GENERAL SECRETARIATEOR RESEARCH/AND TECHNOLOGY



National Research Infrastructures

Main Policy Aspects

Dr. Agnes Spilioti GSRT, S&T Policy Planning Directorate Athens, 10-07-2019





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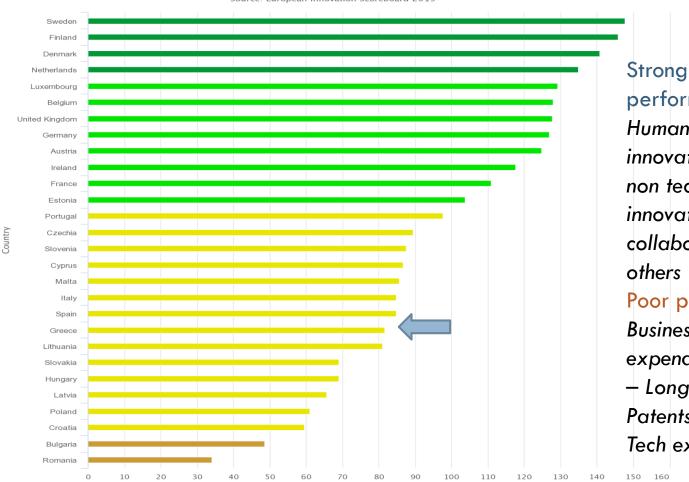
New Call: "Regional Excellence"

National R&D Landscape and Main Policy Challenges

General Picture and Challenges

- R&D in Greece performs against a non high tech industrial background (service economy dominated by tourism and public services). Traditional sectors occupy the major part of the Greek production fabric (agro-food, construction)
- Business sector composed mainly by small and very small firms: 95,5% of the Greek firms have less than 10 employees
- Greek firms tend to import mature technology from abroad and perform relatively well in non technological innovation
- Insufficient research potential in firms (1,31 researchers/1.000 inhabitants versus an average of 4,48 in OECD)
- Insufficient investment in research and innovation
- Poor links between business and academia
- Dramatically increased brain drain during the crisis time (around 10fold increase)
- Over regulation and controlling mechanisms for EU State Aid and ESIF

Greece is a moderate innovator



Value

0. Summary Innovation Index

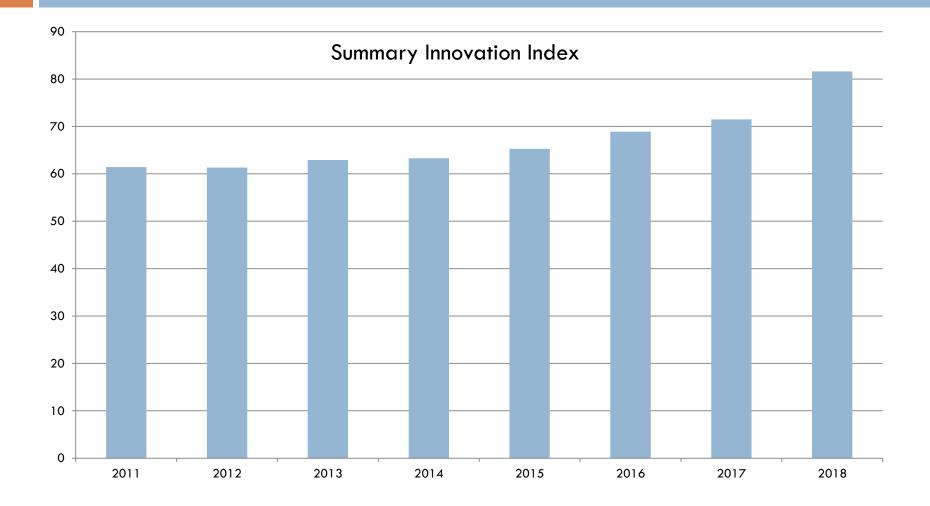
Source: European Innovation Scoreboard 2019

performance:

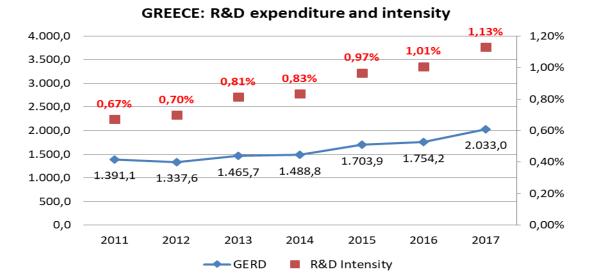
Human resources & innovators (mostly non technological innovation), SMEs collaborating with others **Poor performance:** Business R&D expenditures, Life – Long Learning, Patents, VCs, High Tech exports

Highcharts.com

EUROPEAN INNOVATION SCOREBOARD 2019-Greece's Profile over time



R&D Intensity in Greece Preliminary data 2017



Source: National Documentation Centre

Τομείς εκτέλεσης E&A	2011	2012	2013	2014	2015	2016	2017
Τομέας BES	485,9	458,6	488,7	504,4	561,6	740,4	990,8
Τομέας GOV	331,7	331,9	410,1	412,7	479,4	438,8	448,1
Τομέας HES	559,5	534,3	548,6	553,2	643,8	559,4	577,7
Τομέας ΡΝΡ	14,0	12,8	18,3	18,5	19,1	15,6	16,4
ΣΥΝΟΛΟ ²	1.391,2	1.337,6	1.465,7	1.488,7	1.703,8	1.754,2	2.033,0

Highly competitive human research potential...

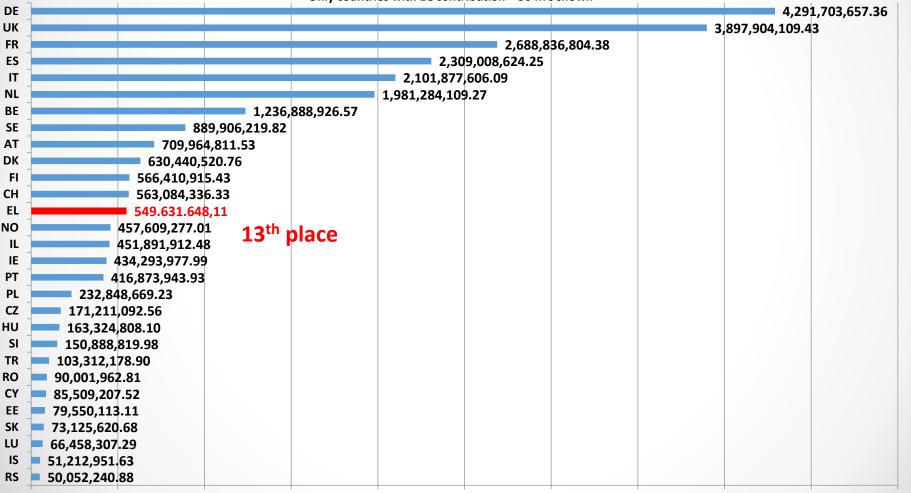
(regarding EC financial contribution from H2020)

EC Financial Contribution per Country

Data: EC CORDIS, Reference date: 12/10/2017

Analysis by V. Gongolidis, General Secretariat for Research and Technology, Greece

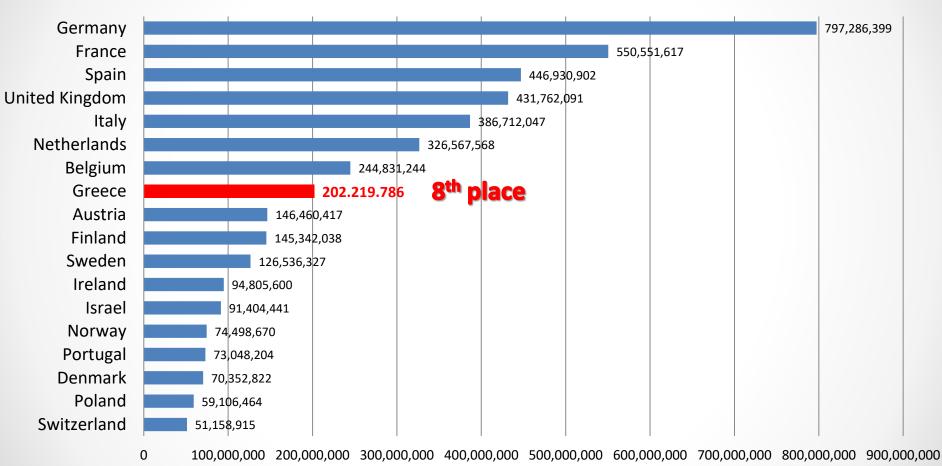
Only countries with EC contribution > 50 M€ shown



GR Performance in Horizon 2020 on ICT

H2020-ICT EU Contribution per country

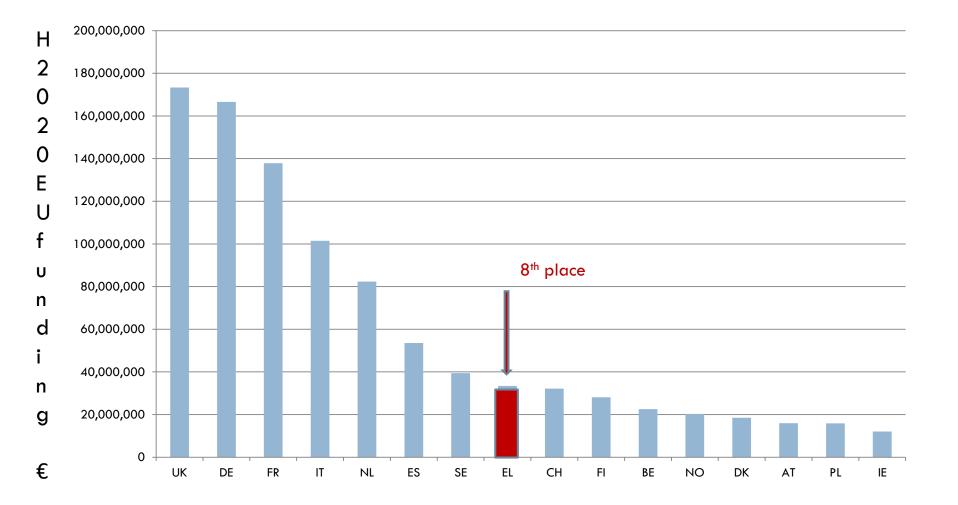
Data: Horizon 2020 Dashboard, Reference date: 31/3/2019



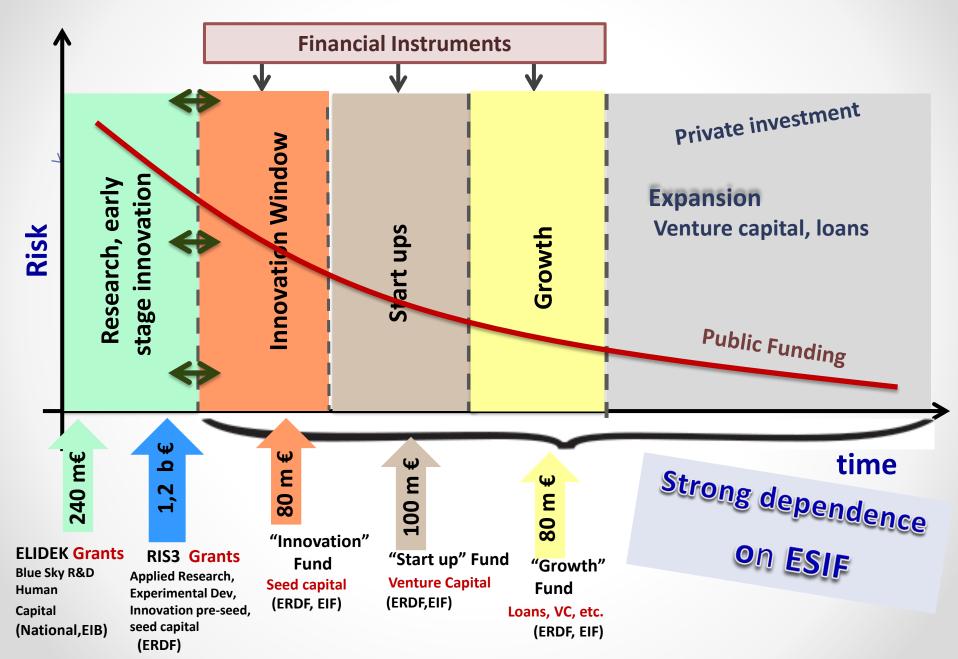
H2020 EU contribution to GR on ICT = 23%

H2020 EU total contribution to GR

Highly competitive presence: Research Infrastructures Programme - H2020



Need for policy intervention in every part of the innovation chain



Pillars of National Policy on RTDI

Research & Innov



Demand-driven research (NSRF 2014-2020)

Curiositydriven research (ELIDEK)



Flagship Initiatives

(Medical Precision in Oncology, Cardiovascular Diseases and Genetic Neurodegenerative Diseases, Agri-Food Network, Climate Change Network

ICT Technologies

National Strategy for Smart Specialization: 8 main priority sectors



Main Implementation Instruments of the National RIS3



Promotion of research activities in firms, business –academia collaboration
Flagship Programme "RESEARCH – CREATE – INNOVATE" >410 m€
Specific Actions in Priority Sectors (Aquaculture, Industrial Materials, Cultural Heritage) 30 m€



Support Innovation Intermediaries

Innovation Clusters, 24 m€

Competence Centres, 30 m€

Technology Transfer Offices in Universities and Research Centres, 15 m€



International Cooperation

Bilateral Cooperation (Germany, China, Russia, Israel) 50 m€ ERA related Actions (ERANets, JUs etc), 25 m€ **PRIMA** Art. 185 Initiative



Support to new innovative business firms Equifund: Innovation Window (VCs), 70 m€



Research Infrastructures, 138 m€

Towards a National Funding Plan for Research Infrastructures

Role of RIs

- Rls are key structural elements of the R&D ecosystem as
- enablers of innovation
- > bonding elements within the knowledge triangle
- Need for a coherent national plan for RIs
- to support the decision making process and to optimize investments for RIs
- > to support an evidence based national strategy linked to EU priorities

Towards a national policy for RIs

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Landscape and Challenges

International networking of Greek teams Strong presence to H2020 – RI program and to ESFRI

Fragmentation of effort & Infrastructures

Limited national funds, dependence on structural funds (ESIF – ERDF)

Compliance with RIS3 (Ex-ante conditionality for Research Infrastructures) Targets

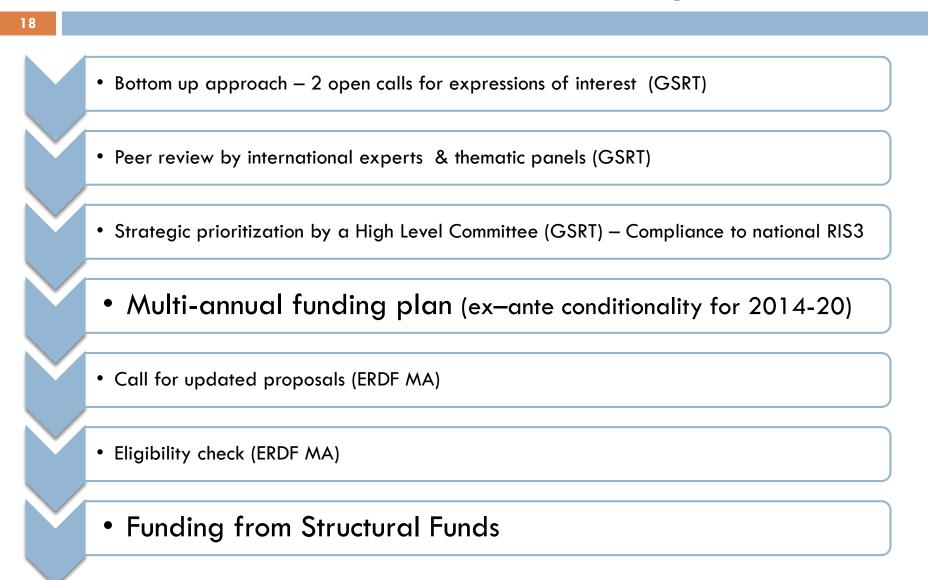
Excellence

Critical Mass/ National – International Networking/

Governance – Access Policy

> Impact/innovation Potential

Selection Process for funding



Evaluation Criteria (GSRT)

1.00	ON/OFF CRITERIA
А	Compliance with the definition of research infrastructure
В	Contribution to the RIS3 priorities: a. Its main activities are fully aligned to product / process / organizational innovation of RIS3 priority sectors b. The majority of the RI deliverables and services contribute to the RIS3 priority sectors
Н	RANKING CRITERIA Threshold: 4/5
Α.	Scientific, technological potential and maturity of the RI (1-5)
В.	Effective Networking, Synergies within the Knowledge Triangle and International Visibility (1-5)
C.	Access Policy (1-5)
D.	Governance and Sustainability of the RI (1-5)
Ε.	Innovation Potential & Contribution to Private Sector Innovation (1-5)
F.	Contribution to National and Regional Growth & Socioeconomic Benefits (1-5)

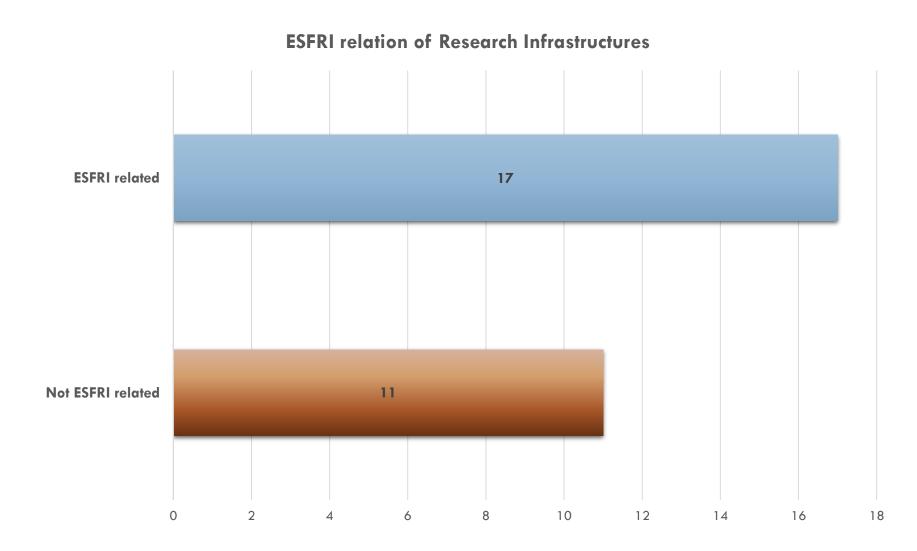
Multi- Annual Funding Plan for Rls 2014-20

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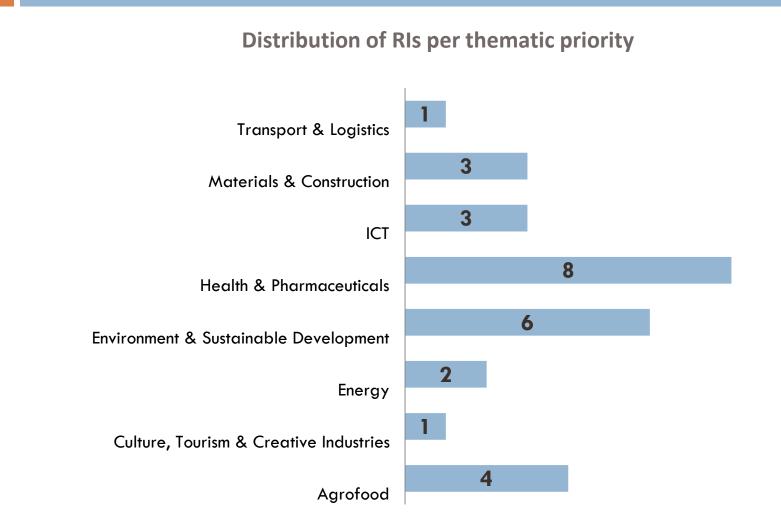


Elements of the Multiannual Funding plan for Research Infrastructures 2014-20

Elements of the multiannual funding plan for RIs



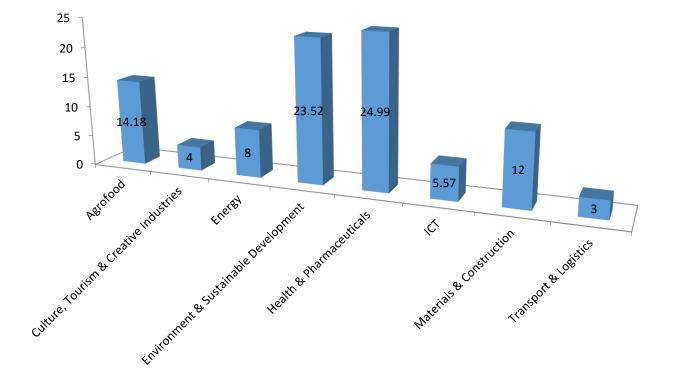
Elements of the multiannual funding plan for RIs



Athens, Nov. 2017

Budget Approved/ Sector

Total Budget Approved



ICT, Culture and Creative Industries

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Title	Acronym
National Digital Infrastructures for Research	HELIX
Detector Development and Technologies for High Energy Physics	DeTAnet
Greek Infrastructure for Digital Arts, Humanities and Language Research and Innovation	APOLLONIS
So.Da.Net_CESSDA_GR: the Greek RI for social sciences	So.Da.Net

More Info...

Detailed info on the multiannual funding plan



Ενδεικτικό Πολυετές Σχέδιο Χρηματοδότησης των Εθνικών Υποδομών Έρευνας και Καινοτομίας

Ex-ante Conditionality (EAC/1-2) Research and Innovation Infrastructures

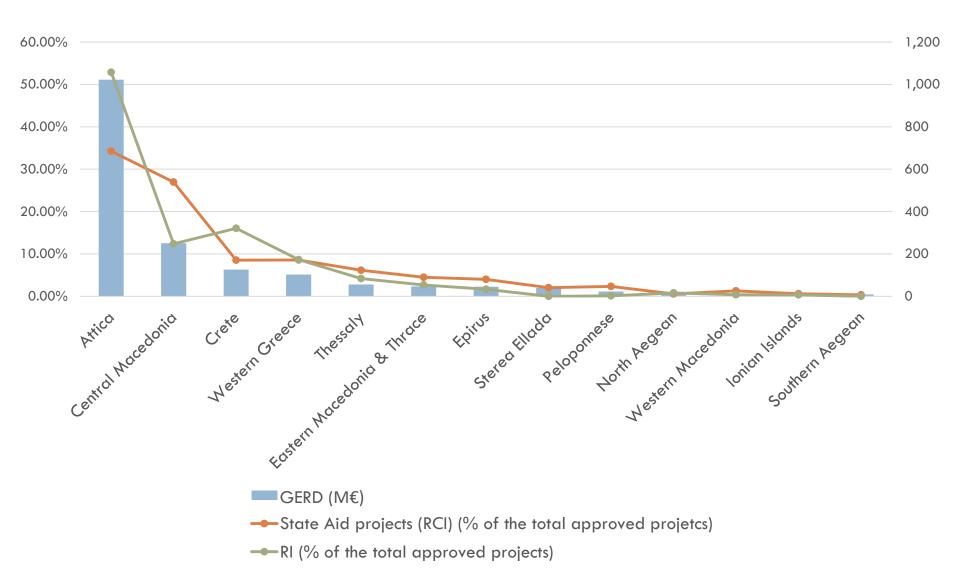
"The existence of a multi-annual plan for budgeting and prioritization of investments"

Νοέμβριος 2016



New Call: "Regional Excellence"

Regional R&D Spending and Participation to the national R&D calls



New Call: "Regional Excellence"

- Target: increasing the RDI capacity in lagging regions (mostly remote & insular) through the development of state-ofthe-art RIs and research teams addressing regional problems
- Beneficiaries: HEIs, Public RTOs
- □ Public Funding: 45m €
- Thematic Priorities: Regional RIS3

Eligible Regions







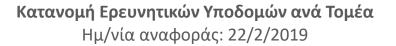
Thank you!

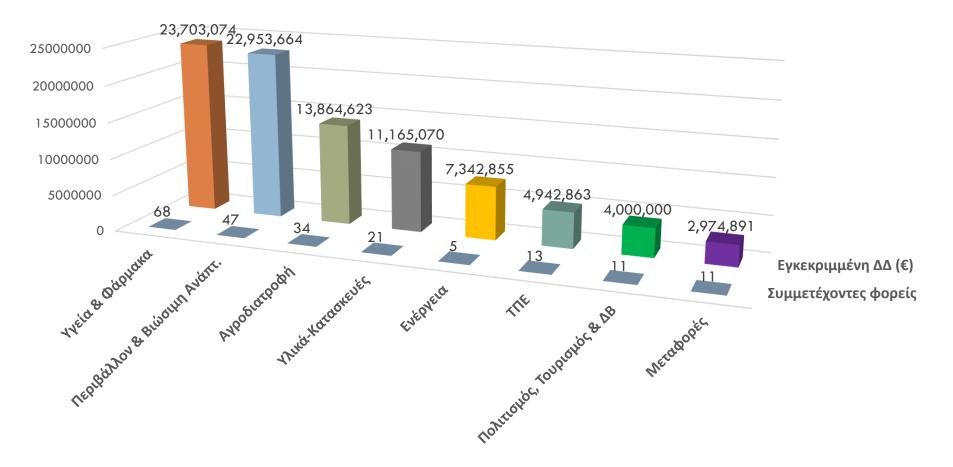
aspi [at] gsrt.gr



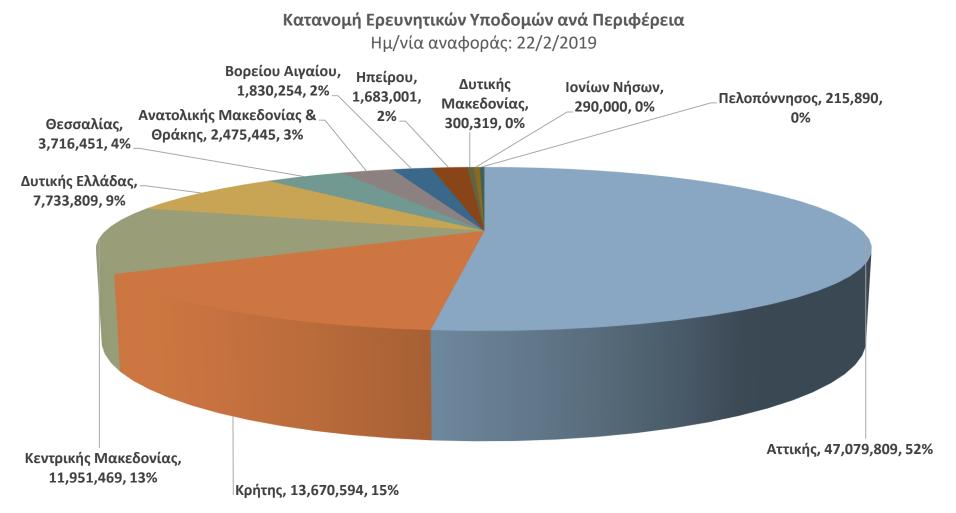


Κατανομή Ερευνητικών Υποδομών ανά Τομέα RIS3





Κατανομή εγκεκριμένης Δ.Δ ανά Περιφέρεια

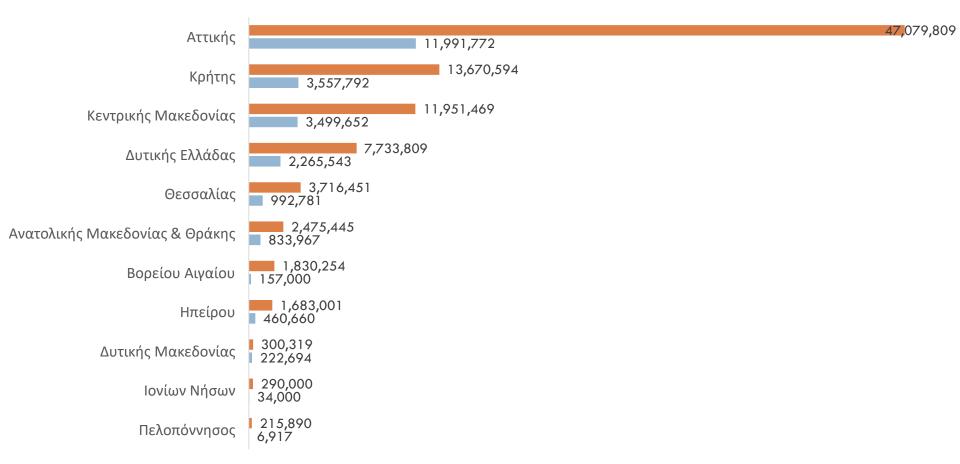


Ερευνητικές Υποδομές Α' & Β' κύκλος Χρηματοδότηση & Πληρωμές

ΕΣΠΑ 2014-2020: ΕΡΕΥΝΗΤΙΚΕΣ ΥΠΟΔΟΜΕΣ (Α' & Β' ΚΥΚΛΟΣ)

Επεξεργασία: Β. Γογγολίδης, Ημ/νία αναφοράς 25-6-2019

Δ.Δ (€) Πληρωμές (€)



Health

35	
Title	Acronym
ELIXIR-GR: Managing and analyzing biological data	ELIXIR-GR
The Greek Research Infrastructure for Molecular and Behavioral Phenotyping of biological model organisms for chronic degenerative diseases	Infrafrontier – Phenotypos
The Greek Research Infrastructure for Personalised Medicine	pMED-GR
The National Research Infrastructures on Integrated Structural Biology, Drug Screening Efforts and Drug target functional characterization	INSPIRED
A Greek Research Infrastructure for Visualizing and Monitoring Fundamental Biological Processes	BIOIMAGING- GR
An Open-Access Research Infrastructure of Chemical Biology and Target-Based Screening Technologies for Human and Animal Health, Agriculture and the Environment	OPENSCREEN -GR
Infrastructure for preclinical and early-phase clinical development of drugs, therapeutics and biomedical devices	EATRIS-GR
Strategic expansion of the Greek Biobanking Infrastructure	BBMRI-GR

Agro-food

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Title	Acronym
Centre for the study and sustainable exploitation of Marine Biological Resources	CMBR
□Synthetic Biology: from omics technologies to genomic engineering	OMIC- ENGINE
Upgrading the Plant Capital	PlantUp
Generation of Food Omics GR. A consortium for comprehensive molecular characterisation of food products	FoodOmics GR
Research Infrastructure on Food Bioprocessing Development and Innovation Exploitation	Food Innovation RI

Environment

Title	Acronym
Research Infrastructure for Waste Valorization and Sustainable Management of Resources	INVALOR
Panhellenic infrastructure for atmospheric composition and climate change	PANACEA
National Infrastructure for Marine Research and Water Resources	HIMIOFoTS
Hellenic Plate Observing System	HELPOS
Hellenic Research Fleet (only for the PHILIA vessel).	PHILIA

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Energy / Transport & Logistics

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Title	Acronym
PROMETHEUS: A Research Infrastructure for the Integrated Energy Chain	PROMETHEUS
Centre of Excellence for Future Vehicle Environmental Performance	FuVEP
Intelligent Research Infrastructure for Shipping, Supply chain, Transport and Logistics	EN.I.R.I.S.S.T

Materials

Acronym
Innovation-EL
HELLAS-CH
CALIBRA

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