

European Structural and Investment Funds:Challenges and Opportunities for Research Infrastructures

JASPERS Networking Platform

2nd ELI pillars workshop

Katja Reppel
Deputy Head of Unit
CC Smart and Sustainable Growth
DG Regional and Urban Policy

Regional Policy



ESI Fund Opportunities for Research Infrastructures

"Ask not what Cohesion Policy can do for ESFRI — ask what ESFRI can do for Cohesion ..."

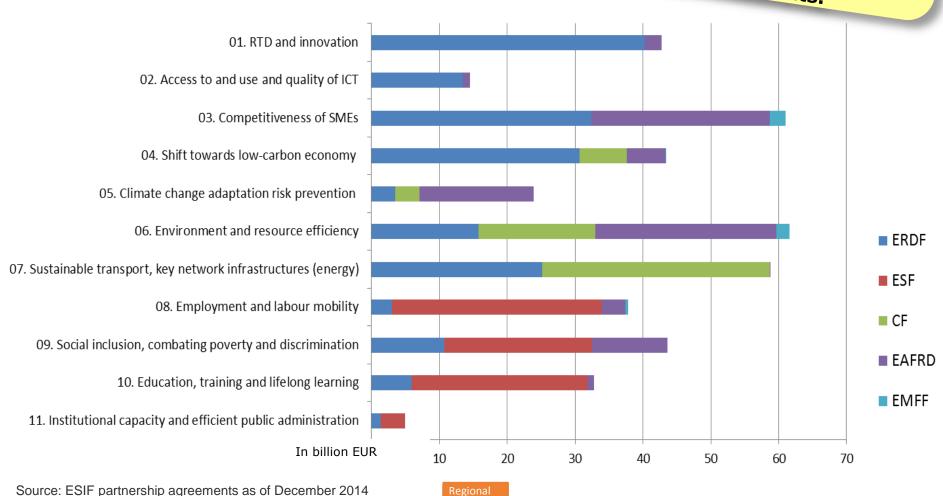


European Regional Development Fund objectives:

"The European Regional Development Fund is intended to help to **redress the main regional imbalances** in the Union through participation in the **development and structural adjustment of regions** whose development is **lagging** behind and in the conversion of **declining industrial regions**." (Article 176 EU Treaty)

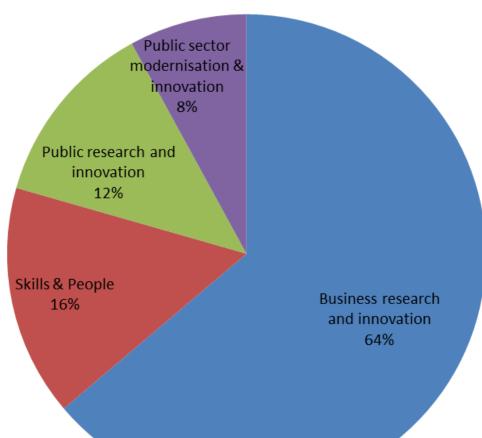


Thematic objectives or bolstered by inv





ESIF Innovation Investments 2014-2020



ERDF & ESF allocations:

- Business research & innovation: EUR 60 billion
- Skills & People:
 EUR 14.5 billion
- Public research & innovation: EUR 11.7 billion
- Public sector modernisation & innovation:
 FUR 7.4 billion

Source: http://ec.europa.eu/regional-policy/en/policy/evaluations/data-for-research/



... of the public research & innovation investments:



Infrastructure 57%

ERDF allocations:

- Public research & innovation activities:
 EUR 5.1 billion
- Public R&I infrastructures:
 EUR 6.6 billion

TARGETS by 2023:

- Around 30,100 new researchers in supported entities
- Around 72,000 researchers working in improved research infrastructure facilities
- Around 72,000 enterprises cooperating with research institutions
- Around 1,200 research institutions participating in cross-border, transnational or interregional research projects - Interreg



ESIF investment plans in RIs:

Country break-down of ERDF investments until 2020 in public research and innovation:

Public R&I infrastructures

1,200,000,000

1,000,000,000

800,000,000

600,000,000

400,000,000

200,000,000

Use of existing RIs!

R&I activities in public research centres



ERDF investment plans in **ESFRIs**:



European Spallation Source

Multi-disciplinary Research Infrastructure based on the world's nextgeneration neutron source co-hosted by Lund (SE) & Copenhagen (DK)

- ✓ €20 million allocated by the national ERDF programme of Sweden.
- ✓ Combination with H2020 via InnovFin (€100M loan)



Extreme Light Infrastructure

Some of the most intense lasers world-wide, to develop new interdisciplinary research opportunities with light from these lasers and secondary radiation derived from them. ELI is currently based on three sites: Dolní Břežany (CZ), Szeged (HU) and Măgurele (RO).

Over EUR 375 million allocated from 2014-20 ERDF OPs:

- √ RO: EUR 116.3 million infrastructure
- ✓ HU: EUR 83.2 million infrastructure
- ✓ CZ: EUR 176.4 million activities

Combination with H2020 via InnovFin (€33.8M loan) & preperatory work,



Lessons learnt - Research infrastructures

- Research excellence per se is no objective for Cohesion Policy, but just a tool for competitiveness and growth
- Big is not necessarily beautiful (over-capacities? top crust?)
- Research Infrastructures do not *per se* lead to regional socioeconomic development: connected to innovation eco-system?
- Technology & knowledge transfer to firms in the region needed
- Business plans for research infrastructures remain wishful thinking, unless energetically implemented with professional staff (marketing, business management, accountants ...)
- Academia-business cooperation requires time and efforts
- Links to regional economy need to be planned & fostered from the out-set, including alignment to specific R&I needs and potentials of the regional economy



Challenges:

- 1. Get from programmes & strategies to viable, mature investment projects ...
- 2. Align RIs' business & financing plans to state aid rules ...
- 3. Make RIs work for smart specialisation & economic transformation



From programme & strategy to viable, mature investment projects

Support for project development:

- Horizon 2020 research infrastructures support: scientific & technological feasibility; InnovFin: FI funding & advisory services
- **ERDF** technical assistance: <u>Experts database</u>, <u>Policy-learning database</u>, <u>Peer-to-Peer learning</u> and JASPERS: cost-benefit analysis & business plan development for running and financing RIs
- European Investment Advisory Hub of the EFSI (EIB): bankability of projects





REGIO Training on state aid for research and innovation: Brussels, 20 October 2017 Enrol here

State aid rules apply to ERDF

- Avoiding "economic activities" is a non-option for ERDF research infrastructure projects:
 - ✓ But: up to 20% of activities and capacity can be allocated each
 year to economic activity without being state aid relevant
- > Investment aid for research infrastructures (Art.26 GBER):
 - ✓ Up to EUR 20 million and up to 50% aid intensity: no need to notify the project to DG COMP
- Regional aid for RIS (Art.14 GBER): :
 - ✓ Condition: RI has to give <u>transparent and non-discriminatory</u> <u>access</u> to the infrastructure
 - ✓ Aid intensity up to 70% depending on aid classification in the Regional Aid maps
- For the rest: Notification!





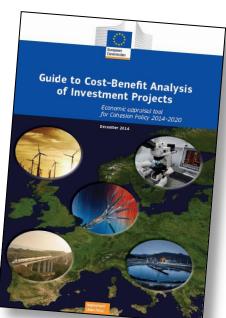
Planning for financial sustainability

... work out a business plan from the start and implement it!

Some pointers & inspiration provided in the **Guide to Cost-Benefit Analysis** for major ESIF projects, incl. chapter on research infrastructures:

How to assess options against:

- Expected costs
- Expected revenues
- Expected economic benefits, incl. positive and negative externalities
- Possible wider regional effects
- Implementation time
- Degree of uncertainty and the risk involved



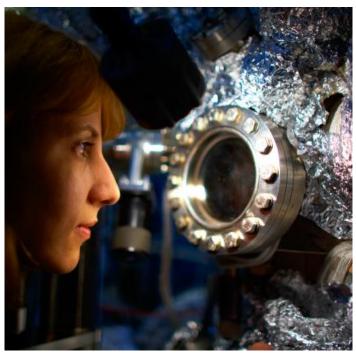




Marketing!

Example: Science Link provides European enterprises with better access to large scale, high-tech research infrastructures such as Maxlab in Sweden or DESY in Germany. 17partners in 8 countries (SE, DE, DK, EE, FI, LV, LT and PL).

These research facilities carry out photon and neutron measurements and are up to now hardly accessible for industry. Enterprises who use the existing large scale research infrastructure, can develop new, better products faster and thus enhance their innovation performance in various fields such as environment and energy, agriculture and food, life science and biotechnology and chemicals https://www.science-link.eu/



Total budget: EUR 3.6 million of which EUR 2.8 million ERDF (Interreg programme for the Baltic Sea Region)



Vote before 9 October for your favourite RegioStars finalist: www.regiostars.eu



Smart Specialisation Communication

Step up available policy support:

- Smart Specialisation Platform
- H2020 Policy Support Facility
- SRSS
- European Semester:
 Dialogue with
 regions and local
 authorities.
- ▶ **Pilot actions** for accelerating innovation uptake, removing investment barriers:
- Lagging regions
- Regions in industrial transition



▶ Pilot actions:

- Thematic partnerships to commercialise & scale-up inter-regional projects in value chains; developing bankable projects

► Maximise the impact of different EU funds:

- Facilitate combination of funding instruments, harmonise rules, interregional investments
- Mapping of R&I facilities
- Investment envoys

See: <u>COM(2017)376</u> and <u>SWD(2017)264</u>



Research Infrastructures as part of S3s: How an ideal situation should look like:

- ✓ RIs as <u>integral part of implementation roadmaps</u> strategies, not "cathedrals in the desert" & large-scale budget absorbers
- ✓ RIs identified in an <u>entrepreneurial discovery process</u>, jointly by researchers, enterprises and possibly civil society
- ✓ RIs aim to become <u>crystallisation points for economic change</u> <u>and growth</u>: cooperation/ integration with clusters, technology parks, incubators, SME support, LivingLabs, demonstrators, education and training, etc.
- ✓ Importance of RIs for <u>international attractiveness &</u> <u>connectedness</u>: including for private investors & brain-gain ...
- ✓ S3 monitoring includes <u>evaluation of RIs</u> and their role in S3: relevant also for strategy adjustments





Questions and Answers





For more information:

Cohesion Policy: http://ec.europa.eu/regional policy/index en.cfm

Research & innovation in Cohesion Policy: http://ec.europa.eu/regional_policy/en/policy/themes/resear-ch-innovation/

Smart Specialisation Strategies http://s3platform.jrc.ec.europa.eu

















For info or further questions on this seminar and the activities of the JASPERS Networking Platform, please contact:

JASPERS Networking and Competence Centre

jaspersnetwork@eib.org

www.jaspersnetwork.org

