

# Synergies and the Stairway to Excellence (S2E) project

ELIXIR - EXCELERATE structural funds workshop

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[www.jrc.ec.europa.eu](http://www.jrc.ec.europa.eu)



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Stimulating innovation  
Supporting legislation*

# Content

- Background – RIS3
- Synergies and the Stairway to Excellence (S2E) project
- Facts and Figures for EU13
- Examples of Synergies
  - Institute of Electronic Materials Technology (ITME)
  - CzechGlobe
  - Centre for NanoHealth

# What is **Smart Specialisation**?

- = **fact-based**: all assets + capabilities + bottlenecks in a region, incl. external perspective, cooperation potential, global value chains
- = **no top-down decision** but dynamic entrepreneurial discovery process uniting key stakeholders around shared vision
- = **all forms of innovation**, not only technology-driven, existing / new knowledge
- = **ecosystem approach**: creating environment for change, efficiency of institutions
- = **differentiation**: focus on competitive advantages, potential for excellence, emerging opportunities, market niches
- = **concentration of resources** on priorities, problems and core needs, for critical mass/critical potential
- = **synergies** across different departments and governance levels (EU-national-regional); cross-sector/technology links
- = **place-based** economic transformation: rejuvenate traditional sectors through higher-value activities

## Do it through a "RIS3" approach:

**ANALYSIS:** discovery of the socio-economic and research-innovation engines of regional growth, competitive advantages & weaknesses.

**PROCESS:** governance, stakeholder involvement, institutional setting.

**VISION/GOAL/OBJECTIVES:** common goals for the future.

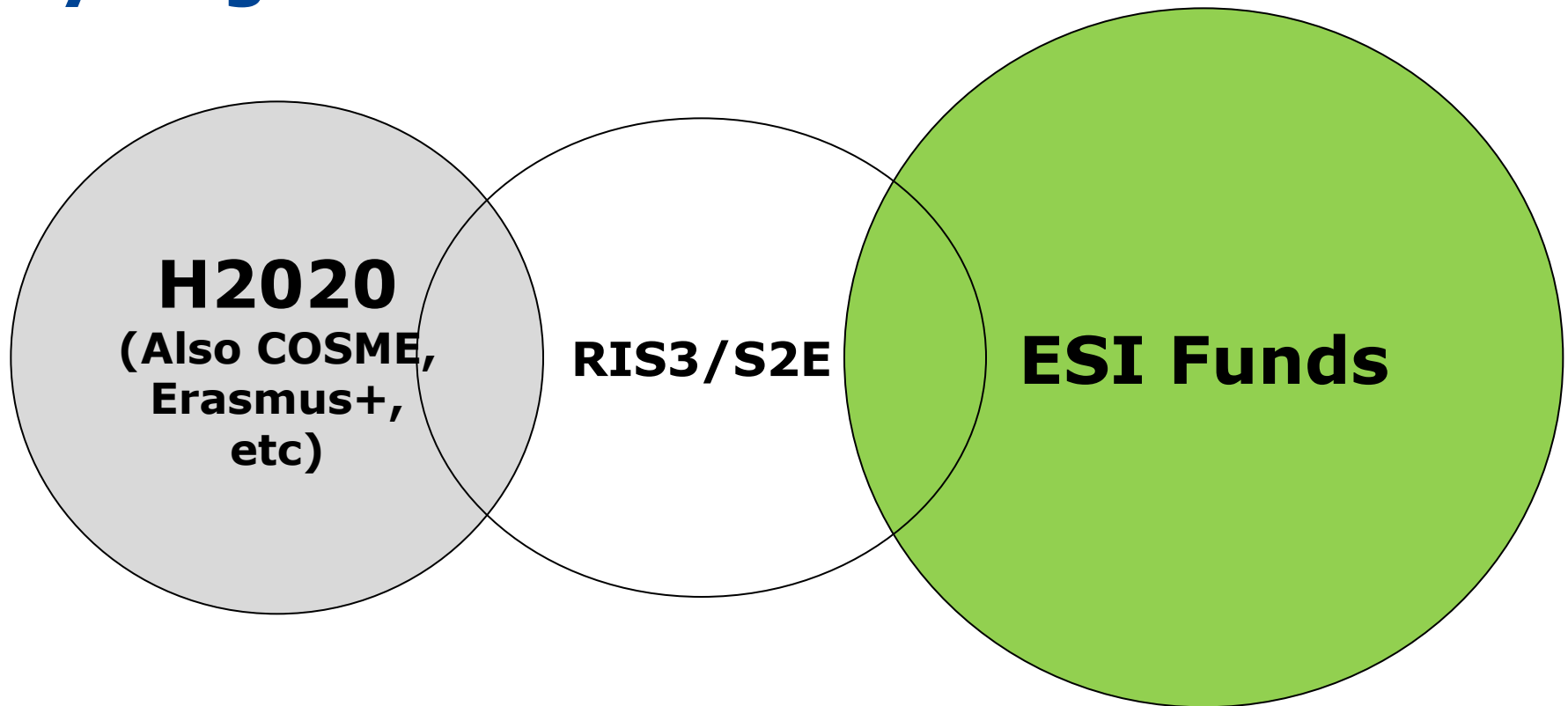
**PRIORITIES:** search and selection of activities & projects & actions & technological areas to focus on.

**POLICY MIX:** policy mechanisms and instruments - social, industrial, innovation, labour, research, development.

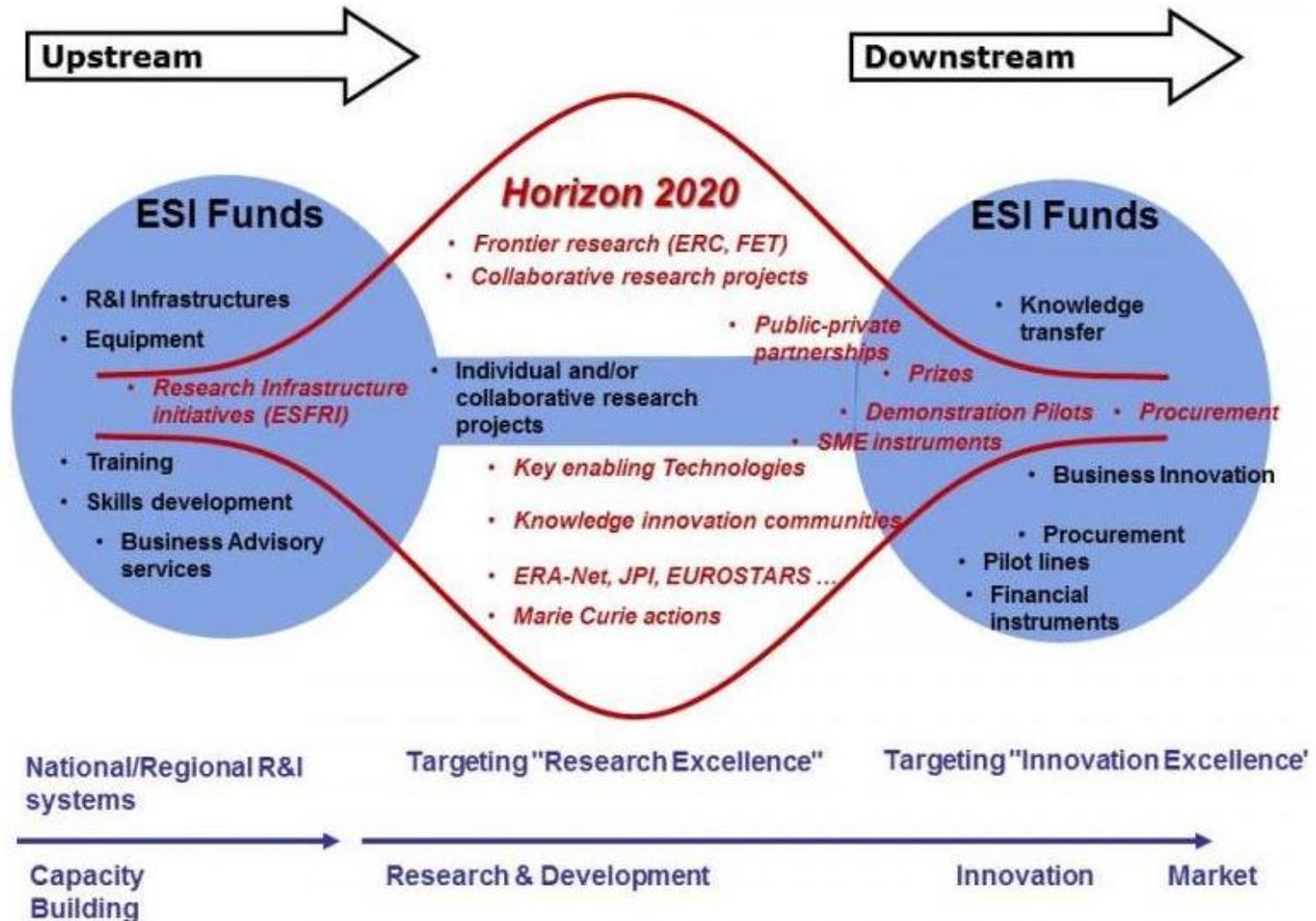
**MONITORING:** selection indicators and evaluation process.



# Synergies Rationales



# Synergies concepts



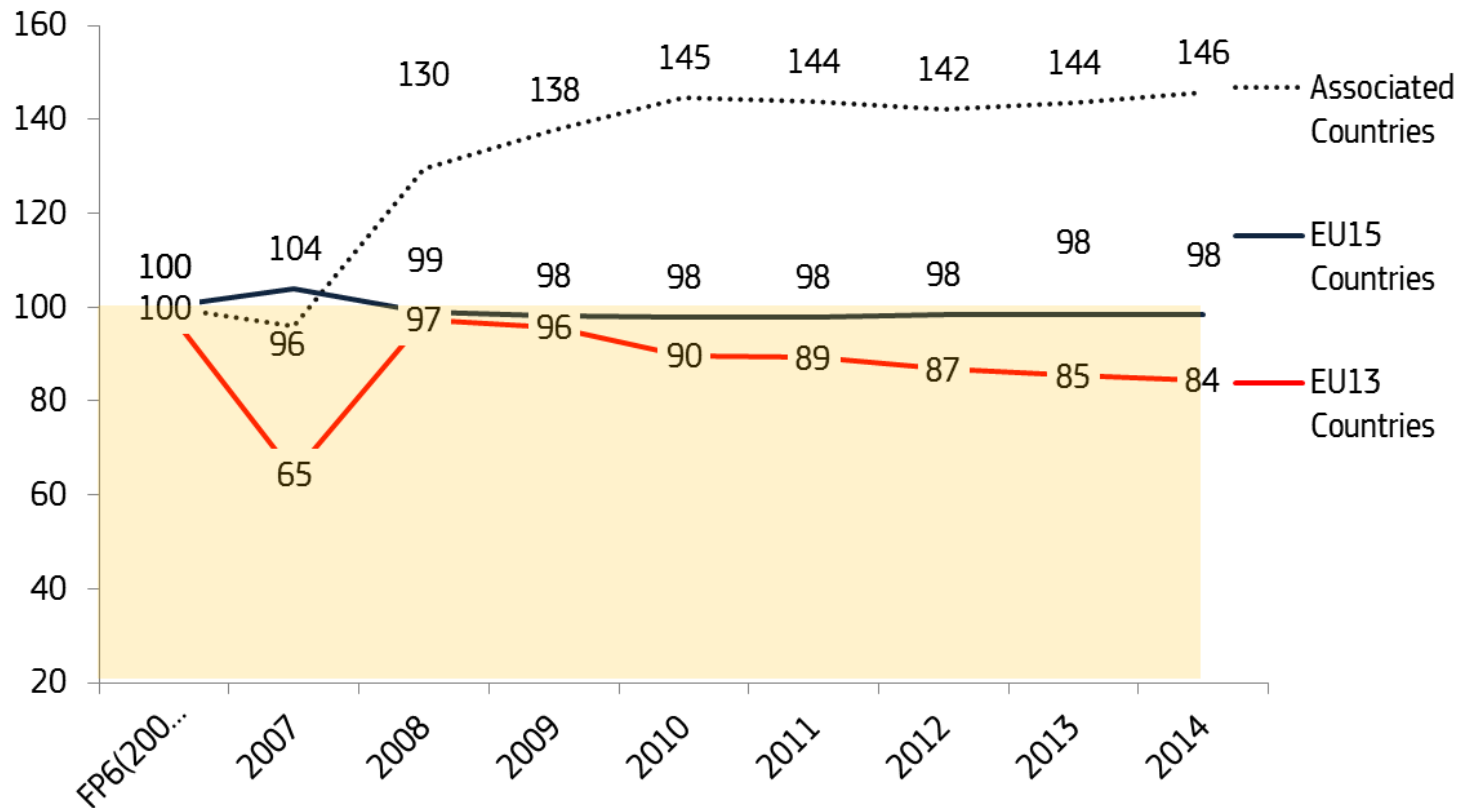
# How to achieve synergies?

... i.e. regarding the projects

- **Sequential/Successive projects** that build on each other
- **Alternative funding**: Take up high quality project Horizon 2020 proposals for which there is not enough budget available and implement via ESIF
- **Parallel projects** that complement each other
- **Cumulative funding**: Bringing together Horizon 2020 and ESIF money in the same project

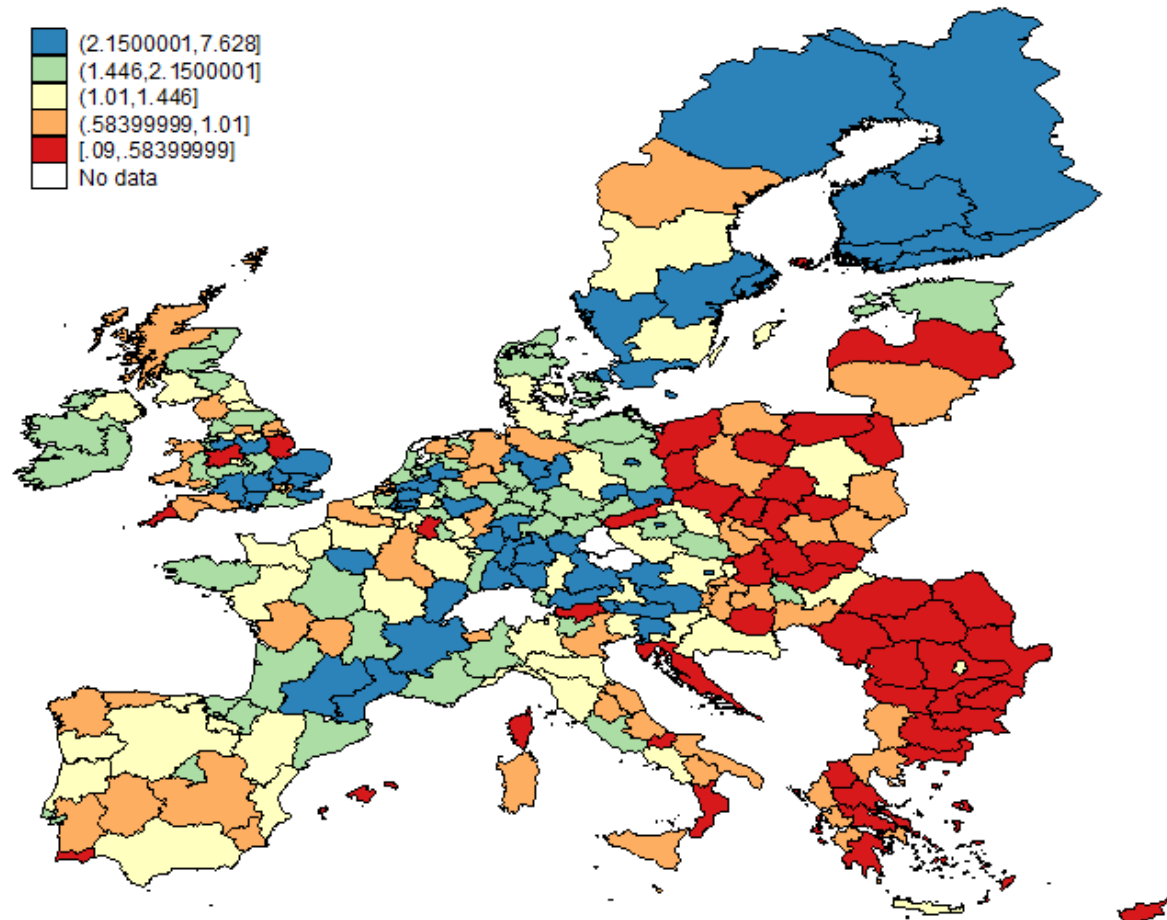
# Where do we Stand?

Share of EC FP7 contribution received between 2007 and 2014 (starting from FP6)



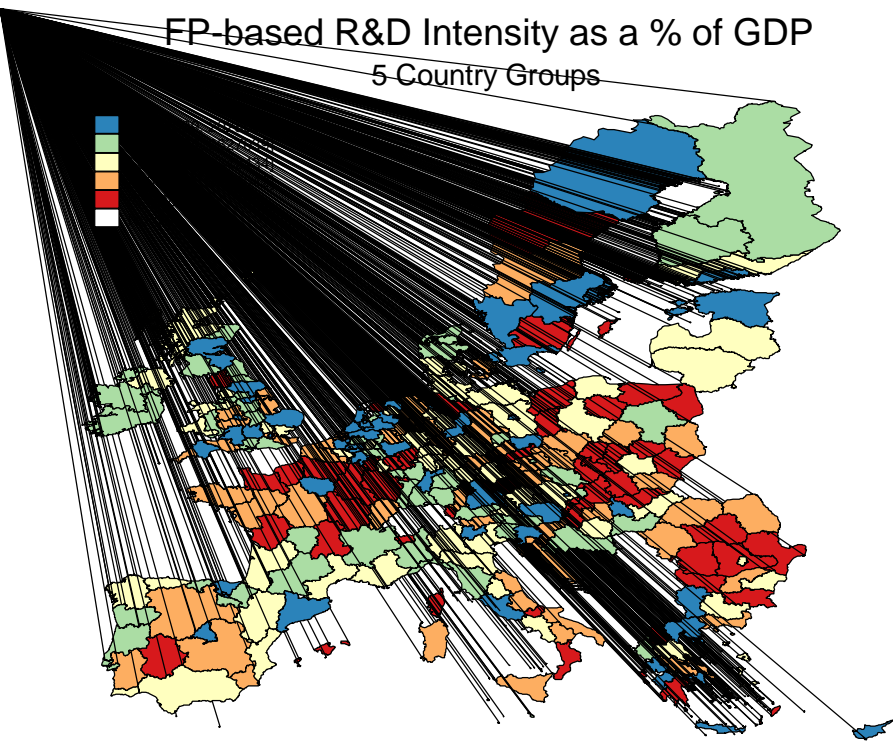


## Regional R&D Intensity as a % of GDP 5 Country Groups

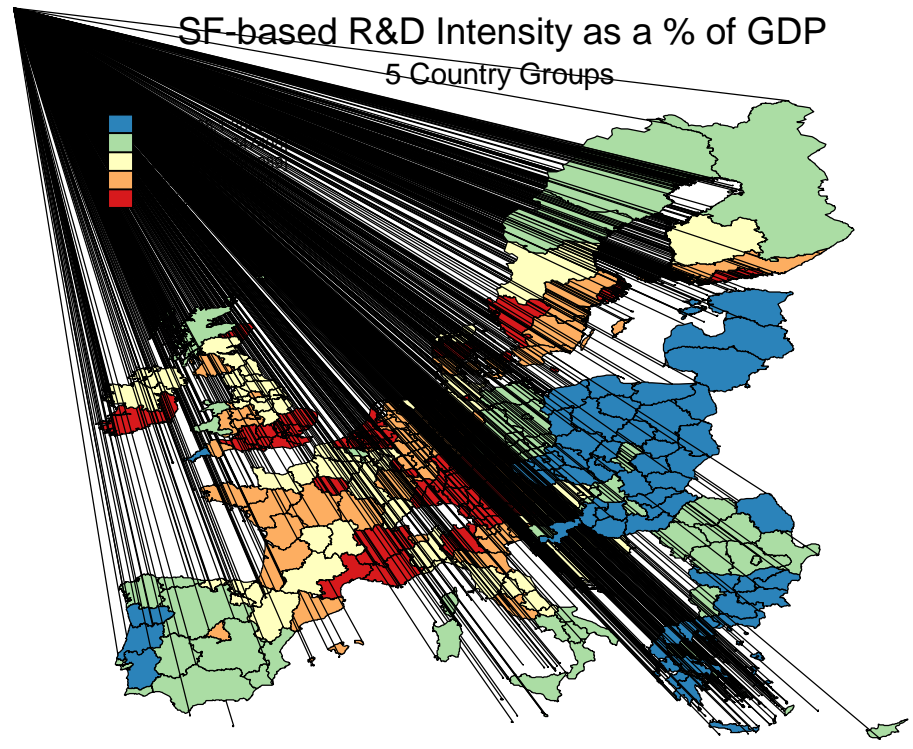


Source: JRC/IPTS

# Funding Distribution of 7<sup>th</sup> FP and SFs



Source: JRC/IPTS



Source: JRC/IPTS

## **S2E Activities and preliminary results**

1. Country & Region Information through national and regional profiles and Country reports
  - A set of 35 national and regional facts & figures reports
  - 13 S2E country reports drafted by a pool of independent experts
2. Examples of Synergies that show existing combinations of funding sources during the previous financial period
  - 25 case studies showing concrete examples of combination of fund (developed by independent experts and in-house)
3. Organisation of 13 National events
  - 3 already (Riga, Zagreb, Bratislava), 11 to come in the next months

# Stairway to Excellence

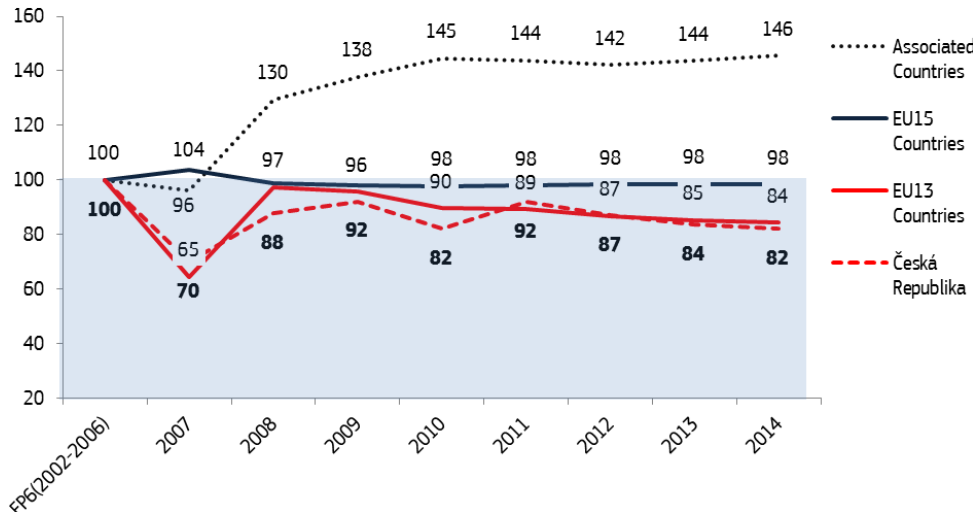
Cohesion Policy and the Synergies with the  
Research and Innovation Funds

## Czech Republic (CZ)

### Facts & Figures



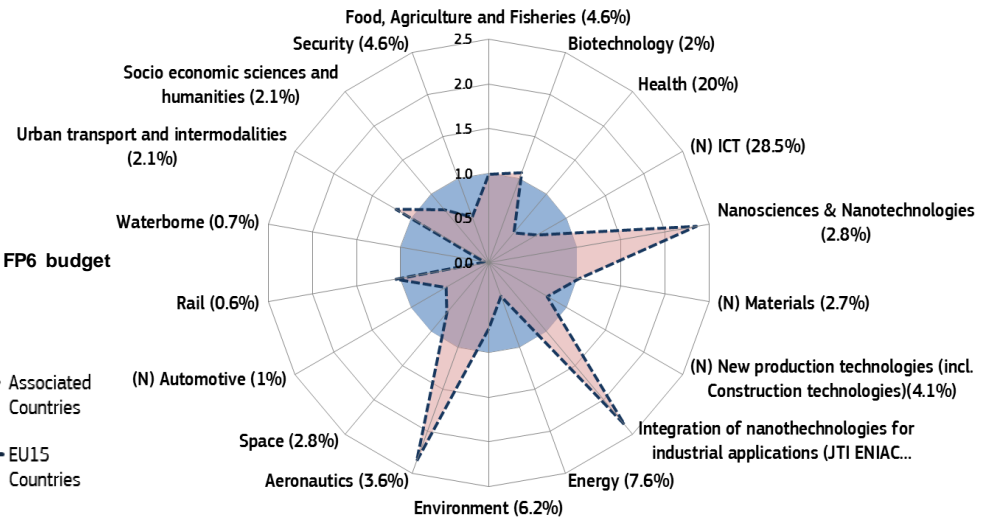
Figure 1: Evolution of the Share of EU FP contribution received between 2006 and 2014 (EU FP6 budget share taken as base 100)



# S2E Facts and Figures

Figure 1: S&T specialisation areas according to the EU Contribution received by FP7 participants

- Framework programme 7 (% of FP7 budget dedicated to cooperation programme in the area)
- Česká Republika
- (N): National smart specialisation area chosen



# National S2E Events

- A better understanding of the national innovation ecosystem
- Raising awareness of the actions needed to enable synergies between different EU funding programmes
- Sharing experiences in combining different EU funds

The events are open to national and regional MAs, NCPs, national authorities in charge of RIS3, selected experts and representatives from business and research organisations.

Croatia (March 2015)

Latvia (April 2015)

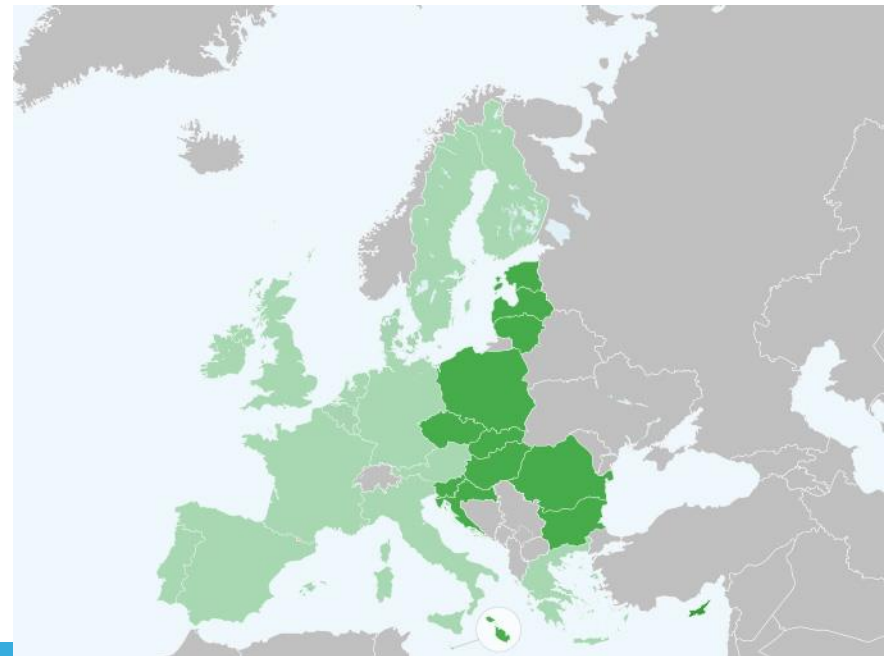
Slovakia (June 2015)

Malta (S3 Workshop July 2015)

*Forthcoming Events: Lithuania - 30 October*

*Czech Republic, Estonia*

➤ **Joint Statement of the National Event**





Valsts izglītības attīstības aģentūra

## JOINT STATEMENT OF THE NATIONAL EVENT OF LATVIA "The Synergies with Research and Innovation Funds"

*organised by*

European Commission, Joint Research Centre (Stairway to Excellence Initiative)  
Latvian State Education Development Agency  
15 April 2015, Riga-Latvia

- 1. Consensus for Better Coordination & New Opportunities**
- 2. Upstream activities**
- 3. Downstream activities**
- 4. The Way Forward**

*Key Issue 2: The need for improved research collaboration with the Central and Western European countries (EU15).*

**Potential Actions:** e.g. enhancing the network & learning (and adapting) from good practices across Europe.

**Key Issue 5:** Low rate of participation in international research collaboration  
**Key Issue 6:** Long-term availability (sustainability) of ESIF

**Potential Actions:** e.g. establishment of incubation centres, enhanced autonomy for public universities, institute-dedicated budget, alignment of national funds and performance-based funding.

# Examples of Synergies - Summary

- Case studies - examples of synergies between ESIF and Horizon 2020 implemented across the EU – NOT ONLY EU13
- 6 Developed in-house (IPTS) and 19 by national experts (EU13)
- Aim to:
  - Identify the facilitating mechanisms and the bottlenecks in the implementation of synergies
  - Identify specific rules and legal aspects at different policy levels that may enhance or limit the creation of such synergies
  - Provide suggestions to improve the synergies
  - Overall to support policy learning
- More details at: <http://s3platform.jrc.ec.europa.eu/cases-studies>

# Example 1 – ITME – Warsaw, Poland

*Produced by National Expert*

## Background

- Institute of Electronic Materials Technology (ITME) - Research into novel materials with unusual electromagnetic properties
- Initial research through FP funding
- Subsequent SF funding developed research including practical applications and industrial collaborations
- National funds awarded and funding from US Air Force

## Type of synergy

- Downstream sequential (also parallel): SF allowed movement towards potential exploitation



# Example 1 - ITME

## Diagram of chronology of the main projects involved in synergies

**FP Project 1:**  
“METAMORPHOSE” (FP6 NoE), networking researchers in the emerging field of metamaterials (2004-2008, 4.4m EUR)

**FP Project 2:**  
“ENSEMBLE” (FP7 NMP), empirical research of metamaterials (2008-2012, 5m EUR)



**SF Project 1:** “Self-organization approach towards photonics/optoelectronics” (POIG TEAM), empirical research of materials with potential industrial applications (2009-2013, 0.5m EUR)

**SF Project 2:** “TOP 500 Innovators” (POKL), training in commercialisation of research results (2012)



**National Project 1:** “New generation plasmonic materials” (MAESTRO, 2012-2016, 0.7m EUR)

**National Project 2:** “NOE” (US Air Force Office for Scientific Research MURI, 2014-2017)

**National Project 3:**  
“Eutectics and metamaterials at a crossroads” (HARMONIA, 2014-2018, 0.5m EUR)

# Example 1 - ITME

## Added Value

- Exploration of an emerging technological field, analysis of development methods, properties and possible applications of advanced materials
- Support international mobility, collaboration with leading foreign researchers => embedded in the Western research landscape

## Factors facilitating synergies

- Creativity of researchers
- Careful selection of FP consortium partners
- Support of the Brussels-based PolSCa (Polish Science Contact Agency)

## Limiting factors and suggestions

- H2020 regulations concerning researcher salaries
- SF applications and reporting more closely aligned to FP7/H2020
- Need for better administrative support for researchers at their home institutions

# Example 2 – CzechGlobe – Brno

*Produced by National Expert*

## Background

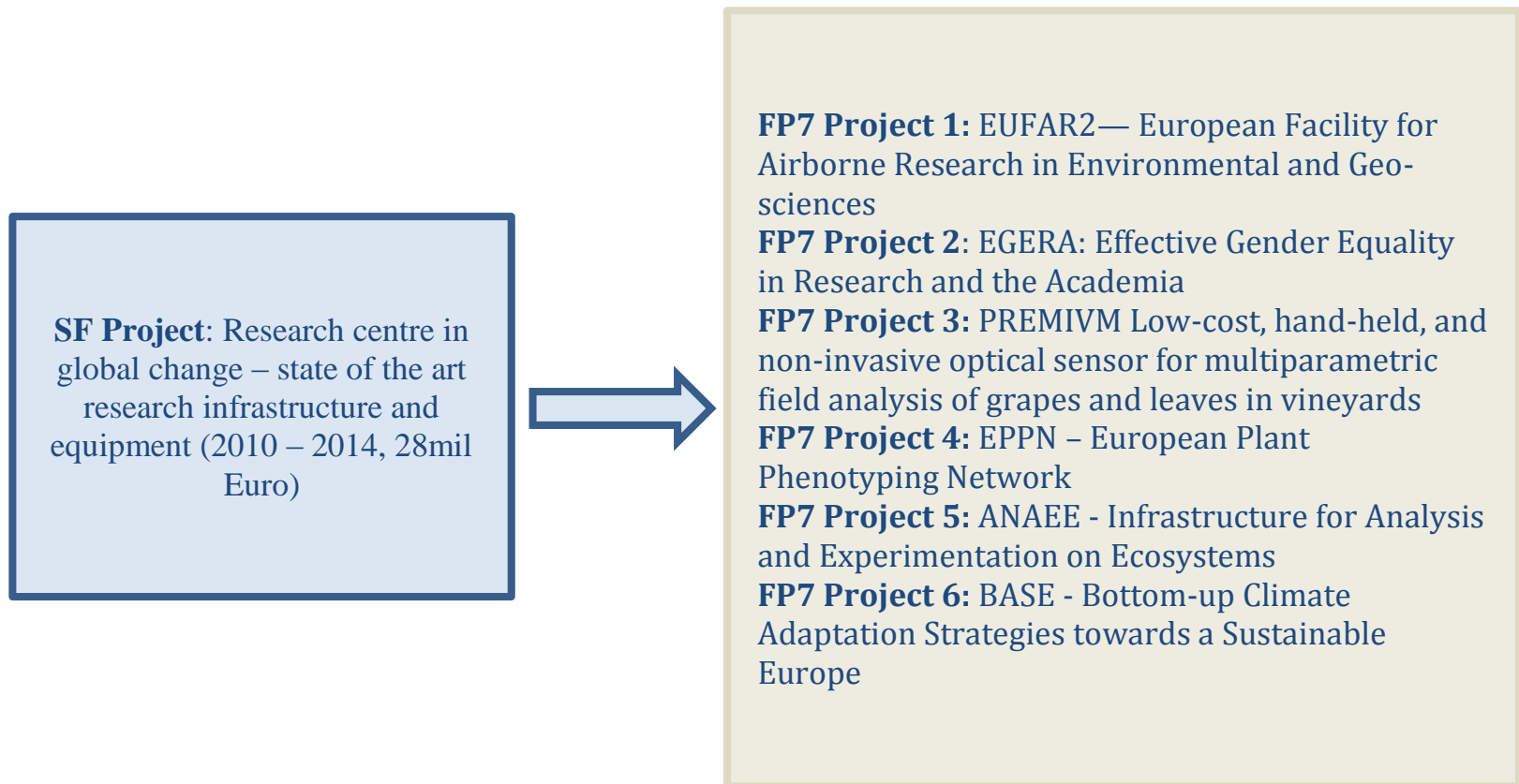
- Global Change Research Centre – founded in January 2011
- Financed and built through the Operational Programme Research and Development for Innovations
- The aim of the project was to develop research infrastructure enabling comprehensive research creating new opportunities as project partners
- BUT also had previous partnerships, personal networks, R&D results and reputation – ***not as simple as build facility, join projects***

## Type of synergy

- Upstream Sequential Funding

## Ex. 2 – CzechGlobe

### Diagram of the synergies implemented



## Ex. 2 – CzechGlobe

### Added Value

- State of the art infrastructure
- New opportunities and project partners
- Better and full use of the infrastructure and human resources capacities - multifunctional use of the infrastructure by various users

### Limiting factors and suggestions

- Alignment of project implementation periods - different funding use different periods for call implementation
- Removal of contradictory rules - coordination of the funding agencies (e.g. ESIF rules in compliance with H2020 rules)
- Flexible criteria and rules that frequently change (sometimes even during the opening of the call)
- Staff instability

# Example 3 – Centre for Nanohealth

*Produced by IPTS*

## Background

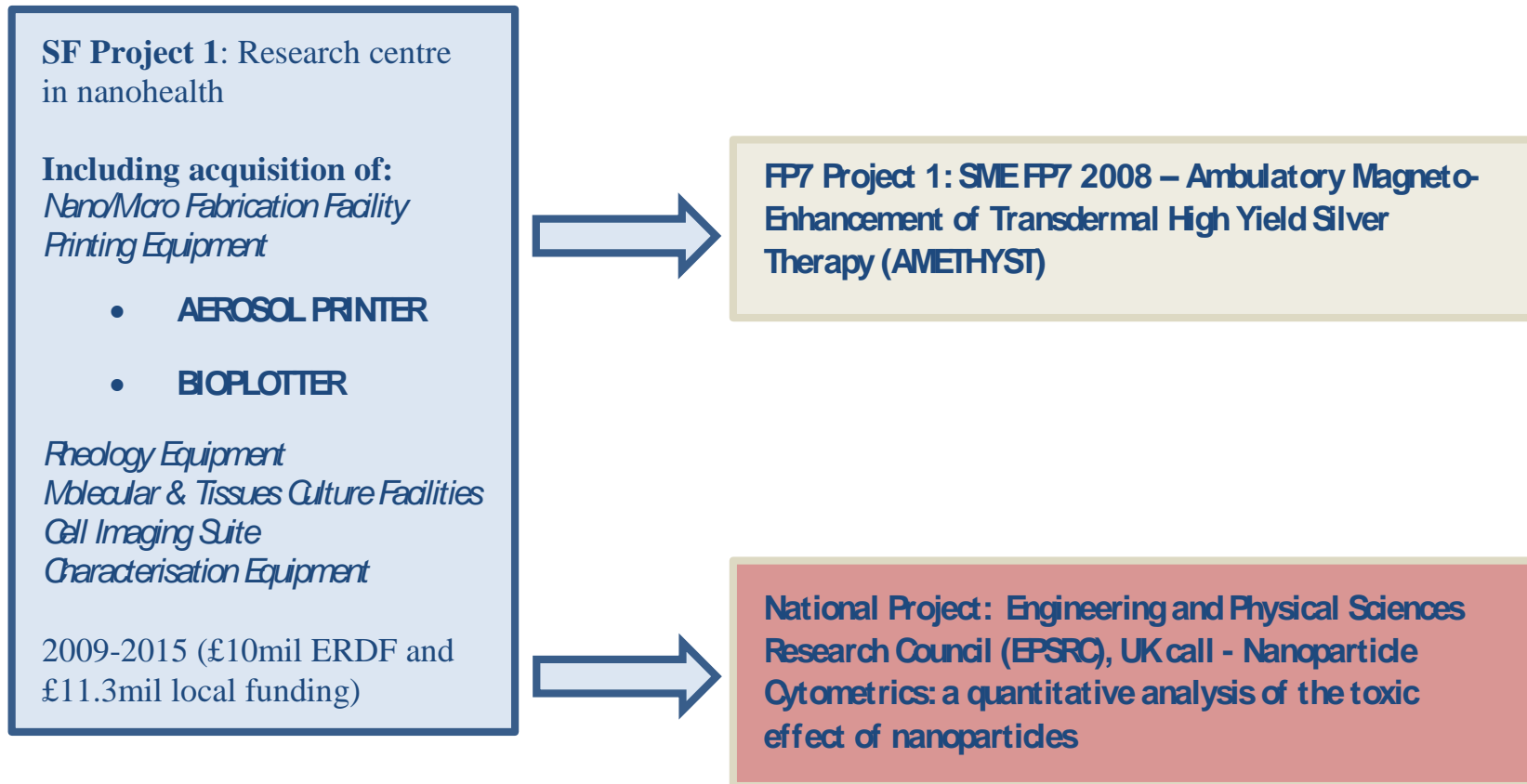
- Started in 2009 with support from the ERDF Convergence Programme
- Establish the region (West Wales and the Valleys) as a world leading interdisciplinary centre for Research and Development, Demonstration and Deployment, and Skills for NanoHealth
- Also aims to promote Welsh SMEs to work on the development of new healthcare technologies
- ~10M€ ERDF funding (2009-2015)

## Type of synergy

- Sequential upstream synergies

# Ex. 3 – Centre for Nanohealth

## Diagram



## Ex. 3 – Centre for Nanohealth

### Factors facilitating synergies

- Strong institutional support – Department for Research and Innovation
  - Support for academics providing support when apply for funding and managing the award (financial and administration) including both FP7/H2020 and Structural Funds
  - Business development supports both businesses and academics with advice on collaborative projects and funding schemes
- Active regional authority – and improved in current period with financial support for proposal preparation and H2020 office

### Limiting factors

- Administrative complexity of combining different funding sources – time sheets etc
- General issue related to sustainability of the facility



# Important issues regarding synergies

- Need for an 'institutional' strategic approach in order to successfully combine funds, while ensuring long term sustainability;
- Too many distinct regulations (H2020, ESIF, national calls). Need for simplification;
- Need of clear objectives and rules for each funding source. Complementarity or duplication ?
- National/regional support is very important. When this fails, provide internally the support
- Consistent and open policy/strategy environment – no frequent strategic changes and good engagement with stakeholders

# Thank you!



<http://s3platform.jrc.ec.europa.eu/stairway-to-excellence>

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