Spanish Cooperation Potential in Space H2020

Infoday Horizon 2020 Space. Porto, February 25st 2015

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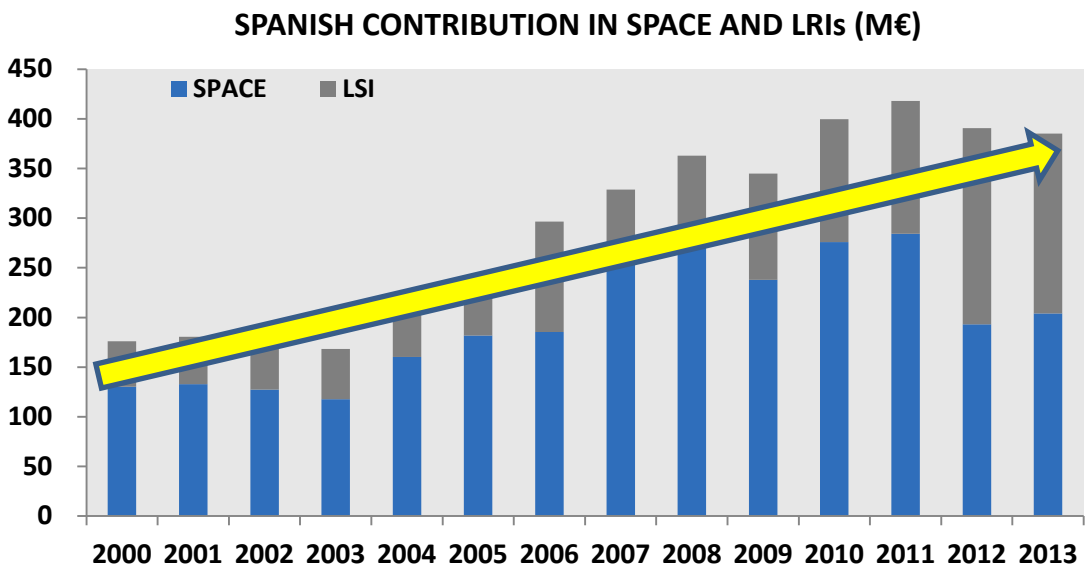
OUTLINE

- Spanish investment in Space
- Space sector in Spain
- Spanish results in Space/FP7
- Spanish entities: reliable partners for H2020 projects

Spanish investment in Space and Large Research Infrastructures

Spanish public investments of more than 400M€/year devoted to large technological projects related to scientific and space research



- **Internationalitation.** Promotes R&D export.
- **Spain trademark.** Promotes Spain as a highly advanced technological country.
- **Driver of the economy.** Spin-off to other sectors.
- **Highly cualified employment.**

Public investments in Science and Space generates private activity that contributes to strengthen the model of the Spanish Economy

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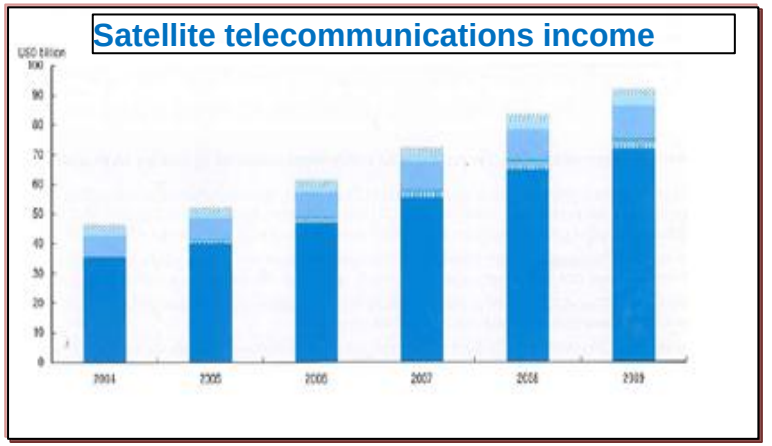
Space is a strategic sector for the Spanish Government

Space provides with high benefits for the Society through Science and applications and offers an attractive return in investments

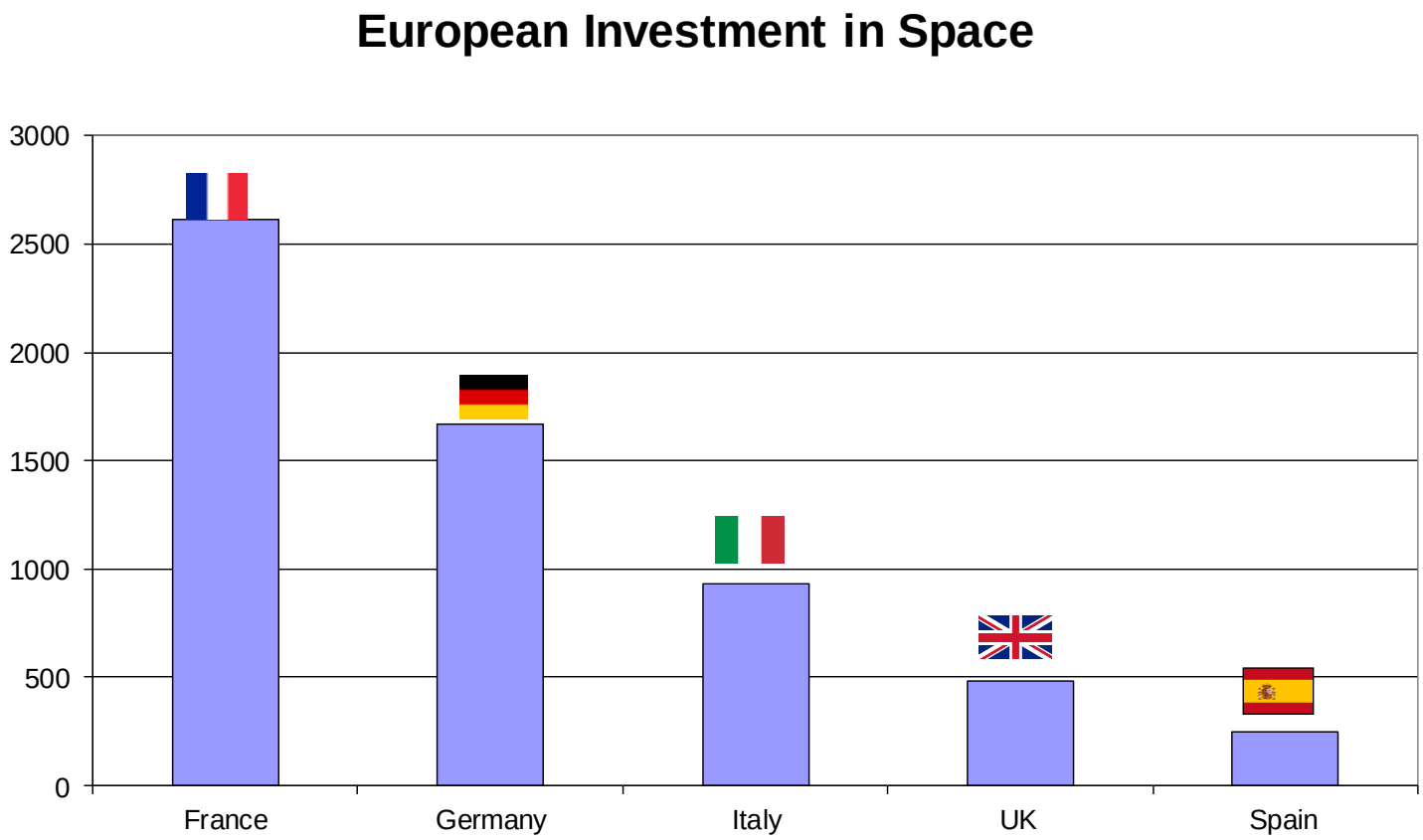
- Benefits for society
  - Security
  - Telecommunications
  - Transport
  - Environmental
  - Science



- High technological contents / R&D intensive
- High return of investment
  - The global commercial market continues to grow (subject to cycles)
  - Public investment is key to maintain the level of competitiveness

Public Investment in Space in Europe

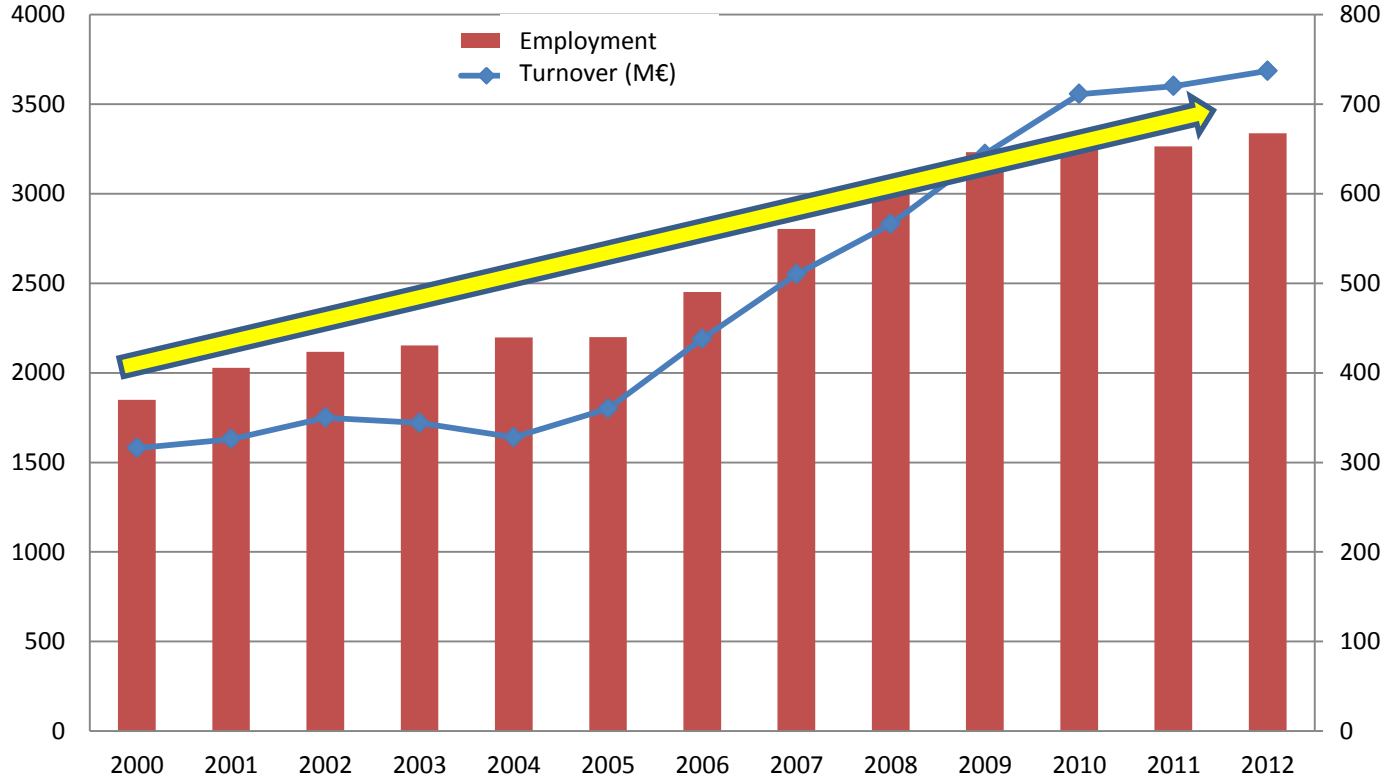
Spain is the 5th largest public investor in Space in Europe



Source: OECD

Growth of the Spanish Sector

Spanish industry has achieved a 2 digits growth over the last decade, with 45% international sales in 2013



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Leadership in International Space Programs

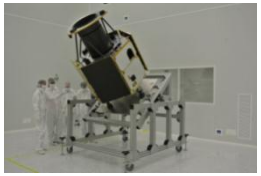
Spanish Industry is achieving a largest role in Space programs, with the leadership of European Space Programs in the years to come

First launch of VEGA

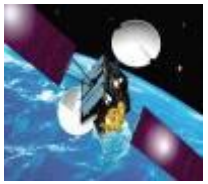
Mars Explorer reaches Mars

Launch of PAZ

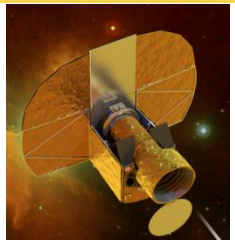
Launch of Deimos-2



Launch of Ingenio



Launch of Small-Geo



Launch of CHEOPS

Launch of Proba-3

2012 2013 2014 2016 2018

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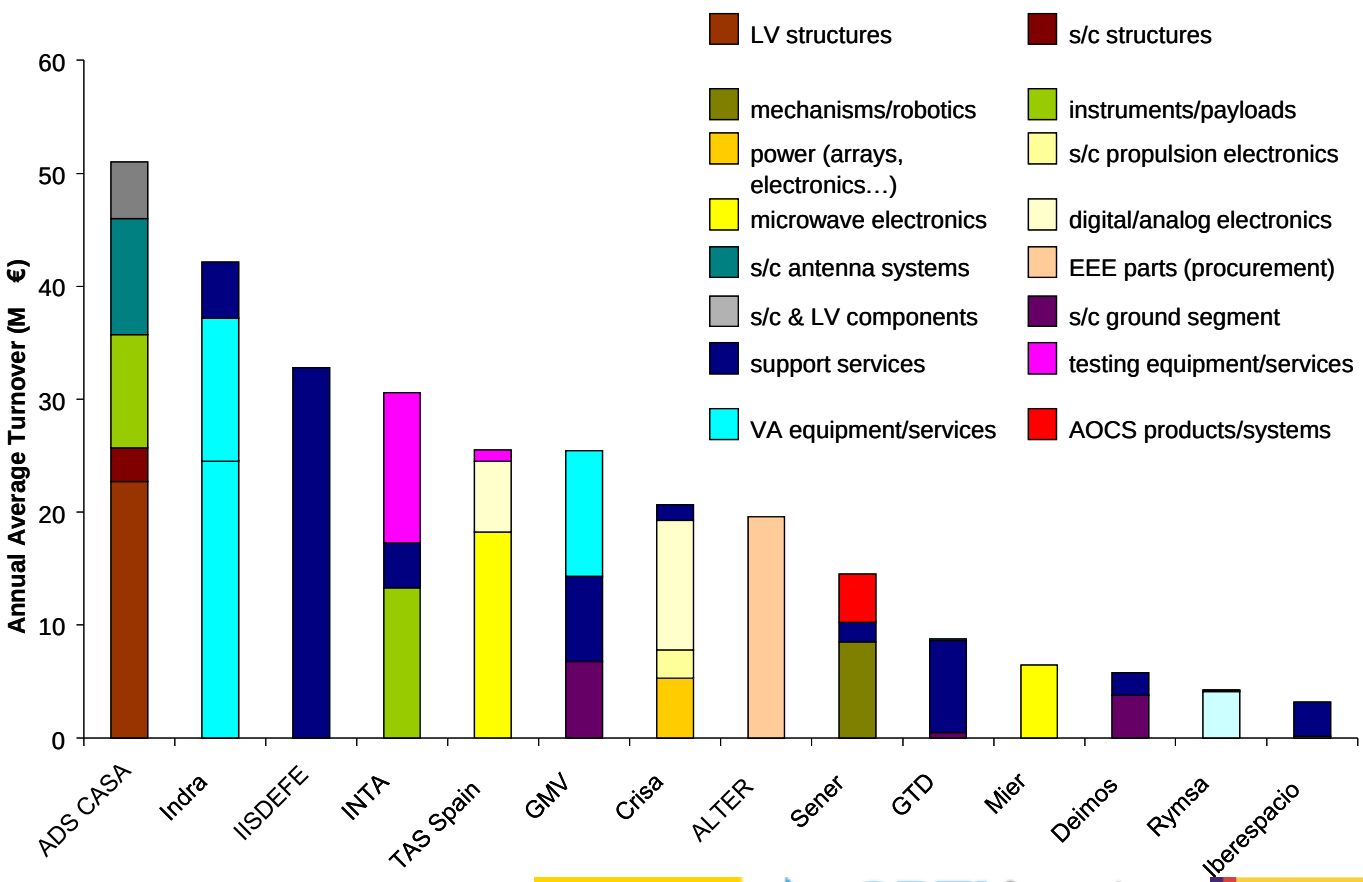
Spanish Space Industry

Competitive core of industries with high capacity in a wide range of technologies



- More than 20 companies
- Active in institutional and commercial markets:
  - Satcom
  - Earth Observation
  - Launchers
- Highly competitive
- Technological capabilities covering the whole spectrum
- Prime role in systems and missions
- Telecom and EO operators

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Space infrastructure in Spain

NATIONAL PROGRAMS	INTERNATIONAL PROGRAMS

TEST FACILITIES

GROUND SEGMENT

EUROPEAN FACILITIES

GROUND SEGMENTS FOR NASA AND ESA

European New Multiannual Financial Framework 2014-2020

Growing role of EC in space offers more possibilities for cooperation

~ 12.000 M€

~ 1.400 M€

~ 3.800 M€

Copernicus
The European Earth Observation Programme

GALILEO EGNOS

Navigation solutions powered by Europe

~ 70 M€

~ 6.300 M€

SST

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Spanish results in Space/FP7

- ✓ 2.999 M€ in grants obtained by Spanish companies
  - ✓ 32% Industry
  - ✓ 23% Universities
  - ✓ 14% Public research centres
  - ✓ 12% Technological centres
- ✓ 2.500 Spanish participants in funded projects
- ✓ Spain was the 5th country with the best results in Space/FP7

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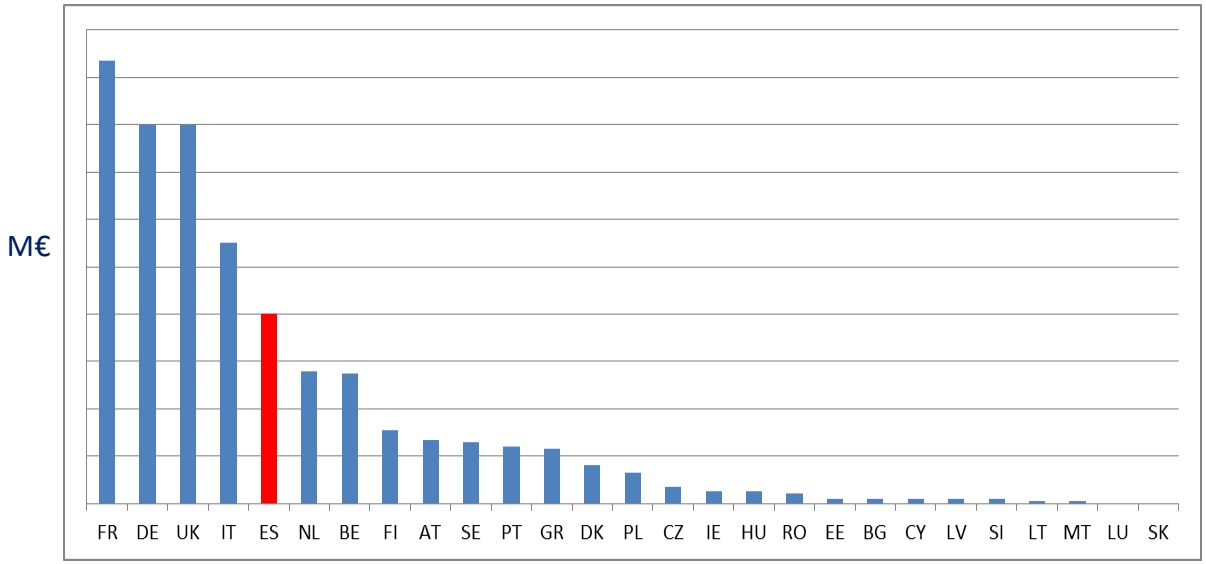
Spanish results in Space/FP7

Success rate UE → 26.4% – 1.146 participants/259 projects

Success rate Spain → 29.2% – 75 participants/112 projects
11% coordinated projects by Spanish entities

Spain is in the 5th position of returns from the FP7 Space Programme (8,04%)



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Spanish participation in Space H2020 1st call (2014)

- Very high participation
- Spanish entities participate in 47% of the proposals submitted
- 265 participations of Spanish entities in 148 proposals
- 58 proposals coordinated by Spanish entities

AND THE RESULTS…..?

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Spanish results in Space H2020 1st call (2014)

Provisional results in the 1st call of H2020 Space (2014) can be seen as **VERY GOOD**

ES Return: 11,2%

(11.2% of the total budget of the call has been obtained by Spanish entities) (*)

- Large improvement compared to FP7
- 30 project funded with Spanish participants (45% of the total nº of projects)
- 8 projects coordinated by Spanish entities
- **Spain is the 4th country with better results in 3 of the 4 calls: GALILEO, PROTEC, COMPET.**

(*) Provisional results

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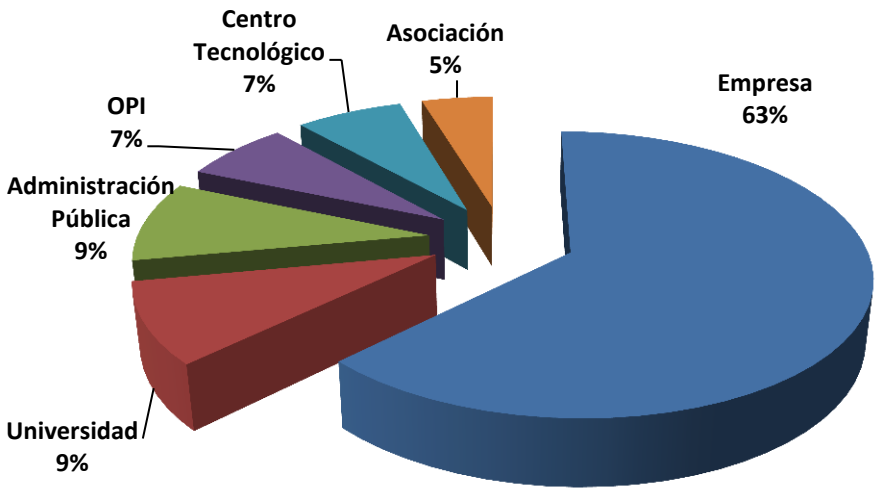
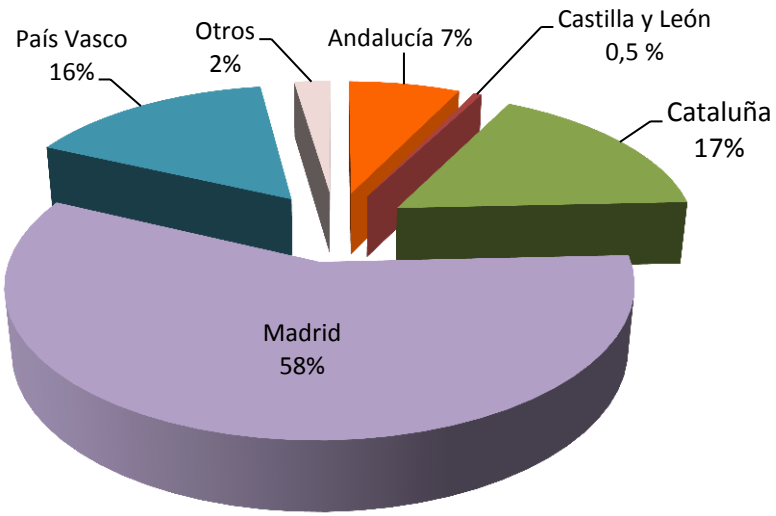
Spanish results in Space H2020 1st call (2014)

Participation in funded projects by type of entity and Spanish region

Type of entity



Region



(*) Provisonal results

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Spanish results in Space H2020 1st call (2014)

List of Spanish entities funded in 1st call H2020 Space

- AERO CLUB BARCELONA-SABADELL
- AEROPLANS BLAUS
- AIRBUS DS
- ALTAIS SL CARTOGRAFIA Y URBANISMO
- ARQUIMEA INGENIERIA (C)
- AVS
- CENTRO DE ESTUDIOS E INVESTIGACIONES TECNICAS DE GUIPUZCOA
- CSIC (Instituto Astrofísica Andalucía) (C)
- DEIMOS SPACE
- FUNDACIO PRIVADA CREAFUTUR
- FUNDACION TECNALIA
- GEONUMERICS (C)
- GMV AEROSPACE AND DEFENCE (C)
- GOING GREEN
- HEWLETT PACKARD ESPAÑOLA
- INAER
- IBERICA DEL ESPACIO (C)
- IKOR TECHNOLOGY CENTERS
- INDRA
- INGENIERIA Y ECONOMIA DEL TRANSPORTE
- INGENIERIA Y SOLUCIONES INFORMATICAS DEL SUR
- INSTITUT MUNICIPAL D'INFORMATICA
- INTA
- NEBUSENS SL
- PILDO CONSULTING (C)
- SENER INGENIERÍA Y SISTEMAS
- THALES ALENIA SPACE ESPAÑA
- Univ. Autónoma de Barcelona
- Univ. de Barcelona
- Univ. Complutense de Madrid
- Univ. de Nebrija
- Univ. de Málaga
- Univ. del País Vasco
- Univ. Politécnica de Cataluña

(*) Provisional results

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Conclusions

- Growth of Spanish space sector over the last decade:
  - 2 digits yearly growth in turnover, employment, productivity
  - Increased capability for system/subsystems
  - Competitive equipment provider
- Spanish entities are attractive partners:
  - High technological capabilities
  - Competitiveness in the commercial market
  - Good results in FP7 Space and impressive results in 1st call H2020 Space
- Spanish entities are open for cooperation in H2020 proposals – **Contact the Spanish NCP for partner search!**

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CONTACT THE NCP FOR PARTNER SEARCH IN SPAIN

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