Spanish strategy for ESA and EU space programmes

“HISNORSAT: encuentro de la industria espacial Hispano-Noruega”

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3 de mayo de 2011
AGENDA

• Space in Europe

• Space in Spain

• Strategy for the future
Europe is a global actor in Space

ESA is currently the main public investor

- Turnover: 6bn€ in equipment (satellites and ground segment)
- Public sector is highly relevant accounting for 60% of investments
- ESA is the main public investor:
  - MS contributions account for around 3 bn€
  - Total budget sums up to around 4bn€
- Capacity and demand concentrated in 5 countries: F, D, IT, UK, S.
National programmes represent the second main source of investment. EU is progressively increasing its role.
Spain is 5th in public investment in Space

Inversión pública europea civil y militar en espacio (2009).
Fuente: Euroconsult
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Until 1986 | Very small sector. Reduced scientific community, Total turnover of 120 Mpta (7 M€) in 1986.
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CDTI manages, either directly or in collaboration with other entities, most of Spain’s technical, scientific and industrial interests in European and national Space initiatives and programmes.

Cooperation with other agencies:
- CNES
- NASA
- DLR
- CEOS
- PNOT

EO national satellite programme:
- Hisdesat
- Hispasat

Satellite operators:
- PNOT

Coordination with other ministries:
- MFOM: Galileo/Egnos National teledetection plan
- MINISDEF: Agreements with DGAM and Isdefe
- MMARM: Agreement with met office

Role of CDTI

SPACE IN SPAIN
Spanish contribution to ESA in the last 7 years has raised an average of 60%

Industrial return has been kept over 100%
Spain has progressively increased its capacities in the course of the last 50 years.
Spain has already leaded several space projects and new programmes will provide continuity for the next years.
Three Spanish owned satellite operators
Industrial capacities covering all the value chain

- Total orientative turnover 2009 >644 M€ (Source: Proespacio)
- Two big telecom satellite operators and small EO operator
- HW and SW companies in a wide range of technologies.
- Numerous companies in the field of applications in navigation, telecom and Earth observation.
**National programmes will boost national technological capabilities**

**ESA centre in Spain (ESAC) has increased in size and status**

**SSA and GMES offer good opportunities for EUSC (UE Satellite Centre in Madrid)**

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<td><strong>1.</strong></td>
<td>Wide range of infrastructures for EO, telecom and navigation (INTA, AENA, Hispasat) to be developed through the different programmes</td>
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<td><strong>2.</strong></td>
<td>ESAC growth through its role as a reference centre for science and exploration and SSA</td>
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<td><strong>3.</strong></td>
<td>EUSC roles for GMES and SSA in EU.</td>
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Substantial public support coherently with its relevance as most important commercial space activity

- **ARTES**: Investment in the last ESA CM´08 over relative GNP: 48,45 M€.

- **Industrial Return Programmes with Hispasat and Hisdesat**: 35-40 M€ per year

- **Flagship programmes with substantial national investment**:
  - **Amheris**: Onboard reprocessing system for satcom satellites. Prime: Thales Alenia Space España
  - **Spainsat and XTAR**.

- **Future**: Further increase of national capabilities. Placing Spanish companies as primes or payload system integrators aiming at:
  - Increased technological independence.
  - Promoting the participation of the Spanish industry in bigger consortia.
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STRATEGY FOR THE FUTURE

Prepare the Spanish space sector for the new challenges in times of budgetary restrictions

• New scenario in Europe after the Lisbon Treaty
  – EU to become a new important actor from 2014 onwards with a potentially increased budget. Spain will contribute 9% without georeturn.

• Finalization of main running programmes:
  – Launch of Ingenio (2014)
  – SMALL-GEO, PROBA-3, SSA, MTG

• Managing of the budgetary difficulties:
  – ESA: maintain level of investment
  – Further use of other CDTI programmes to support R&D activities
  – Market development
  – Increasing participation to European initiatives: FP7, UE, Eumetsat, etc.