



# Nano-Tech Workshop

Barcelona, 6<sup>th</sup> of November 2012

Carles Cané  
CNM (IMB-CSIC)



# Nanotechnology in Spain

- Interest in High Tech with multidisciplinary approach
- Nanoscience and Nanotechnologies, among them
- Plan Nacional de I+D+i 2004-2007:
  - Strategic Action on Nanosciences and Nanotechnologies
- Plan Nacional de I+D+i del Gobierno 2008-2011:
  - Ingenio 2010 Programme
  - CONSOLIDER and CIBER Programmes (long and medium term R&D)
  - CENIT (industrial short term)

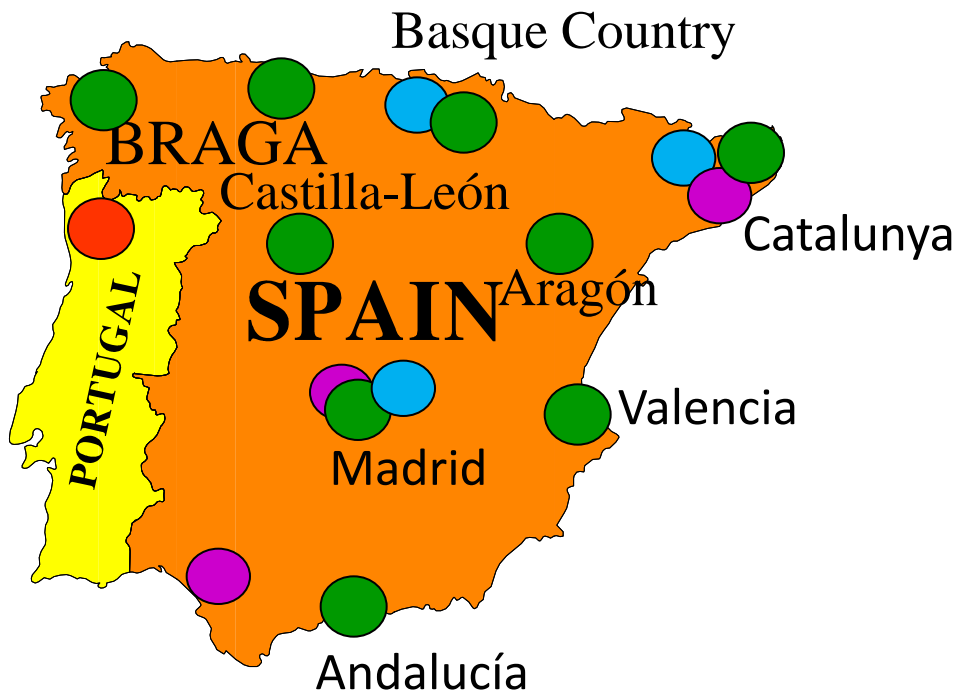
# National Budget and Thematics

- 324 Meuros in 2004-2007
- 80-90 Meuros per year in 2008-2009
- ...but decrease in 2010-2011

Technology Area	% of total
Electronics	18
Nanobiotechnology (including Medicine and Pharma)	26
Measurement, instruments	4
Energy	17
Nanomaterials	29
Environment	5
Other	
(Toxicity on) Health and safety	1
Ethical, legal and societal issues	0
Others, which?	0
<b>TOTAL ACCUMULATED PUBLIC R&amp;D FUNDING</b>	<b>100%</b>

Source: MICINN

# Main Infrastructure Geographical Distribution



- MicroElectronics  
Top-down approach:
- MEMS /MNT  
Top-down approach:
- Nanotechnologies:  
Bottom-up approach
- INL: Common Nano  
Institute in Braga

# Tools

- The National Technological Platforms:



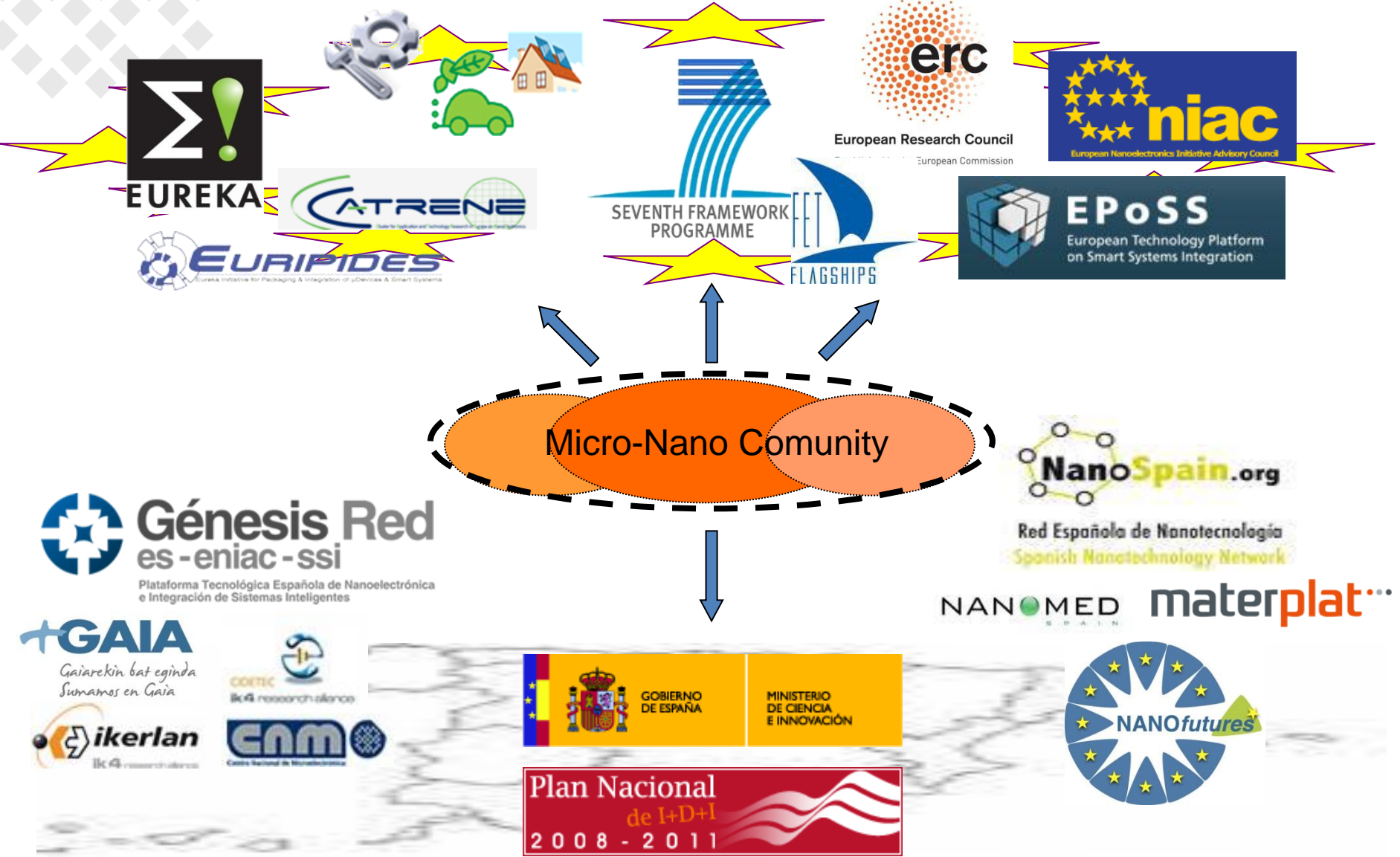
- The Networks



- **More than R&D 300 groups and SMEs, with 2000 researchers**

# Recovery Plan

# Mission



# The Spanish Importance in Europe



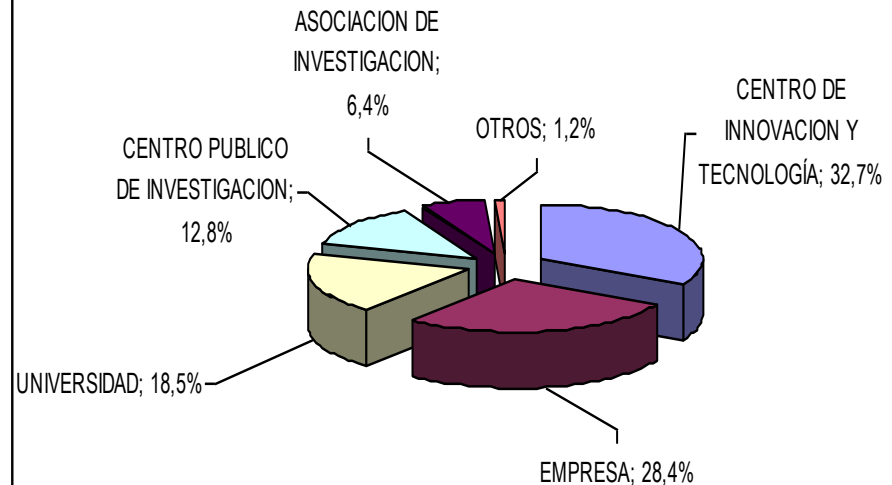
## NMP:

- 9-10% of EU-27:
  - Good Industrial Participation

## ICT: Nanoelectronics + MNT:

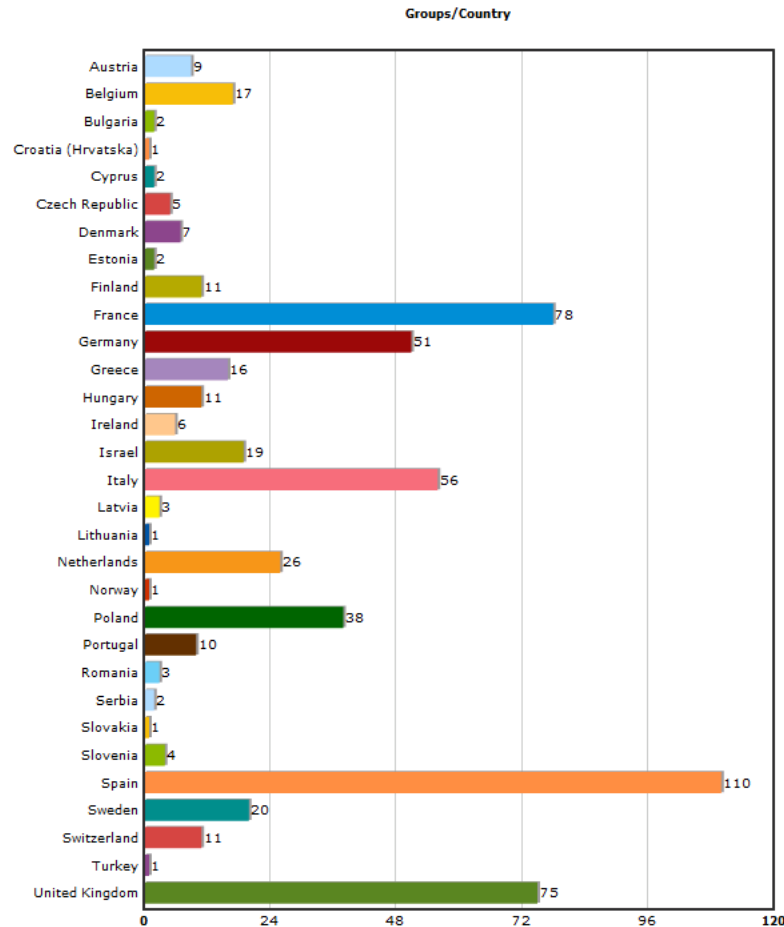
- 3- 3,5% of EU-27:
  - Mostly coming from R&D Institutions

Distribución de retornos españoles por tipo de Entidad  
FP7-NMP-2007-2010 (incluidas FoF y EeB)





# Example:





# ...and outside Europe

- Bilateral Call with Japan
- Attending Industrial events
  - Nano Tech 2011, in Tokio

Also:

- Biocom 2011 Berlín

And in the future:

Imagine Nano Bilbao 2013,

...



# Barcelona Nano Cluster- *Bellaterra*

(BNC.b)

A scientific & industrial oriented "cluster"

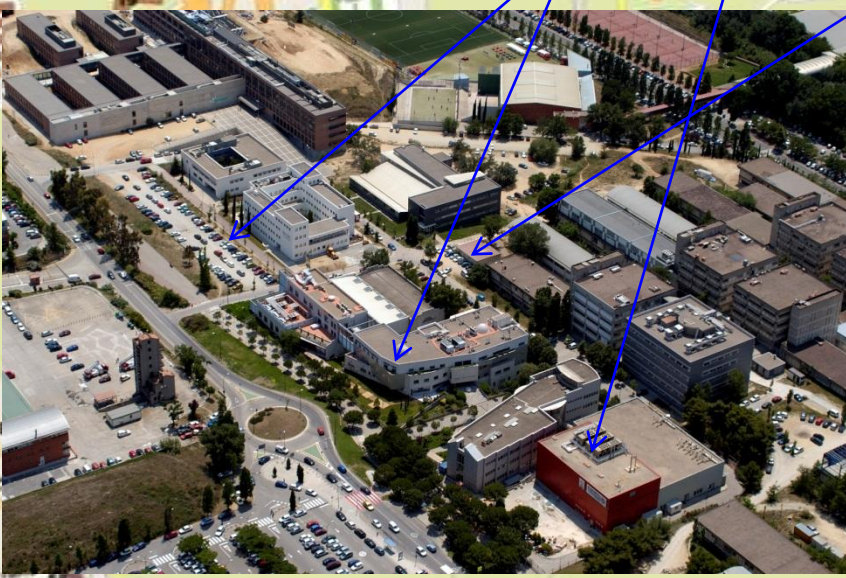
MFTGRS ICMAB CIN2 CSIC

ENM IMM

DT Microelectronic, A.I.E.

ICN Institut Català de Nanotecnologia

UAB



PARC DE RECERCA UAB



Thank you

Carles Cané

cane@cnm.es