Defining European Relevance in the Spanish Roadmap

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I. Is **European relevance** one of the criteria which has been defined or considered during the process of developing the Spanish Roadmap for RIs?

II. Are there any **quantifiable indicators** for the assessment of the European relevance in the Spanish Roadmap?

III. What would we value in the **collaboration with other partners in Europe** regarding RIs?
What’s an ICTS?

ICTS (Infraestructura Científica y Técnica Singular)
Unique Scientific and Technological Infrastructure

Unique infrastructures (facilities, resources or services) which are totally or partially open to use by the scientific-technological and industrial community, both national and international.

They can be physically located in a single place or as part of a distributed network.
Spanish ICTS Roadmap

Defined during the 3rd Conference of Presidents in 2007

Strategic objectives:

   - Financial and political agreements between the Spanish and Regional Governments
2. Promote regional development and socio-economic progress around the ICTS, facilitating the creation of a pool of companies with high technological knowledge
3. Facilitate access to all interested research groups (national and international): increase the RI availability as powerful tools for raising quality in science and technology
4. Foster the internationalisation of the Spanish RIs, and the Spanish participation in European and other international initiatives.
ICTS Criteria

- Unique and with strategic character

- Funding/Investment:
  - Construction costs (>≈10 M€), exploitation costs (>≈ 1 M€/year).
  - Sustainable, from own funds (or external income) and eventually from the Ministry.

- Existence of an strategic plan (for ex-ante and ex-post evaluation)

- In accordance with National, European and other International Strategies
  - European Framework, ESFRI Roadmap and other international Strategic Plans (ERANET, JTIs, Technological Platforms...)

- Open to external use (National and International users)

- With S/T Advisory Committee of recognised international prestige
ICTS European Relevance

At present, the Spanish National Roadmap is composed of 31 existing RIs labelled as ICTS, 5 under construction and other 19 (different maturity status) over the Spanish geography.

Conclusion:

I. Is European relevance one of the criteria which has been defined or considered during the process of developing the Spanish Roadmap for RIs?
Quantifiable Indicators - European Relevance

1. **Structural Participation of European Institutions in ICTS governance**
   ✓ i.e. Max Plank Institute is a funding partner of CSIC for the Calar Alto Astronomical Observatory (50%)

2. **ICTS Long Term Collaborations with European Institutions**
   ✓ i.e. The Solar Platform of Almería (PSA-CIEMAT) collaborate in a frequent manner with the European Institutions: CNRS (France), DLR and Max Plank Institutes (Germany), ETHZ and PSI (Switzerland), INETI (Portugal); European industry sector and Universities

3. **ICTS Connection to ESFRI Roadmap or existing Pan-European RIs**
   ✓ TJ-II (CIEMAT) - IFMIF
   ✓ Doñana Natural Reserve - LifeWatch
   ✓ GTC - ESO and E-ELT
   ✓ BSC - PRACE and ELIXIR
   ✓ PSA - EU-SOLARIS
4. **ICTS Participation in European Programs and Networks:**

- **i.e.:** R/V Cornide de Saavedra (IEO), R/V Sarmiento de Gamboa and R/V Hespérides (CSIC) - FP7 funded project

- **i.e.:** At present, BSC-CNS coordinates or participates in 35 FP7 projects

- **i.e.:** The Oceanographic Platform in the Canary Islands (PLOCAN) coordinate the project TROPOS (Oceans of Tomorrow-2010 FP7-funded project)

- **i.e.:** At present, Clean Room of the Microelectronics National Center (CNM), coordinates of participates in 15 European projects (FP7 and others)

5. **ICTS open access to European users:**

- **i.e.:** Access to many ICTS such as ALBA Synchrotron, INTA aircrafts, BSC-CNS, Doñana Reserve, CIEM, CEHIPAR, IRAM, and others is funded through the FP7 integration activities and other funding programmes
6. **European participation in ICTS advisory Committees:**

- European Members of recognized international prestige are part of S/T and access advisory committees

  i.e.:  
  - Nuclear Magnetic Resonance Laboratory (RMN)
  - BSC-CNS
  - Ultra-short Ultra intense Pulsed Laser Center (CLPU)

7. **ICTS staff participation in international Committees:**

  i.e.:  
  - Maritime Eng. Laboratory (CIEM) - Hydralab
  - National Accelerators Center (CNA) - Nuclear Physics European Collaboration Committee (NuPECC)

**Conclusion:**

II. Are there any **quantifiable indicators** for the assessment of the European relevance in the Spanish Roadmap?
III. What would we value in the collaboration with other partners in Europe regarding RIs?

ICTS are convinced to develop strong partnership with other existing or future Pan-EU Research Infrastructures, and to collaborate with other European R+D+I institutions

1. PERSONNEL AND EXPERIENCE EXCHANGE:

✓ More human networking is needed.
✓ High excellence scientific and technological staff

1. DATA EXCHANGE: User-driven data sharing

✓ Use of standards are needed to ensure interoperability
✓ Special focus on data architecture, data & metadata frameworks, data discovery in repositories
III. What would we value in the collaboration with other partners in Europe regarding RIs?

3. EQUIPMENT AND FACILITIES EXCHANGE:

- Find synergies and try to avoid duplication of resources
- Good to build on top of existing networks
- Participate in ESFRI distributed RIs instead of being stand-alone RIs

4. FUNDING:

- International Funding mechanisms needed
- Better utilization of Structural Funds!
- Funding Partnership and foster external income (industry involvement)
Thank you for your attention