

***Greece:***  
*Towards a National Roadmap  
for Research Infrastructures*



*Dora Farmaki, National Expert, Research Infrastructures, GSRT*

# National Strategy for Research Infrastructures: *A Challenge for Greece*



- Creation of a coherent, collaboration framework among the academic / research and industry stakeholders → **Research Infrastructures** as catalysts for the achievement of synergies between research and the development structures of the country
- Multi-annual plan for investment on Research Infrastructures, mapping national priorities (also part of *ex ante conditionality in the programming period 2014-2020* “1.2 The existence of a multi-annual plan for budgeting and prioritization of investments” regarding the allocation of Structural Funds for RIs)
- Strong links with innovation and alignment with Smart Specialisation Strategies
- Emergence of National and European Added Value
- Identification of priorities for Regional Research Infrastructures and Regional Partner Facilities
- Optimal networking / sustainability / critical mass

# Objectives of the National Roadmap for Research Infrastructures



- ❑ Support the decision-making process for the upgrade of research infrastructures (or new ones, if necessary) within the framework of a National Strategy for Research and Innovation, 2014-2020
- ❑ Provide an evidence-based support for EC negotiations regarding ESFRI participation
- ❑ Roadmap: A policy instrument for Research Infrastructures in the country

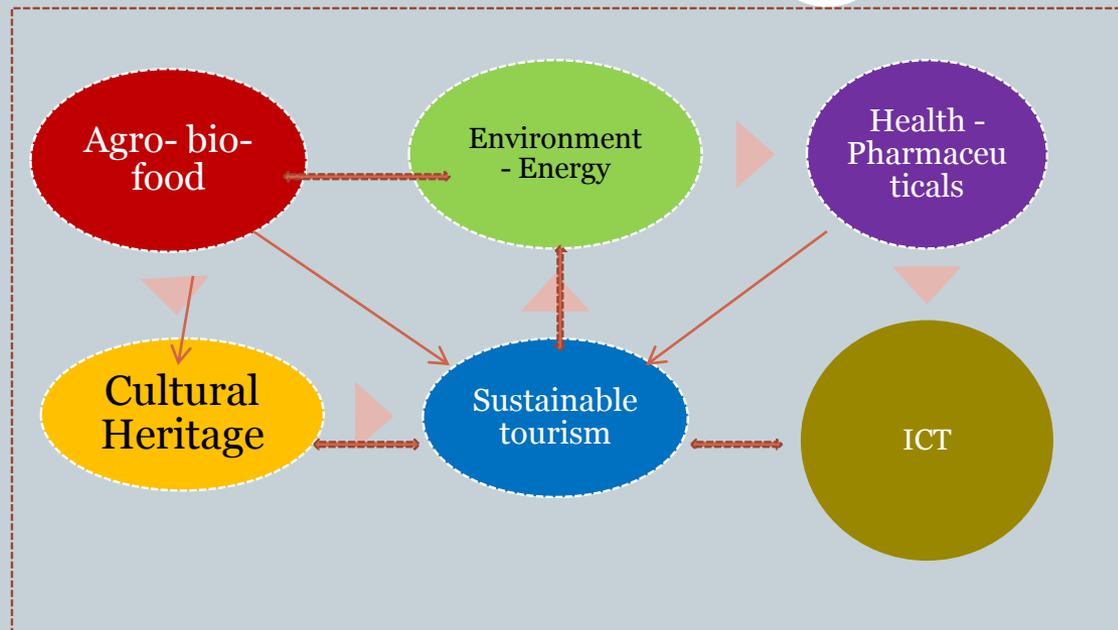
# Greek participation in ESFRI roadmap



Scientific Area (ESFRI)	Greek participation in ESFRI roadmap
Biological & Medical Sciences	<b>BBMRI, EATRIS, ELIXIR, Infrafrontier, EMBRC, EURO-Biomed, ERINHA, ISBE</b>
Energy	<b>HiPER, ECCSEL, EU-SOLARIS, WindSCANNER</b>
Physical Sciences & Engineering	<b>ELI, KM3NeT</b>
Material, Analytical Facilities	European XFEL
Environmental Sciences	<b>COPAL, EMSO, EPOS, EURO-ARGO, LIFEWATCH</b>
Social Sciences & Humanities	<b>CESSDA, SHARE, CLARIN, DARIAH</b>
e-infrastructures	<b>PRACE</b>

\* In **bold**: Structural Funds (2007-2013) approved for the preparation of Greek participation in ESFRI

# Research Infrastructures in line with the national and regional priorities & Research & Innovation Smart Specialisation Strategies



Strengthening the role of research within the Greek Knowledge Triangle

-  
Solid & competitive participation in ERA

Research Infrastructures

Human Potential

Key Enabling Technologies / FET

**Monitoring and reviewing mechanisms**

# 1<sup>st</sup> Phase – Expression of interest



- Submission of **138** proposals in **7** thematic areas
  - A “bottom-up” process
  - Strengthening national networks and critical mass per scientific area
  - Encouragement of strong governance schemes / emphasis on sustainability
- Only 69 proposals support only one thematic priority (*significant level of interdisciplinarity*)
- Significant connection to the European landscape of Research Infrastructures (I3 networks, ESFRI, ...)

# Main steps for the formulation of the National Roadmap for Research Infrastructures



- **1<sup>st</sup> Phase:** Expression of Interest - submission of abstracts
- **2<sup>nd</sup> Phase:** Submission of full / detailed proposals

## Evaluation Procedure based on 2 *threads*

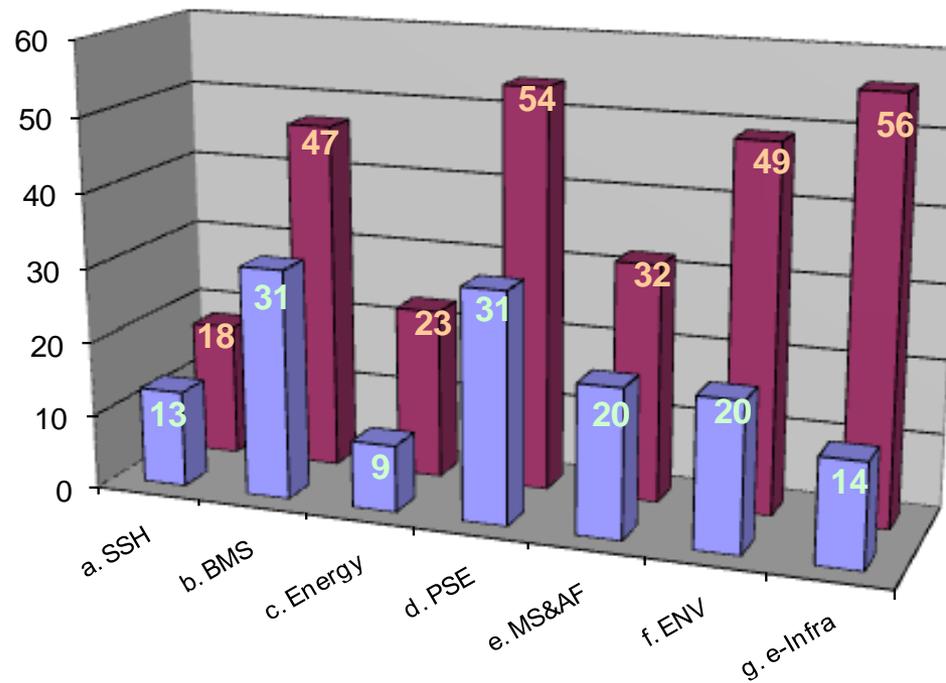
- **Evaluation of the scientific and technical merit and innovation potential**
  - Methodological support / Criteria setting / evaluation thresholds
    - *GSRT / Advisory Board*
  - International peer review evaluation process
  - Site visits / targeted meetings per scientific area
- **Strategic prioritization of the proposed RIs**
  - Within the ongoing Strategy for Smart Specialisation for Research and Innovation being developed by GSRT, taking into consideration national and regional RIS<sub>3</sub>
  - Meeting visionary, strategic priorities at the national and regional level, boosting national and regional economy and competitiveness with R&I

## Number of proposals per *main* scientific area



- **13** *Social Sciences and Humanities*
- **31** *Biological and Medical Sciences*
- **31** *Physical Sciences and Engineering*
- **20** *Material Sciences and Analytical Facilities*
- **9** *Energy*
- **20** *Environmental Sciences*
- **14** *e-infrastructures*

# Distribution of proposals per scientific area



# GSRT actions



Open call  
for bottom-up  
expression of interest

- 1<sup>st</sup> Phase – completed: 17.2.2013
- 2<sup>nd</sup> Phase – **deadline 12.7.2013** (*based on expression of interest*)
- *Guidelines: Available on 23.5.2013*
- *2 information days (February, April 2013) & several targeted meetings*

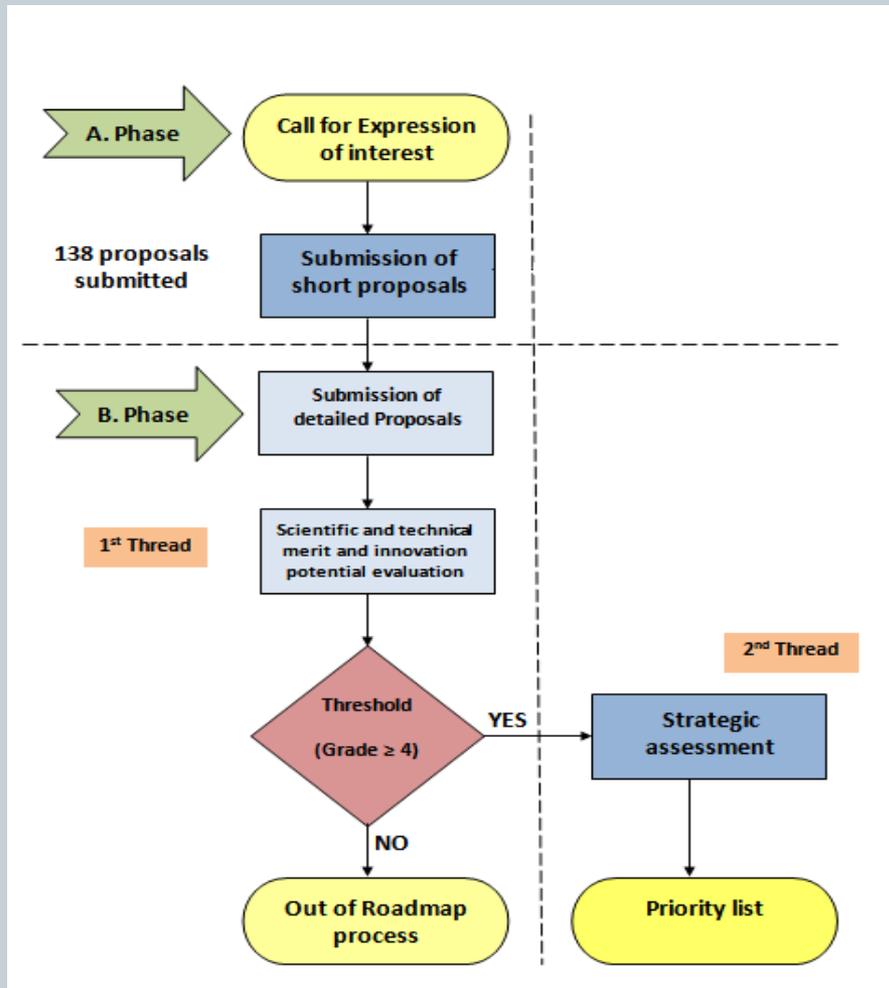
Advisory Board  
& formulation of  
support framework

- Representatives of the research, academic and business / industry areas
- 3 meetings (up to May 2013) and extensive information exchange
- Elaboration of methodology issues / criterias / evaluation method
- **4 groups of criteria (grades: 1 – 5)**
- Experts identification for specific scientific areas / topics
- Guidelines for submission of proposals / FAQs (*available through the online submission platform*)

Targeted  
information towards  
Regions

- Structured dialogue / negotiations with Regional Authorities
- Identification of strategic interests at the regional and national level
- Linkage to the multi-annual planning of GSRT for innovation infrastructures

# Two threads for proposal evaluation & prioritization



# 1<sup>st</sup> Thread

## Main groups of criteria



1. Scientific, technological potential & maturity of the RI
2. Effective networking & synergies within the knowledge triangle
3. Access policy, governance and sustainability
4. Innovation potential and socio-economic benefits

# 1. Scientific, technological potential & maturity of the RI



- The significance of the Research Infrastructure for specific research fields addressed, *including:*
  - *Scientific objectives, main concept of the RI*
  - *Current state-of-the-art*
  - *Expected benefits for the Greek research system as location for conducting cutting edge research at an international level*
  - *International reputation and visibility, involving the partners and principal investigators*
  - *Impact of combating the brain-drain of highly skilled human resources (research & technical staff)*
- Degree of interdisciplinarity
  - *The effect of RI on strengthening interdisciplinary research in Greece*
- Perspectives for scientific & technological breakthroughs in the field of operation of RI
- Maturity of the RI project
  - *Proven ability to continuously follow state-of-the-art, experienced human resources & operational readiness*

## 2. Effective networking & synergies within the knowledge triangle



- Competence complementarity of the partners and added value of the national RI network at the regional, national and international level
- Degree of networking and creation of critical mass
- Extent and types of the user community
- Potential for increasing existing or for creating new research groups in the field of operation of RI
- Education and training for students, researchers, technicians and engineers
- Synergies and networking capacity in relation to other Research and Innovation initiatives at the national and international level (with emphasis on ERA integration effects, e.g. ESFRI participation)

### 3. Access policy, governance and sustainability



- Access policy for researchers
  - *Transparent policy, incl. transnational access activities, conditions for provision of access, addressing remote access needs in relation to availability of e-infrastructures and data management issues*
- Access policy for industry (addressing IP rights – if applicable – fees and confidentiality issues)
- The management structure & governance of the proposed research infrastructure
- Technical feasibility, incl. human resource issues & cost-effectiveness of the proposed infrastructure, based on:
  - *Level of requested funding and envisaged sources of funds*
  - *Multi-annual financial plan (est. costs) with funding sources information, as per:*
    - *Cost of investment*
    - *Operational Cost*
    - *Cost for decommissioning*
- *SWOT analysis*
- *Long-term sustainability plan of the investment*

## 4. Innovation potential and socio-economic benefits



- Contribution to increase the potential for innovation and technology transfer through the construction and operation of the RI, based on expected results and spill-over effects of the RI
- Addressing major societal challenges and other socio-economic benefits, such as:
  - *Development of new technologies*
  - *Effects on training*
  - *Creation of jobs*
  - *Return of investment*
  - *Territorial development (reduction of regional disparities and further regional upgrading)*
  - *Territorial cooperation (new opportunities for inclusion of the RIs in cross-border, transnational and interregional clusters and networks)*
- The integration of the RI in scientific, business and social environment in Greece and expected socio-economic benefits at the regional and national level

## 2<sup>nd</sup> thread

# Main points of strategic importance for proposal prioritization



- Expected economic and social benefits for Greece as location for conducting cutting edge research at a national, regional and international level, considering also the importance of cross-border cooperation
- The relevance of the RI to the national strategic priorities for Research & Innovation
- Its expected impact on the national and regional development and competitiveness
- Expected impact of the RIs on additional socio-economic issues (e.g. employment, environment, related commercial / business activities) towards the national & regional economy

# 2<sup>nd</sup> phase for proposal submission



## Time table / Submission & evaluation process

- Online submission platform → Updated information based on expression of interest (1<sup>st</sup> Phase): *Application based on Parts A & B*
- Evaluation expected end October 2013
- Draft Roadmap: end 2013
- Presentation of the Roadmap: ICRI2014 – Athens, April 2014

## Support documents / actions

- **Integrated Infrastructure Initiative (I3) model** → model for the description of proposed Networking, Services and Joint Research *Activities*
- **Guidelines** for submission of proposals
- **FAQs** (*incl. relevant link to EuroRIs-Net+ Knowledge Repository*)
- **Helpdesk** (GSRT)

# Planned implementation and monitoring of the National Roadmap for Research Infrastructures (2014 – 2020)

