



## Spain – Research Infrastructure: Fact sheet (international RI)

1. Is there a National Roadmap for RI in place?		
Yes	No	In planning
x		

Source: Data derived from InRoad Consultation on RI (2017).

2. Link to the roadmap
<a href="http://www.idi.mineco.gob.es/stfls/MICINN/Internacional/FICHEROS/Organismos_e_infraestructura/s/Construyendo_la_ciencia_del_siglo_XXI.pdf">http://www.idi.mineco.gob.es/stfls/MICINN/Internacional/FICHEROS/Organismos_e_infraestructura/s/Construyendo_la_ciencia_del_siglo_XXI.pdf</a> [Last access: 01/2018].

Source: Data derived from InRoad Consultation on RI (2017).

3. RI definition deviates from ESFRI RI definition (If yes, please check RI definition in the Annex).	
Yes	No
	x

Source: Data derived from InRoad Consultation on RI (2017).

4. Players and their responsibilities in the national RM procedure					
	Responsibility for RM	Decision-making	Funding	Scientific evaluation	Economic evaluation
Mineco - Ministry of Economy, Industry and Competitiveness (MINECO)	x	x	x	x	x
Other Ministerial Departments		x	x		
Autonomous Regions of Spain		x	x		
RPO & Universities			x	x	

Source: Data derived from InRoad Consultation and additional documents provided through the Consultation on RI (2017).

5. Steps and Actions in the national RM Procedure		
Step	Action	Responsible actor
1	Planning	MINECO
2	Call	Permanent OPEN CALL
3	Landscape analysis	MINECO & General Admin. Departments+regional Authorities
4	Mapping	MINECO
5	Eligibility Check	MINECO
6	Science-driven Evaluation	Committee composes by experts in the corresponding



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		scientific domain appointed by MINECO supported by ANEP and the Spanish State Research Agency and the units responsible of the management of RI at national and European level within MINECO.
7	Economic evaluation	MINECO
8	Evaluation of societal relevance	MINECO and the Spanish State Research Agency
9	Decision	MINECO
10	Validation	MINECO

Source: Data derived from InRoad Consultation on RI (2017).

<b>6. Criteria of the decision-making process in the RM procedure</b>		
<b>Eligibility criteria</b>	<b>Evaluation criteria</b>	<b>Feasibility criteria</b>
<ul style="list-style-type: none"> <li>Objectives should be aligned to the objectives of the Spanish Strategy for Science and European RI strategies, ESFRI, CERN, ESO, etc.</li> <li>Nature: Is excellent and Unique.</li> <li>Investment: There are proof of availability of funds, or possibility for cofounding from the Promoters, in general RPO, Regional Governments, or Universities.</li> <li>Open to users based on competitive access.</li> </ul>	<ul style="list-style-type: none"> <li>Scientific interest. Quality of R&amp;D results expected.</li> <li>Opening to competitive and transparent access.</li> <li>User community seize interested.</li> <li>Potential industrial return</li> <li>Possibilities for Spain to have a recognized position in the RI organization as host or main node.</li> <li>Cooperation with other research organizations, RI and industrial sector</li> <li>Internationalization possibilities.</li> <li>Long term Sustainability.</li> <li>Socio-economic impact</li> </ul>	<ul style="list-style-type: none"> <li>Coverage of Operation and maintenance costs through Funding mechanisms at National, Regional and institutional level. Including in some cases the use of ERDF funds</li> <li>Institutional commitment for the construction of the infrastructure on top of the existing facilities, which are obliged to share the access with the new RI to be constructed. It is specially remarkable in the case of the distributed infrastructures</li> </ul>

Source: Data derived from InRoad Consultation and additional documents provided through the Consultation on RI (2017).

<b>7. Towards harmonisation and synchronisation of RM Procedures</b>		
<b>The respondents are interested in...</b>	<b>...an exchange of experience for the following topics.</b>	<b>...increased coordination for the following topics.</b>
Involved players and responsibilities	x	x
Planning and design of RM	x	x
Inventory/landscape analysis	x	x
Evaluation procedures	x	
Strategic decision-making	x	
Timing of national and	x	x



European RM		
Life cycle management	x	x
RI funding instruments	x	x
Monitoring and evaluation of RI	x	x
Prioritisation of RI		x

Source: Data derived from InRoad Consultation on RI (2017).

#### 8. Timelines and Life-cycles: Publication and updates

The international roadmap was first published in 2010 and it is pending of a new revision, which is in progress. Estimated publication date end of 2018 in conjunction with the new 2018 ESFRI Roadmap

Source: Data derived from InRoad Consultation on RI (2017).

#### 9. Main purposes of the national RM on RI

- In line with the European RI strategies, specifically the ESFRI Roadmap, identify and facilitate the Spanish involvement in top RI with the final intention to offer researchers and industry tools for the development of excellent science.
- A tool supporting and monitoring the implementation of RI
- A tool to coordinate and create synergies between national RI ICTs, RPO and Universities facilities to work together for the participation of Spain in the construction of the big European and International RIs.
- To foster innovation, technology transfer and participation of the private sector in the construction of the RIs
- To ensure the scientific and technological competitiveness of the Spanish RIs in the international context
- A guide with strategic RI priorities for setting research policy priorities
- An input for funding decisions on RI between institutional, regional and national stakeholders.
- A list to achieve agreement on the RI with institutional, regional and national stakeholders
- A list of strategic priorities, which are foreseen for funding, mainly to fulfil the ex-ante condition required for the use of ERDF funds dedicated to RI.

Source: Data derived from InRoad Consultation on RI (2017).

#### 10. Organisation and main indicators for funding of RI

	Planning	Construction	Operation
National budget	x	x	x
European Fund for Strategic Investments (EFSI)		x	
European Structural and Investment Funds (ESIF) managed at national level	x	x	
Regional budget	x	x	x
ESIF managed at regional level	x	x	
Research funding agencies	x	x	x
Research Performing Organisations	x	x	x
European Investment Bank		x	
Horizon 2020	x	x	
Others			

Source: Data derived from InRoad Consultation on RI (2017).



## 11. Responsible Organism(s) for RI Funding

- MINECO The National State Administration (AGE)
- Other Ministerial Departments with competencies in the field.
- The Regional Governments
- Interested RPOs with are owners of their owns RIs (IAC, ISCIII, CIEMAT, CSICc, , among others).
- CDTI that covers construction and operation mainly through in-kind contribution via Private companies

Source: Data derived from InRoad Consultation on RI (2017).

## 12. RI Funding Sources

- National and regional budget
- European Structural and Investment Funds (ESIF) managed at national level and assigned by MINECO
- ESIF managed at regional level.
- Research Performance Organization. In some cases, assuming the limitation of the National and Regional Budgets for the allocation of funds for all the RI are the RPOs using the budgets of the institutions

Research Infrastructure Life-cycle	Concept Phase	Design Phase	Preparation Phase	Construction/Implementation Phase	Operation Phase	Termination Phase	Others (e.g. upgrade, repurposing)
<b>Funding source</b>	1. RFOs; 2. Funding Agencies	Not only one scheme of funding (it depends on the origin of the project)	Not only one scheme of funding (it depends on the origin of the project) - For a ESFRI Project: EC and WPRI	Not only one scheme of funding (it depends on the origin of the project) - MINECO; - Other Ministries; - Regional Governments - Universities and RPO	Not only one scheme of funding (it depends on the origin of the project) - MINECO; - Other Ministries; - Regional Governments - Universities and RPO	Not only one scheme of funding (it depends on the origin of the project) - MINECO; - Other Ministries; - Regional Governments - Universities and RPO	Not only one scheme of funding (it depends on the origin of the project) - MINECO; - Other Ministries; - Regional Governments - Universities and RPO
<b>Funding instrument</b>	- Institutional	-	-	-	-	-	-



	Budgets; - National/Regional Plan						
<b>Responsible funders/funding bodies</b>	- MINECO - AEI (State Research Funding Agency); -Regional funding Agencies	-	-	-	-	-	-
<b>Covered costs</b>	Personnel Materials Facilities Subcontracts	-	-	-	-	-	-
<b>Period of time covered (years)</b>	variable	-	-	-	-	-	-

Source: Data derived from InRoad Consultation on RI (2017).

### 13. Details on national funding mechanisms

- In Spain, funding decisions on RI are linked with the State strategic priorities.
- There are several ways to fund RIs in Spain. The instrument in place varies according the type of activity (capacity building, research projects, collaborative actions, etc.), the actors involved, etc.
- Spain does not design funding instruments thinking of their potential combination.

Source: Data derived from InRoad Consultation on RI (2017).

### 14. National Operational Program Information

<b>Total amount (EU amount and National amount)</b>	All Programs (€M)	
	Programs with ERDF (€M)	
<b>EU amount</b>	All Programs (€M)	
	Programs with ERDF (€M)	
<b>Thematic objective 1 (Research &amp; Innovation)</b>	Total funds (€M)	
	ERDF (€M)	
<b>Investment category - ERDF</b>	058. Research infrastructure and innovation (public) (€M)	
	059. Research infrastructure and innovation (private and scientific parks) (€M)	

Not applicable or no information presently available.

### 15. Relevant issue(s) not addressed

In the funding of RIs the In-Kind contribution is of extraordinary importance. It is a major topic today we are using but will deserve furthermore understanding and generalization.



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Source: Data derived from InRoad Consultation on RI (2017).



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## Spain – Research Infrastructure: Fact sheet (ICT)

1. Is there a National Roadmap for RI in place?		
Yes	No	In planning
x		

Source: Data derived from InRoad Consultation on RI (2017).

2. Link to the roadmap
<a href="https://ec.europa.eu/research/infrastructures/pdf/roadmaps/spain_national_roadmap.pdf#view=fit&amp;pagemode=none">https://ec.europa.eu/research/infrastructures/pdf/roadmaps/spain_national_roadmap.pdf#view=fit&amp;pagemode=none</a> [Last access: 08/2017].

Source: Data derived from InRoad Consultation on RI (2017).

3. RI definition deviates from ESFRI RI definition (If yes, please check RI definition in the Annex).	
Yes	No
x	

Source: Data derived from InRoad Consultation on RI (2017).

4. Players and their responsibilities in the national RM procedure					
	Responsibility for RM	Decision-making	Funding	Scientific evaluation	Economic evaluation
CPCTI - Science, Technology, and Innovation Policy Council <sup>1</sup>	x	x			
MAPAMA - Ministry of Agriculture and Fisheries, Food and Environment, MINETUR - Ministry of Industry, Energy and Tourism, MDEF - Ministry of Defense, MEDU - Ministry of Education, Culture and Sports, MINETAD - Ministry of Energy and Digital Agenda, MF-Ministry of Public Works and Transport or Institutions dependent on them that host RIs (Research National Public			x		

<sup>1</sup> Article 8 Science, Technology and Innovation Act 14/2011.



Institutions, etc.)					
MINECO - Ministry of Economy, Industry and Competitiveness	x	x	x		x
CAIS - Advisory Committee for Unique Infrastructures				x	
Autonomous Communities of Spain		x	x		
Institutions dependent on the Autonomous Regions of Spain (Universities)			x		

Source: Data derived from InRoad Consultation and additional documents provided through the Consultation on RI (2017).

5. Steps and Actions in the national RM Procedure		
Step	Action	Responsible actor
1	Planning	MINECO
2	Call	Executive Committee of the CPCTI
3	Landscape analysis	MINECO, regional Authorities
4	Mapping	MINECO
5	Eligibility Check	MINECO, Autonomous Communities
6	Science-driven Evaluation	CAIS with the support of MINECO and the Spanish State Research Agency
7	Economic evaluation	MINECO
8	Evaluation of societal relevance	CAIS with the support of MINECO and the Spanish State Research Agency
9	Decision	CPCTI
10	Validation	MINECO

Source: Data derived from InRoad Consultation on RI (2017).

6. Criteria of the decision-making process in the RM procedure		
Eligibility criteria	Evaluation criteria	Feasibility criteria
<ul style="list-style-type: none"> <li>Objectives should be in alignment with the objectives of the Spanish Strategy for Science</li> <li>Public ownership (100%), meaning that the RIs must belong to or be managed by public entities, whether they are under the authority of the Spanish Central Administration and/or the Autonomous</li> </ul>	<ul style="list-style-type: none"> <li>Socio-economic impact</li> <li>Uniqueness of technological facilities (at least at national level)</li> <li>Management and sustainable development strategy</li> <li>Open to competitive and transparent access</li> <li>Cooperation with other research organisations, RI and industrial sector</li> <li>Quality of R&amp;D results achieved by using the</li> </ul>	<ul style="list-style-type: none"> <li>RDI regional systems specificities, the distribution of the competences in the State Administration itself, and the autonomy of universities</li> <li>Operation and maintenance costs will be covered by the ICTS hosting institution)</li> <li>Funds will be available through competitive funding mechanisms for update and improvement investments, a mainly through the use of ERDF funds</li> </ul> <p>Competitive open access for the scientific, technological, and industrial</p>



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<p>Communities</p> <ul style="list-style-type: none"> <li>Investment: They entail an investment cost, higher than 10 M€, in their construction, updating, and improvement</li> <li>Management: The ICTS (Unique Scientific Technical Infrastructure) should possess appropriate management schemes in accordance with their specific characteristics.</li> <li>Open to users based on competitive access.</li> </ul> <p>The Spanish ICTS Map (2013-2016) and the current evaluation for the (2017-2020) period only accepts the inclusion of operative RIs</p>	<p>RI</p> <ul style="list-style-type: none"> <li>Potential for the development of new technologies to promote technology transfer</li> <li>Production and Performance. - The production and performance of the ICTS should be in proportion to the cost and size of the facility.</li> <li>Economically sustainable (nominal operation and maintenance)</li> </ul> <p>(detailed information in 2.3 Annex Part 1)</p>	<p>communities as well as government administrations</p>
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Source: Data derived from InRoad Consultation and additional documents provided through the Consultation on RI (2017).

<b>7. Towards harmonisation and synchronisation of RM Procedures</b>		
<b>The respondents are interested in...</b>	<b>...an exchange of experience for the following topics.</b>	<b>...increased coordination for the following topics.</b>
Involved players and responsibilities	x	
Planning and design of RM	x	x
Inventory/landscape analysis	x	x
Evaluation procedures	x	
Strategic decision-making	x	
Timing of national and European RM	x	x
Life cycle management	x	x
RI funding instruments	x	x
Monitoring and evaluation of RI		x
Prioritisation of RI		x

Source: Data derived from InRoad Consultation on RI (2017).



**8. Timelines and Life-cycles: Publication and updates**

The roadmap "Map of unique scientific and technical infrastructures (ICTS)" was first published in 2007 and was then updated in 2013 (2013-2016). The Ministry of Economy and Competitiveness has promoted, in conjunction with the Autonomous Communities, an updated ICTS Map approved on 7 October 2014 by the Council of Scientific, Technological, and Innovation Policy. This Map will be submitted to a complete update and review at the beginning of the period of validity for each State Plan. It is accessible under:  
[http://www.idi.mineco.gob.es/stfls/MICINN/Innovacion/FICHEROS/ICTS\\_ing.pdf](http://www.idi.mineco.gob.es/stfls/MICINN/Innovacion/FICHEROS/ICTS_ing.pdf) [Last access: 07/2017].

The new Map of ICTS for 2017-2020 is currently under evaluation of the RI candidates.

Source: Data derived from InRoad Consultation on RI (2017).

- 9. Main purposes of the national RM on RI**
- An inventory of existing RI which are unique at national level, to facilitate the access of users from the public and private sector, optimizing their use by means of public competitive and transparent access protocols.
  - A tool supporting and monitoring the implementation of RI
  - A tool to avoid redundancies and improve the coordination of different RIs working in the same field of application through the idea of distributed RIs and/or network of RIs.
  - To foster innovation, technology transfer and participation of the private sector in RIs
  - To ensure the scientific and technological competitiveness of the Spanish RIs in the international context
  - A guide with strategic RI priorities for setting research policy priorities
  - An input for funding decisions on RI between institutional, regional and national stakeholders.
  - A list to achieve agreement on the RI with institutional, regional and national stakeholders
  - A list of strategic priorities, which are foreseen for funding, mainly to improve the use of ERDF funds dedicated to RIs
  - A planning instrument to prepare for the negotiations at European (ESFRI) and international levels

Source: Data derived from InRoad Consultation on RI (2017).

**10. Organisation and main indicators for funding of RI**

	Planning	Construction	Operation
National budget	x	x	x
European Fund for Strategic Investments (EFSI)			
European Structural and Investment Funds (ESIF) managed at national level	x	x	
Regional budget	x	x	x
ESIF managed at regional level	x	x	x
Research funding agencies	x	x	x
Research Performing Organisations	x	x	x
European Investment Bank			
Horizon 2020			x
Others			x

Source: Data derived from InRoad Consultation on RI (2017).



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11. Responsible Organism(s) for RI Funding
<ul style="list-style-type: none"> <li>• The National State Administration (AGE) is responsible for funding of construction, running costs, new equipment and other type of investments of those RIs included in the ICTS Map that are managed by entities dependent on them through different administration bodies (Ministries, Public Research Organizations, State Consortia, etc.)</li> <li>• The Regional Autonomous Communities are responsible for funding of construction, running costs and maintenance of RIs that belong to regional institutions dependent on them (universities among others).</li> <li>• Public Institutions with are owners of the RIs (IAC, ISCIII, CIEMAT, CSIC, among others) which covers RI construction and operation costs.</li> </ul>

Source: Data derived from InRoad Consultation on RI (2017).

12. RI Funding Sources
<ul style="list-style-type: none"> <li>• National and regional budget</li> <li>• European Structural and Investment Funds (ESIF) managed at national level and assigned by MINECO</li> <li>• ESIF managed at regional level.</li> <li>• Research Performance Organization. In some cases, assuming the limitation of the National and Regional Budgets for the allocation of funds for all the RI are the RPOs using the budgets of the institutions</li> </ul>

Research Infrastructure Life-cycle	Concept Phase	Design Phase	Preparation Phase	Construction/Implementation Phase	Operation Phase	Termination Phase	Others (e.g. upgrade, repurposing)
<b>Funding source</b>	1. RFOs; 2. Funding Agencies	Not only one scheme of funding (it depends on the origin of the project)	Not only one scheme of funding (it depends on the origin of the project)	Not only one scheme of funding (it depends on the origin of the project) - MINECO; - Other Ministries; - Regional Governments - ERDF	Not only one scheme of funding (it depends on the origin of the project) - MINECO; - Other Ministries; - Regional Governments	Not only one scheme of funding (it depends on the origin of the project) - MINECO; - Other Ministries; - Regional Governments	Not only one scheme of funding (it depends on the origin of the project) - MINECO; - Other Ministries; - Regional Governments
<b>Funding instrument</b>	- Institutional Budgets; - National/Regional Plan	-	-	-	-	-	-
<b>Responsible funders/funding bodies</b>	- AEI (National Research and Innovation	-	-	-	-	-	-



	n Funding Agency); -Regional Funding Agencies						
<b>Covered costs</b>	- personnel	-	-	-	-	-	-
<b>Period of time covered (years)</b>	variable	-	-	-	-	-	-

Source: Data derived from InRoad Consultation on RI (2017).

### 13. Details on national funding mechanisms

- In Spain, funding decisions on RI are linked with the country strategic priorities.
- There are several ways to fund RIs in Spain. The instrument in place varies according to the type of activity to be funded (construction, participation in projects, operational costs, maintenance, etc.)
- MINECO assigns ERDFs funds for improvement and update of RIs contained in the Spanish ICTS Map through collaboration agreements with the owner entities of the ICTS.
- Participation in competitive calls from the Research National Agency
- Own budget from the institutions that host the RIs

Source: Data derived from InRoad Consultation on RI (2017).

### 14. National Operational Program Information

<b>Total amount (EU amount and National amount)</b>	All Programs (€M)	
	Programs with ERDF (€M)	
<b>EU amount</b>	All Programs (€M)	
	Programs with ERDF (€M)	
<b>Thematic objective 1 (Research &amp; Innovation)</b>	Total funds (€M)	
	ERDF (€M)	
<b>Investment category - ERDF</b>	058. Research infrastructure and innovation (public) (€M)	
	059. Research infrastructure and innovation (private and scientific parks) (€M)	

Not applicable or no information presently available.

### 15. Relevant issue(s) not addressed

According to the Spanish Strategy for Science, Technology and Innovation (2013-2020), access to advanced scientific and technological infrastructures is one of the most important assets for maintaining leadership in research, increasing the specialised training capacity in RDI activities and capturing talent. The progress seen in Spain has been significant and this is reflected in the current «*National Map of Scientific and Technological Infrastructures*», which represents a key measure for the territorial development of the Spanish Science, Technology and Innovation System, by defining its profiles of scientific and technical specialisation and facilitating its integration in the European Research Area.

The opening of large scientific infrastructures is a significant effort in the sphere of international collaboration. This is also reflected by the Spain's participation in the European Strategy Forum on Research Infrastructures (ESFRI), in which Spain contribute to defining the best policies and instruments for developing and supporting those of pan-European interest which most contribute to the construction of the European Research Area.

Source: Data derived from InRoad Consultation on RI (2017).

