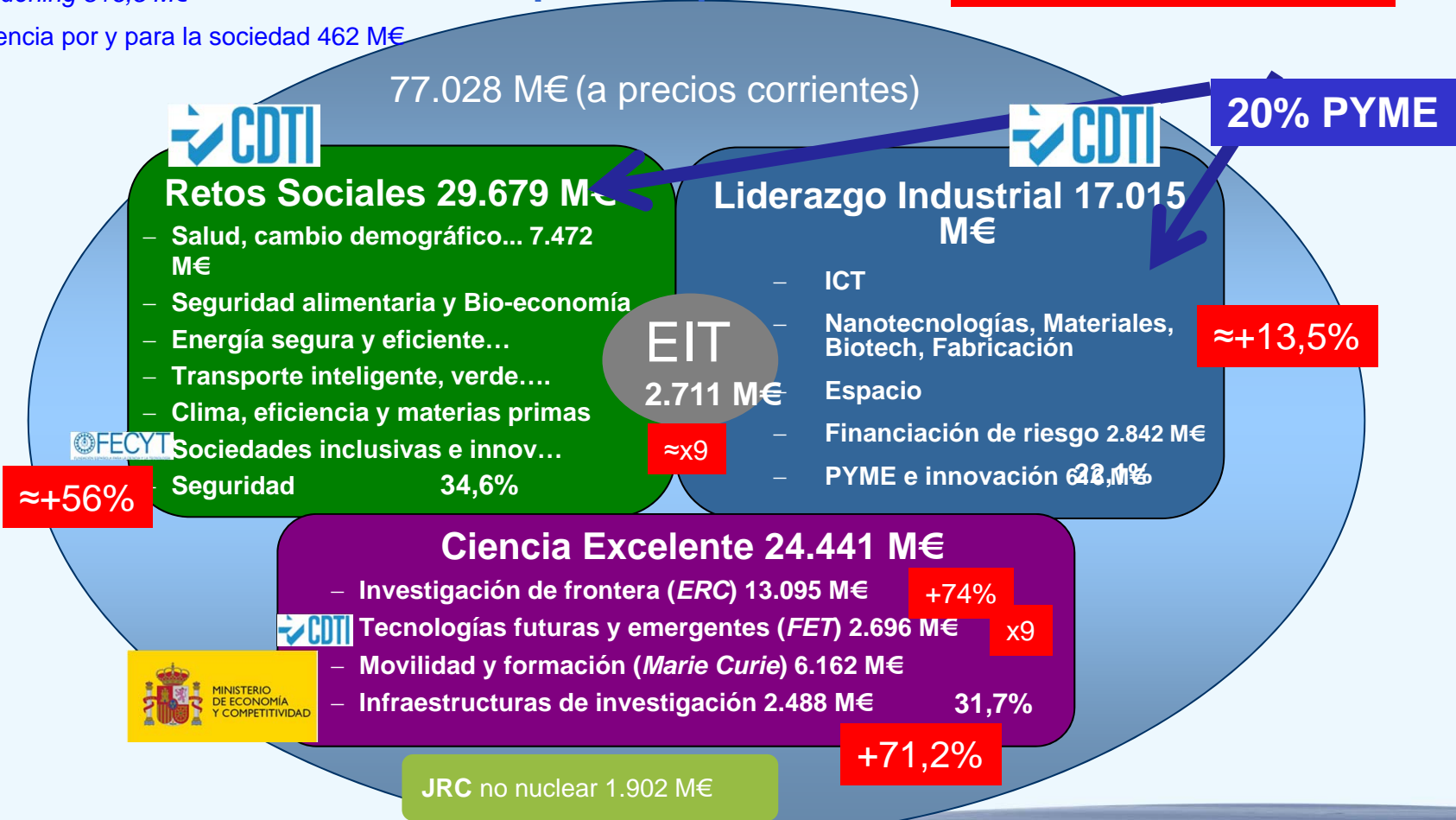


**+52,5% Presupuesto H2020 / VII PM**

Widening 816,5 M€

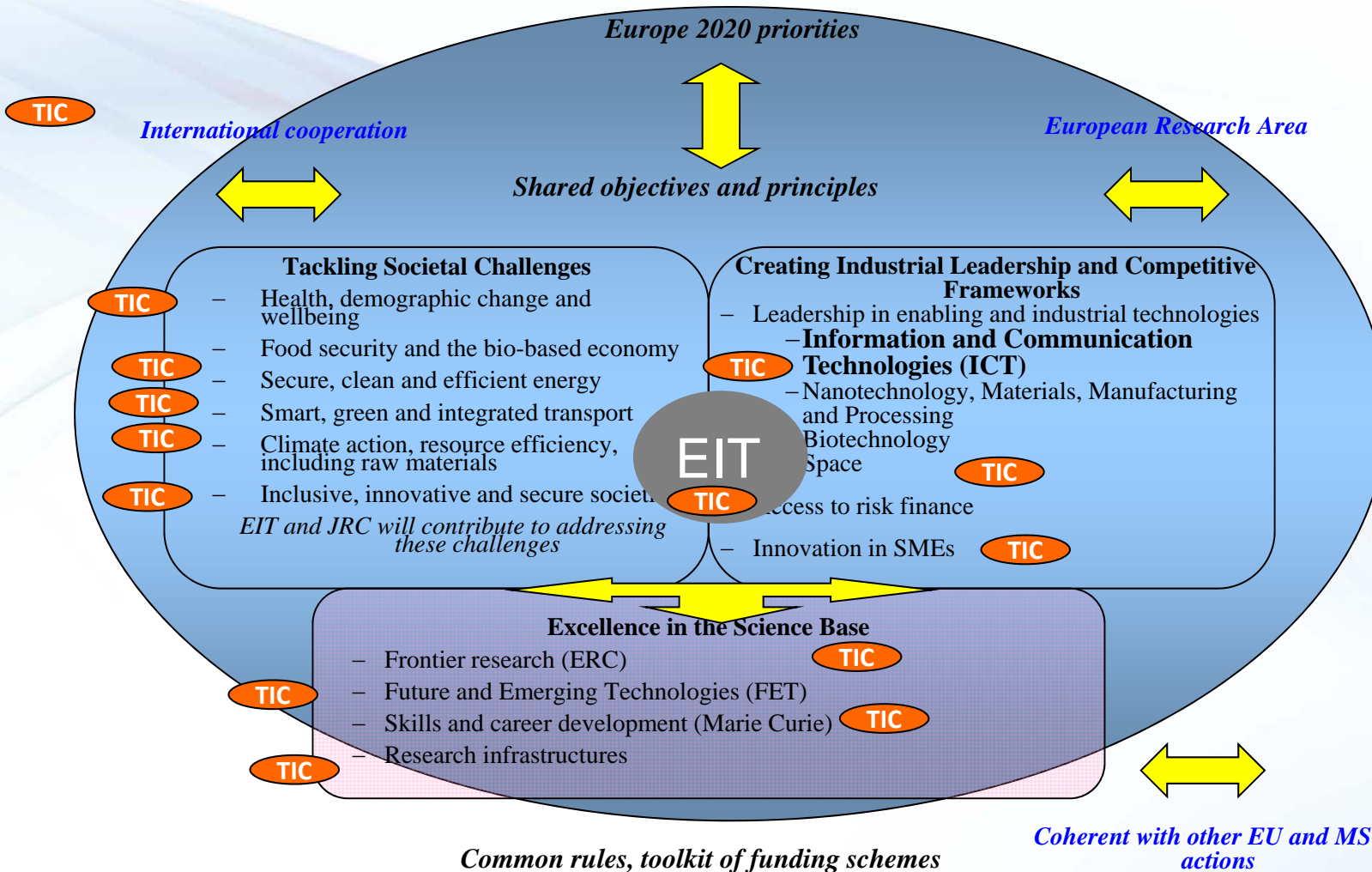
Ciencia por y para la sociedad 462 M€

**Europe 2020 prioridades**





# Horizon 2020 – objectives & structure



EUROPEAN  
COMMISSION

EU - BUILDING AN  
INNOVATION UNION



## SCIENCE BASE (24.441 M€)

- ❑ **Objective:** to reinforce and extend the excellence of the Union's science base and to consolidate the European Research Area in order to make the Union's research and innovation system more competitive on a global scale.

**European Research Council (ERC) ERC – Proof of concept (100%)**

**Future and emerging technologies (FET)** support for collaboration across disciplines on radically new, high-risk ideas and accelerate development of the most promising emerging areas of science and technology. Expanded from ICTs **to cover the whole landscape of S&T. FET FLAGSHIP.**

GESTION CDTI+

GESTION MINECO+

**Marie S. Curie Actions (MSCA):** Cross-sectoral exchanges and training with strong involvement of businesses

**Research Infrastructures:** support the implementation & **operation,** reinforcement of the support to e-infrastructures

# SOCIETAL CHALLENGES (29.679 M€)

- Emphasis on projects that solve specified challenges.

Bringing together resources & knowledge across fields, technologies & disciplines.

Activities to cover cycle from research to market; focus on innovation (piloting, demonstration, demand side policies – public procurement, standards, ..).

Social Sciences and Humanities - integral part of the activities to address all challenges.

- **HEALTH**, demographic change and wellbeing (+e-health)
- Food security, sustainable agriculture, marine and maritime research & the bio-economy
- Secure, clean and efficient **ENERGY**
- Smart, green and integrated **TRANSPORT**
- **CLIMATE** action, resource efficiency and raw materials
- **INCLUSIVE** and reflective Societies
- **SECURE Societies**

GESTION CDTI+

GESTION FECYT+

Science with & for society

Spreading excellence & widening participation

# INDUSTRIAL LEADERSHIP (17.015 M€)

- ❑ crucial role of private sector in bringing innovation to the market. Strong focus on addressing market failures. Activities are technology-driven and range from research all the way up to demonstration and piloting. 20% of total budget of societal challenges and enabling and industrial technologies to go to SMEs

1. Information and Communication Technologies (ICT)
2. Nanotechnologies, Advanced Materials, Biotechnology, Advanced Manufacturing and Processing (NMBP)
3. Space
4. Innovation in SMEs: EUROSTARS. Dedicated SME instrument.
5. Access to risk finance, Equity facility; Debt facility (loans, guarantees..), (2.842 M€)

GESTION CDTI+

## Focus areas in the Work Programme

Provide the opportunity **to build scale and critical mass**, to exploit the existence of well-established research and innovation agendas, to maximise the chances of **securing breakthroughs and realising impacts**, to provide genuinely cross-cutting approaches, while at the same time **aligning** the implementation with major political initiatives, and improving synergy with national programmes

- Bring together relevant activities from different **challenges and KETs**
- Provide support across the **innovation chain** from research, to development, to proof of concept, piloting, demonstration projects, and to setting standards and policy frameworks
- Make use of, as needed, the **full spectrum of forms of funding** and types of action including research and innovation grants, ERANets and other forms of cofunding, SME actions, support to innovation public procurement or pre-commercial procurement;
- **Integrate different perspectives**, including from the social sciences and humanities, support gender perspectives, and meet the demands from consumers, policy makers and other users of the results.

FOCUS Areas	Salud	Food	Energía	Tte	Clima	Sociedades inclusivas	Seguridad
<i>Personalising health &amp; care</i>	●	●					
<i>Sustainable food security</i>		●					
<i>Blue growth</i>		●	●	●	●		
<i>Smart cities &amp; communities</i>			●	●			
<i>Competitive low-carbon energy</i>			●				
<i>Energy Efficiency</i>			●				
<i>Mobility for growth</i>				●			
<i>Waste (+NMBP)</i>		●			●		
<i>Water innovation</i>		●			●		
<i>Overcoming the crisis</i>						●	
<i>Disaster-resilience</i>					●	●	
<i>Digital security</i>							●

## DESARROLLO DEL H2020

**Convocatorias competitivas:** proyectos, CSA, ERANet, demos, RSFF, *proof of concept*, *co-fund*, compras pre-comerciales,

**SME instrument  
Pilot plants  
Inducement prizes  
Loan & Equity**

**Grandes Iniciativas-estrategias:**

**Instituto Europeo de Innovación y Tecnología (EIT)**

**Alianzas de Investigadores:** miniprogramas

**Inter-nacionalización de Prog. Nacionales**

**Asociaciones Público-Privados (PPP y JTI)**



# Definiciones

**PROGRAMME CO-FUND ACTION\*** *funded through a grant the main purpose of which is supplementing individual calls (ERANet or PCP/PPI Cofund) or programmes (MSC Cofund, EU joint programmes,...) funded by entities, other than Union bodies, managing research and innovation programmes. It may also include complementary activities of networking and coordination between programmes in different countries.#*

**PRE-COMMERCIAL PROCUREMENT\*** *of research and development services involving risk-benefit sharing under market conditions, and competitive development in phases, where there is a clear separation of the research and development services procured from the deployment of commercial volumes of end-products.*

**PUBLIC PROCUREMENT OF INNOVATIVE SOLUTIONS\*** *contracting authorities act as a launch customer for innovative goods or services which are not yet available on a large-scale commercial basis, and may include conformance testing.*

**INDUCEMENT PRIZES\*\*** *the aim is to identify and publicise innovations and engage investors and innovators to take new solutions to market. Prizes could be further leveraged through cooperative ventures between the Commission and private enterprises, non-profit organisations, charitable foundations, Member States or international partners to design and run competitions.*

\*Reglas de participación H2020 \*\* Draft Work Programme H2020 (2014-2015),  
# By default 70% of action's eligible costs (provisional)

## PM H2020 y sus proyectos

- Resolución de problemas
- Novedad e Impacto transnacional
- IDT propia o contratada a terceros
- Compartir recursos y conocimientos
- $\geq 2$  años, subv. media 316 k€ (252 k€ PYME)\*
- 5-7 países; 3,7 M€; 11,5 socios (grupos de investigación + empresas + usuarios)\*\*
- Plan de Explotación claro
- Presentación de propuestas **SÓLO Electrónica**

Proyectos  
mayores???

“Tiempo objetivo de puesta en marcha 8 meses”

\*Datos para España VII PM Cooperación. Fuente CE, CDTI

\*\*Sixth FP7 Monitoring report 2012 grants. Cooperación

## PM evaluación de los proyectos

- Excelencia científica y/o tecnológica (relevancia)
- Impacto potencial mediante demostración, difusión y aplicación de resultados
- Calidad y eficiencia del desarrollo del proyecto y de su gestión.

+5

+5

+5

---

15\*

o Umbral mínimo 10

o El Plan de trabajo puede especificar criterios adicionales, umbrales y ponderación

buenas propuestas **NO**  
**EXCELENTES SI**

### Tasa aprobación UCM

Participaciones (85/535) **16%**

Liderazgo (15/154) **10%**

### Tasa de Aprobación\*\*

Cooperación	19%
Ideas	13%
Personas	24%

\*Explotación & difusión de los resultados; género

\*\*Sixth FP7 Monitoring report 2012 propuestas

## **Award criteria: *Research and Innovation Actions;* *Innovation Actions; SME instrument***

### **1. Excellence**

- Ground-breaking nature (eg. level of ambition, beyond the state-of-the-art, novel approach, addresses challenge, ... )
- Conceptually robust; trans-disciplinarity considered...

### **2. Impact [...] extent to which project outputs contribute to:**

- The expected impacts listed in the work programme under the relevant topic;
- Enhancing innovation capacity and integration of new knowledge;
- Strengthening the competitiveness and growth of companies by developing innovations meeting the needs of European and global markets;
- Effectiveness of the proposed measures to communicate the project, disseminate and/or exploit the project results, and appropriate management of IPR.

### **3. Quality and efficiency of implementation**

- Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources;
- Competences, experience and complementarity of the individual participants, as well as of the consortium as a whole;
- Appropriateness of the management structures and procedures, including risk management.

## Subvención de proyectos

- **Máximo 100% de los costes totales elegibles, excepto para las acciones de innovación en que las entidades con ánimo de lucro irán al 70%.**
- **Costes indirectos: 25% de los costes directos elegibles excluyendo la subcontratación.\***
- **Bonus 8.000 € persona/año para entidades sin ánimo de lucro**

***INNOVATION ACTION** primarily consisting of activities directly aiming at producing plans and arrangements or designs for new, altered or improved products, processes or services. For this purpose they may include prototyping, testing, demonstrating, piloting, large-scale product validation and market replication*

(\*) Article 24. Indirect costs. Indirect eligible costs shall be determined by applying a flat rate of **25%** of the total direct eligible costs, excluding direct eligible costs for subcontracting and the costs of resources made available by third parties which are not used on the premises of the beneficiary, as well as financial support to third parties.

# Type of Actions

## Research & innovation actions

primarily consisting of activities aiming to establish new knowledge and/or to explore the feasibility of a new or improved technology, product, process, service or solution. For this purpose they may include basic and applied research, technology development and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment. Projects may contain closely connected but limited demonstration or pilot activities aiming to show technical feasibility in a near to operational environment. *Funding rate:* maximum 100%

## Innovation actions

primarily consisting of activities directly aiming at producing plans and arrangements or designs for new, altered or improved products, processes or services. For this purpose they may include prototyping, testing, demonstrating, piloting, large-scale product validation and market replication.

**demonstration or pilot** aims to validate the technical and economic viability of a new or improved technology, product, process, service or solution in an operational (or near to operational) environment, whether industrial or otherwise, involving where appropriate a larger scale prototype or demonstrator.

**market replication** aims to support the first application/deployment in the market of an innovation that has already been demonstrated but not yet applied/deployed in the market due to market failures/barriers to uptake. 'Market replication' does not cover multiple applications in the market of an innovation that has already been applied successfully once in the market. 'First' means new at least to Europe or new at least to the application sector in question. Often such projects involve a validation of technical and economic performance at system level in real life operating conditions provided by the market.

*Funding rate:* max. 70% (except for non-profit legal entities, where a max. rate of 100% applies)



# Las PYME ante H O R I Z O N 2 0 2 0



## Retos Sociales y Liderazgo Industrial

Proyectos I+D+i colaborativos con topic definido

## Instrumento PYME

Proyecto de **crecimiento empresarial de alcance europeo** en base a un proyecto de I+D+i temático.  
Consortio opcional, 1 ó 2 fases  
1ª fase máx 50k€  
2ª fase ≈ 1-3 M€ (70%\*)

# 20%

del presupuesto de Retos Sociales y LEIT

Tema libre

## Fast track to innovation (piloto 2015)

Proyectos innovación pequeños (<5 socios, <3M€) cercanos al mercado en cualquier sector

## Eurostars 2

Proyectos para PYME intensivas en I+D cercanos al mercado.  
**Financiación H2020+ nacional** y evaluación europea.  
Consortios reducidos

\*Excepcionalmente 100% en Salud

(02/10/2013)





European Commission

Phase 3 & coaching ~ 2% budget

### Phase 1: Concept and feasibility assessment

Input: Idea/Concept: "Business Plan 1" (~ 10 pages)  
**10% budget**

Activities:  
Feasibility of concept  
Risk assessment  
IP regime  
Partner search  
Design study  
Pilot application  
etc.

~ 10% success

Output: elaborated "Business plan 2"

Lump sum: 50.000 €  
~ 6 months

### Phase 2: R&D, demonstration, market replication

Input: "Business plan 2" plus description of activities under Phase 2 (~ 30 pages)  
**90% budget**

Activities:  
Development, prototyping, testing, piloting, miniaturisation, scaling-up, market replication, research

~30-50% success

Output: "investor-ready Business plan 3"

1-5 M€ EC funding  
~ 12 to 24 months

### Phase 3: Commercialisation

Promote instrument as quality label for successful projects  
Facilitate access to private finance  
Support via networking, training, information, addressing i.a. IP management, knowledge sharing, dissemination

SME window in the EU financial facilities (debt facility and equity facility)

Possible connection to public procurement activities

No direct funding

# SME instrument

## Phase 1: Feasibility study

verifying the technological/practical as well as economic viability of an innovation idea with considerable novelty to the industry sector in which it is presented (new products, processes, services & technologies or new market applications of existing technologies). The activities could, for example, comprise risk assessment, market study, user involvement, Intellectual Property management, innovation strategy development, partner search, feasibility of concept and the like to establish a solid high-potential innovation project aligned to the enterprise strategy and with a European dimension. Bottlenecks in the ability to increase profitability of the enterprise through innovation shall be detected and analysed during phase 1 and addressed during phase 2 to increase the return in investment in innovation activities.

*Funding rate: €50,000 lump sum.*

## Phase 2: Innovation projects

that demonstrate high potential in terms of company competitiveness and growth underpinned by a strategic business plan. Activities should focus on innovation activities such as demonstration, testing, prototyping, piloting, scaling-up, miniaturisation, design, market replication and the like aiming to bring an innovation idea (product, process, service...) close to deployment and market introduction, but may also include some research. For technological innovation a TRL of 6 or above (or similar for non-technological innovations) are envisaged. Proposals should be based on a strategic business plan either developed through phase 1 or another means. *Funding rate: 70% (Excepcionalmente 100%)*

preliminar  
18/10/2014)

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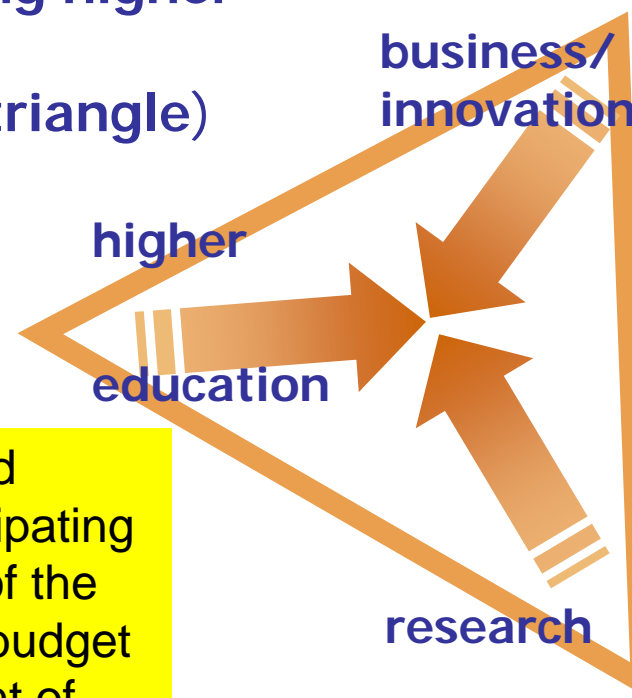
Estrategias

Impulso del CDTI

# EUROPEAN INSTITUTE OF INNOVATION & TECHNOLOGY (2.711 M€)



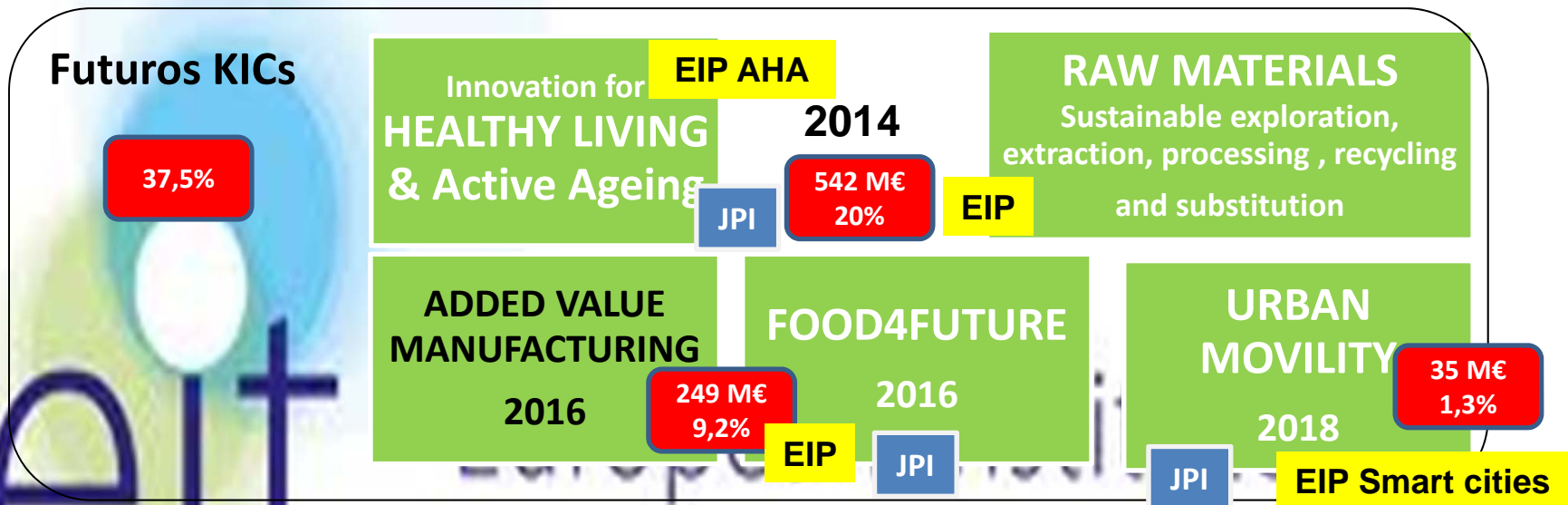
- **[mission:]** To European economic **growth** and **competitiveness** by reinforcing the **innovation capacity** of the Member States and the EU...
- **[concept:]** ... by promoting & **integrating higher education, research & innovation** of the highest standards (= **knowledge triangle**)



The EIT funding model builds on joint strengths and resources of existing excellent organizations participating in the KICs. The EIT funds on average up to 25% of the global KIC budget. The remaining 75% of the KIC budget is a pre-requisite, showing the financial commitment of KIC partners and its leverage effect. This includes KIC partners own revenues and resources, but also public funding, including FP7, H2020 and the Structural Funds.



# Knowledge & Innovation Communities (KIC)





# Gestores: los investigadores




FET Flagship

Research Alliance  
EERA ECRA  
BioMed  
EERA (aero)

Joint Research Initiatives M€??  
EARTOS ??

IRP  
4x10M€

Mini  
2x20M€

	ERC 13.095 M€ (+74%)	FET 2.696 M€ (x9) Flagships*	Redes Excelencia  European Cooperation in Science and Technology	Research Alliance (RA) ???	Integrated R Programmes Miniprogramas
Alcance	Ciencia + Proof of Concept	Ciencia	I+d	I+D	Set Plan.....
Gestión	ERC	CE	CE/centros	Centros	Centros
Financiación	PM/ERC	H2020 Call		Centros + CE?	Centros + CE
		Países???			
Organización	Open botton up	consorcios		Cerrada + Grupos de Trabajo	Cerrada? Mini- convocatorias
Características	Fundamentalmente solo investigadores. ERC sin consorcios y alto presupuesto. *ICT: Human Brain & Grafeno (2*100 M€/año*10 años. 20% convocatoria para nuevos). RA/IRP posicionamiento estratégico , <i>programmes logic</i> .				

## Proof of Concept



- *The type of high-risk/high-gain research at the frontiers of knowledge that the ERC promotes often generates unexpected or new opportunities for commercial and societal applications. The ERC is committed **to ensure the full exploitation of the excellent**, useful ideas it funds. The Proof of concept funding will help ERC grant-holder **bridge the gap between their research and the earliest stage of a marketable innovation**.*
- *This funding aims at supporting grant-holders during the pre-demonstration phase to prepare a "package" to be presented to venture capitalists or companies that might invest in the new technology and take it through the early commercialisation phase. The funding can be used to:*
  - establish viability, technical issues and overall direction*
  - clarify intellectual property rights position and strategy*
  - provide feedback for budgeting and other forms of commercial discussion*
  - provide connections to later stage funding*
  - cover initial expenses for establishing a company*

# Gestores: los Países



	EraNet	Eranet Cofund	Co-Fund	Art 185 (ex169)	JPI
Alcance	I+D	I+D	I, Becas	I+D (Aplicada AAL Eurostars)	Ciencia +Inn? Grand Challenges
Gestión	Países	Países	CE /Países	Países +CE	Países
Financiación	Países +CSA	+1/3CE	+40%?? CE	+1/3CE	CSA +CE?
Ejemplo	>100	>10+20*	>10	5 (Bonus, ECTP, Clinical trials)	10
Organización Geometría Variable	Coordinación	1 Call conjunta	Call periódicas	Calls temática común + estruct. legal	Fusión de programas Challenges
Características	Gestión y coordinación complicada, multiforme. Socios (muchos) son los Gestores de PN. El objetivo es lanzar convocatorias en consorcios (reducidos) para terceros. Bueno para internacionalizar. Regiones muy activas. Se podría llegaría a integrar programas. OPEN				



# COFUND

- **Objective**
  - to stimulate regional, national or international programmes to foster excellence in researchers' training, mobility and career development
- **Scope**
  - Co-funding new or existing regional, national, and international programmes to open up to, and provide for, international, intersectoral and interdisciplinary research training, as well as transnational and cross-sector mobility of researchers at all stages of their career
  - Possibilities of synergies with structural funds
  - Doctoral Programmes (for ESR) and Fellowship Programmes (for ER)
  - Researchers to comply with the mobility rules of the MSCA
  - Minimum support for researchers: 3 months
  - Implemented by a sole beneficiary
- **Expected Impact**
  - to exploit synergies between European Union actions and those at regional, national, and international level, and leverage funding

## RIS3: Smart Cities & Communities (SCC) solutions integrating energy, transport, ICT sectors through lighthouse (large scale demonstration - first of the kind) projects (2015) (draft)

will target primarily large scale demonstration of replicable SCC concepts in city context where existing technologies or very near to market technologies (TRL 7 and more) will be integrated in an innovative way.

The projects should address the following main areas: *(Nearly zero) or low energy districts, Integrated Infrastructures* (core networks, street scenes, lighting,.. *Sustainable urban mobility.*

The consortia should include **partnerships between municipalities and industries** , In order to ensure the success of the lighthouse projects, the *funding for the other parts of the programme or initiative in which the lighthouse projects are embedded should be secured from other sources*, preferably private ones, but also other **EU funding sources (cohesion or regional funds for example), national or regional funding.**

For the projects classified under TRL 7&8, the full purchase costs of equipment or other assets directly assigned to the action, instead of its depreciation, if in compliance with the general conditions of eligibility, will be subject to reimbursement.

RIS3+H2020??

# P2P Artículos 185

1.445 M€  
(x2,1 VII PM)  
+....

\*ISCIII y MINETUR financian

**AAL2 \*** (175 M€)  
Ambient Assisted Living  
Joint Programme



EIP AHA

**BONUS**  
Baltic Sea Research



**EDCTP2\*\*** (683 M€)  
European and  
Developing Countries  
Clinical Trials  
Partnership



**MPIR\*\*\*\*** (300 M€)  
European Association of  
National Metrology  
Institutes



**EUROSTARS2 \*\*\***  
European Joint  
Programme dedicated  
to the R&D performing  
SMEs (287 M€)



\*\*\*\*CEMetrología financia

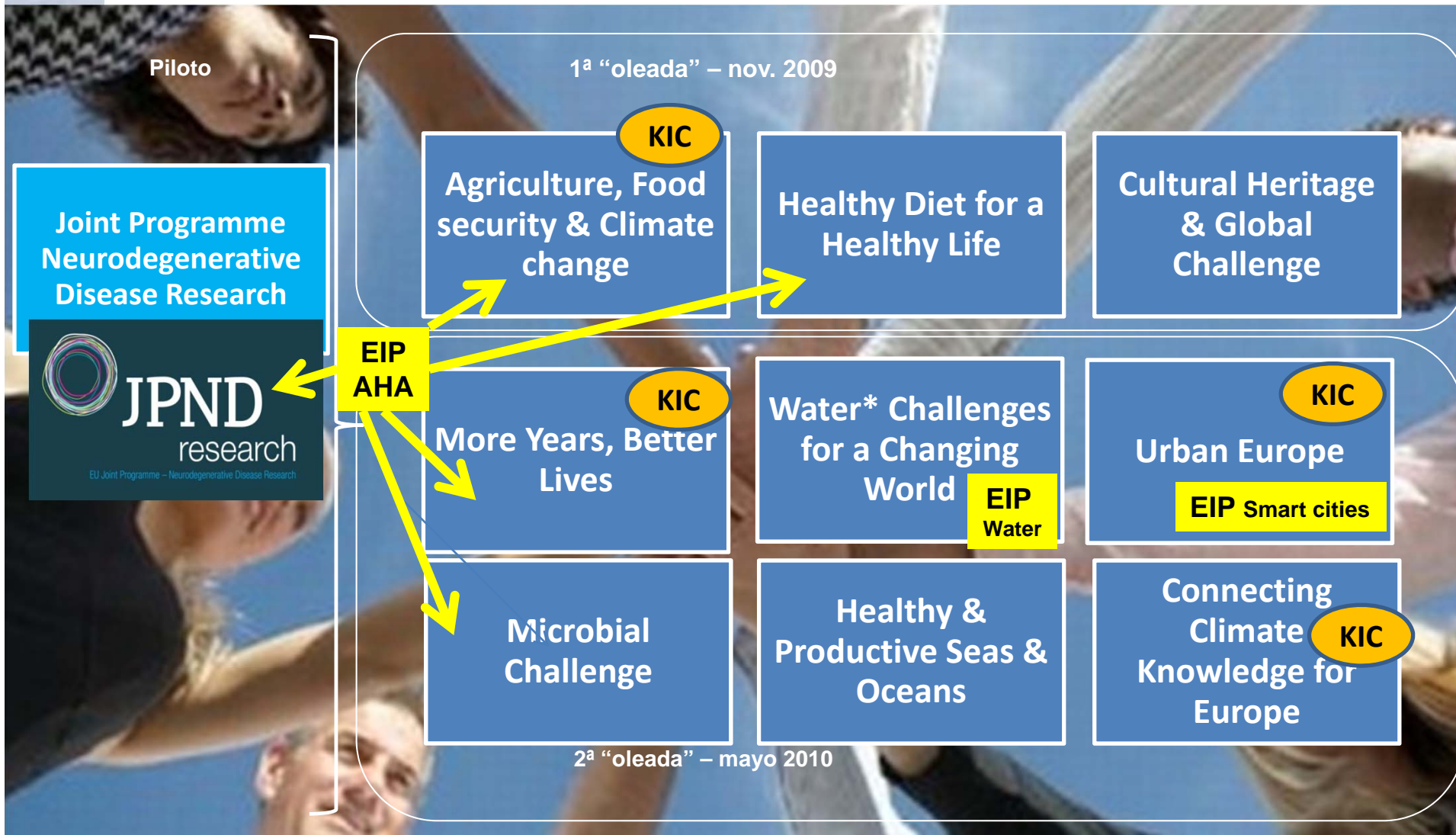
\*\*ISCIII financia

\*\*\*CDTI financia



# JPI Joint Programming Initiatives

JPI



## Gestores: las industrias



## PPP privado-público

6.200 M€ +X

European Industrial Initiatives  
Set Plan (Energía)  
4.000 M€??

	JTI ECSEL (Eniac Artemis)	JTI IMI/ FCH+ SESAR /Clean Sky+BBI	PPP	EII SETPlan
<b>Alcance</b>	Inv. aplicada	Desarrollo demostradores	I+D industrial	Industrial Demos
<b>Gestión</b>	Ind+ CE Países.	Industria EFPIA Aero	CE	CE + colaboran países
<b>Financiación</b>	Países + 1/3CE	CE 50%+ in kind	CE H2020 call	CE H2020 call + países?
<b>Organización</b>	Estructura legal propia		Asociación	PT y EI Teams
	abierta	cerrada	abierta	abierta
<b>Características</b>	Industria fija las prioridades. Gestión y coordinación complicada y propia en las JTI . Ventajas estratégicas para los promotores. Adjudicaciones nominativas (CS, BBI), subcontratación (IMI). Pueden incluir grupos de investigación			

# PPP web links



- **INDUSTRIAL TECHNOLOGIES**

[http://ec.europa.eu/research/industrial\\_technologies/ppp-in-research\\_en.html](http://ec.europa.eu/research/industrial_technologies/ppp-in-research_en.html)  
[www.e2b-ei.eu](http://www.e2b-ei.eu)

Factories of the Future: <http://www.effra.eu/> <http://www.manufuture.org>

Energy-efficient Buildings: <http://www.e2b-ei.eu> <http://www.ectp.org/>

European Green Vehicles Initiative: [www.egvi.eu](http://www.egvi.eu)

<http://www.green-cars-initiative.eu> <http://www.ertrac.org/>

Sustainable Process Industries: <http://www.spire2030.eu/>

- **ICT** <http://ec.europa.eu/digital-agenda/>

Photonics: [www.photonics21.org](http://www.photonics21.org)

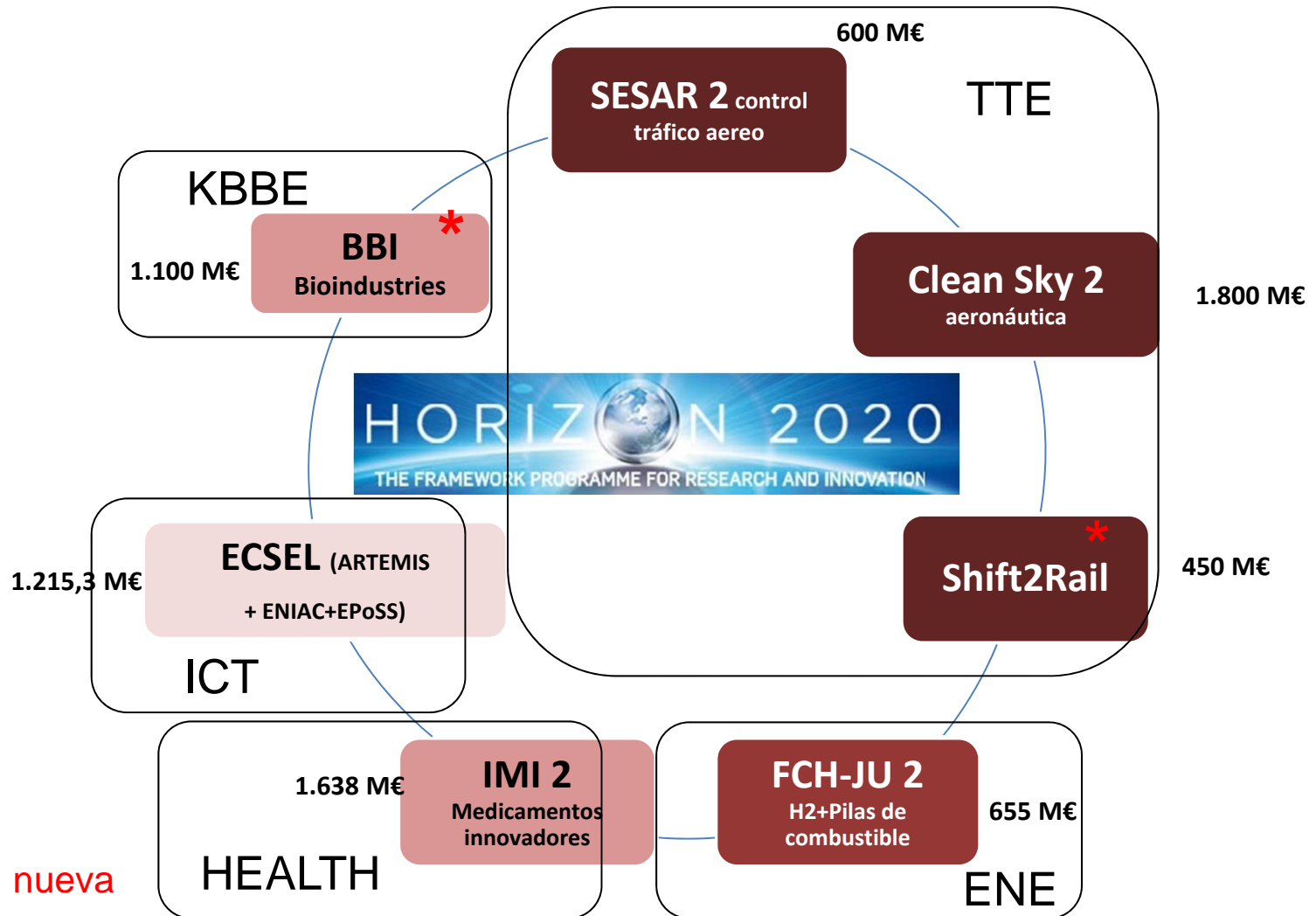
Robotics: <http://ec.europa.eu/dgs/connect/en/content/robotics-public-private-partnership-horizon-2020> <http://www.eu-robotics.net/ppp>

HPC: [www.etp4hpc.eu/](http://www.etp4hpc.eu/)

5G: <http://www.networks-etp.eu/>

# JTIs (PPPs institucionales) 7.458 M€ +X

(VII PM 3.490 M€)



## European Innovation Partnerships (EIP): definition

- *An EIP, as proposed in the Europe 2020 flagship Innovation Union, provides a framework that aims to break down “silo’s”, **bringing together all relevant stakeholders** across policies, across sectors and across borders to speed up innovations that **address a major societal challenge** .... They will be organised around concrete and ambitious targets, agreed at political level, in areas of societal challenges that command broad public and political support.... They will be politically-driven. Their success will depend on **strong commitment and ownership** on the part of the co-legislators/budgetary authorities, as well as political endorsement from the Heads of State and Government.*

+EIP Health, Raw materials, Agro, Water, Smart cities...



## EIP: the new approach

1. They will be **challenge-driven**, focusing on societal benefits and a rapid modernisation of the associated sectors and markets. This means that they will **go beyond the technology** focus of existing instruments, such as Joint Technology Initiatives (JTIs).
2. They will act **across the whole research and innovation chain**:
  - (i) step up research and development efforts;
  - (ii) coordinate investments in demonstration and pilots;
  - (iii) anticipate and fast-track any necessary regulation and standards;
  - (iv) mobilise 'demand' in particular through better coordinated public procurement to ensure that any breakthroughs are quickly brought to market.
3. Therefore, they will build upon relevant existing tools and actions and, where this makes sense (e.g. for joint programming, lead markets, joint pre-commercial and commercial procurement schemes, regulatory screening), integrate them into a single coherent policy framework.





# CDTI H2020= IMPULSO A GRUPOS DE INVESTIGACIÓN, EMPRESAS, ADMINISTRACIONES Y USUARIOS

## ÍNDICE

Entorno global: Unión por la Innovación, KET

Impacto en el H2020

H2020: Por qué?

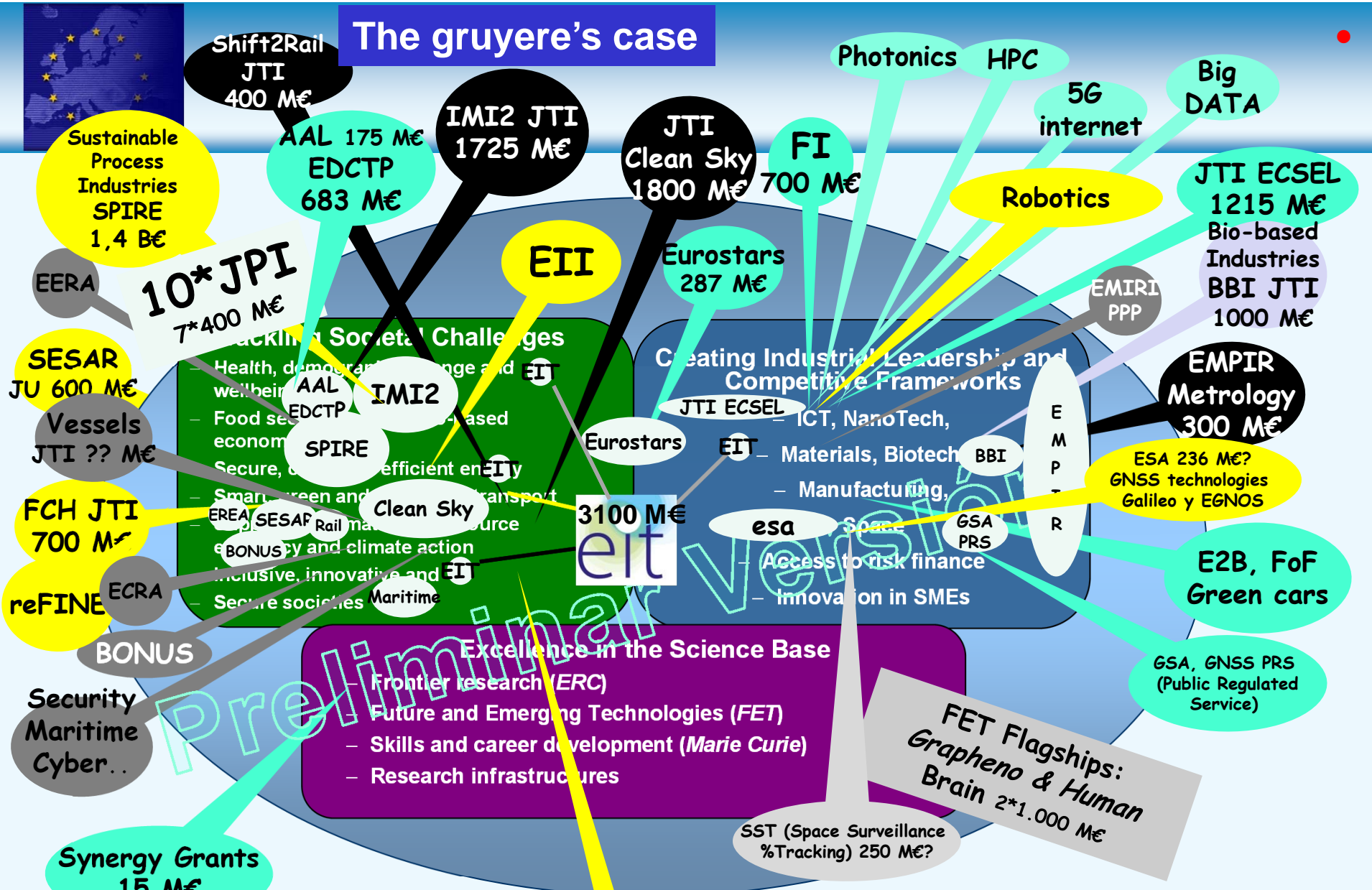
Cómo?

Grandes Iniciativas

**Estrategias**

**Impulso del CDTI**

# The gruyere's case



**+EIP Health, Raw materials, Agro, Water, Smart Cities...**

# Boosting industry & MMSS engagement through partnerships\* (+ in preparation)

7.440 M€  
(x2,1)+....

- **Article 187:** Clean Sky, Fuel Cells and Hydrogen (FCH), Single European Sky Air Traffic Management Research (SESAR), Innovative Medicines Initiative (IMI), Bio-Based Industries (BBI), Electronic Components and Systems (ECSEL) + *Shift2Rail, Vessels, Security-Cyber,....*
- **Public-Private Partnerships (PPP):** Energy-efficient Buildings (E2B), Green Vehicles, Factories of the Future (FoF), Sustainable Process Industries (SPIRE), Future Internet (FI), Robotics, Photonics, Internet Infrastructures (5G) + *High Performance Computers (HPC), Space Strategic Research Clusters (SRC), Big Data, Transport Infrastructure (reFINE), Materials for Energy (EMIRI), Security-Maritime....*
- **SET Plan:** further support will be provided to the European Industrial Initiatives (EII).

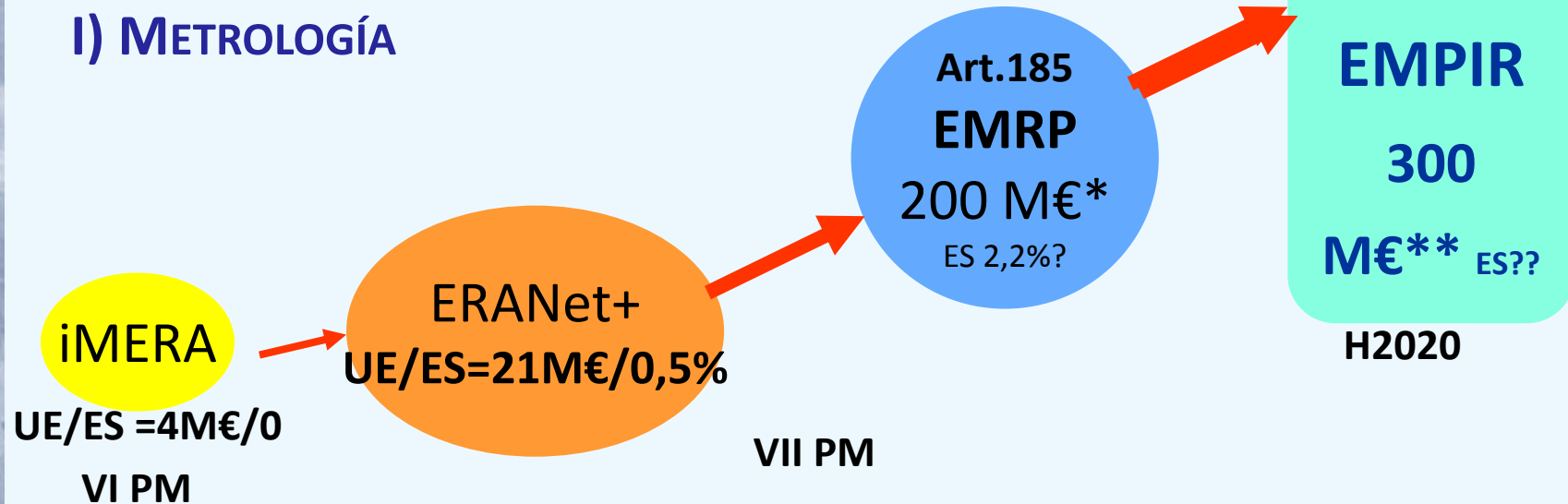
1.445 M€  
(x2,1)+....

- **Article 185:** Eurostars, European and Developing Countries Clinical Trials Partnership (EDCTP), the European Metrology Research Programme (EMRP), Ambient and Assisted Living (AAL), the Baltic Sea Research & Development Programme (BONUS). + *Joint Initiative for the MEDiterranean INNovation Area (MEDINNA), Space surveillance & Tracking (SST), GNSS technologies Galileo & EGNOS (ESA)*
- **ERANet+ (>20; 2014-2015):** Environment, Energy , Food, Health, NMBP, ICT.....

\*WORK PROGRAMME 2014 – 2015. 1. General Introduction

# ESTUDIOS DEL CASO

## I) METROLOGÍA



## II) AERONÁUTICA:

- VI PM CONVOCATORIAS 6,3 % (UE-27)
- VII PM JTI CLEAN SKY (TARDE) ≈ 3-5% ??? (UE-27)

## III) PPP\*\*\* VII PM (PROMOTORES) 14% (UE-27)

\*10% para becas \*\*30% para «no members»

\*\*\* Fábricas de Futuro, Energy Efficient Buildings, Green cars, Future Internet

## Oficinas de Proyectos

**(ESTABLES)**

**Detección de grupos**

**(ACTIVA)**

**Análisis de oportunidades: orientación en convocatorias + grandes iniciativas**

**(ANTES DE)**

**Preparación de Propuestas + Gestión del Proyecto**

**(LLAVE EN MANO)**

- Planificación, Gestión financiera y administrativa, Informes y Relaciones de alto nivel con socios / CE, Legal (acuerdo de consorcio + IPR), Análisis de impacto, Planes de Explotación

**Presencia en Bruselas: oficinas CSIC, CDTI-SOST, CCAA,...**

**Gestores Profesionales**

## Nuevos elementos: +50% (Oportunidades y competencia)

- **Investigación BÁSICA x2**
  - Supervivencia, Co-fund (apertura)
- **+INNOVACIÓN**
  - Proyectos demostración, 1ª Plantas piloto, 20% PYME
- **Externalización: Grandes Iniciativas (Investigadores e Industrias)**
  - Promotores, doble o mitad
- **> Tamaño de Proyectos**
  - Focalización,

Apoyo del Equipo Rector / Alta Dirección

Plan de actuación: prioridades y objetivos

Nuevos grupos

Primas a los Investigadores

Alianzas estables universidades, empresas ES y UE

Anticipación / medio plazo

A por todas (con estrategia)

Oficinas de Proyectos



# Grandes Iniciativas: tabla comparativa

Iniciativa	Alcance	Protagonistas	Apertura	Gestión €
<b>JPI</b> Joint Programming	<b>Investigación</b> (algo Innovación)	<b>Países gestores PN</b>	<b>Open</b>	<b>Países con convocatorias</b>
<b>PPP</b> Public Private Partnerships	<b>Tecnológico e Innovación</b>	<b>Industrias y sus asociaciones;</b> presencia de grupos de investigación	<b>Open</b>	<b>CE H2020 convocatorias normales</b>
<b>JTI</b> Joint Technology	<b>Tecnológico y Demostradores</b>	<b>Industrias presencia de grupos de investigación</b>	<b>Club</b>	<b>Autónoma</b>
<b>European Research Alliances</b>	<b>Investigación</b> algo Inv. aplicada	<b>Centros Investigación</b>	<b>Semi</b>	<b>Autónoma</b>
<b>EIP</b> European Innovation Partnership	<b>I+D+I, compras públicas, regulación ...</b>	<b>CE, países, Industria y Plataformas, Grupos de investigación, usuarios</b>	<b>1º y 2º nivel exclusivo. 3er nivel abierto</b>	<b>«etiquetas» VIP con impacto en convocatorias H2020</b>



<http://www.eshorizonte2020.es/>

H2020 Guía rápida:

<http://www.eshorizonte2020.es/como-participar/guia-del-participante>

La generación de nuevo conocimiento, base del crecimiento europeo



EVENTOS

**7ª Conferencia del Programa Marco para Investigación e Innovación de la UE en España, Horizonte 2020**  
Ya están disponibles la mayoría de las presentaciones de la 7ª Conferencia del Programa



EVENTOS

**Infoday ERC: Programa de Trabajo 2014**  
El día 11 de diciembre de 2013, tendrá lugar en el Instituto de Salud Carlos III una jornada informativa sobre el Programa de Trabajo 2014 del ERC. La intervención principal



ACTUALIDAD

**Publicación de los borradores de programas de trabajo de Horizonte 2020**  
La Comisión Europea ya está publicando los borradores finales de los programas de trabajo de Horizonte 2020.



NOTICIAS

**Abierta la inscripción en la base de datos de expertos de Horizonte 2020 de la Comisión Europea**  
Todos aquellos expertos del mundo académico y empresarial, de diferentes áreas de conocimiento,

CALENDARIO DE ACTIVIDADES

Noviembre 2013

L	M	X	J	V	S	D
				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	

Qué es HORIZONTE 2020



# **H2020 & CDTI**

## **SERVICIO DE VALOR AÑADIDO PARA GRUPOS DE INVESTIGACIÓN, EMPRESAS, ADMINISTRACIONES Y USUARIOS**