Synergies between Structural Funds and FP7: Examples of sequential funding

Workshop on Horizon 2020 & Structural Funds Synergy - NCP_WIDE.NET
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S2E Rationale

H2020
(Also COSME, Erasmus+, etc)

RIS3/S2E

ESI Funds
Synergies Rationale

Supporting synergies in the use of two EU funding sources (ESIF & Horizon 2020) gains in terms of:

- innovation results
- close the innovation gap in Europe
- promote economic growth

The overall political rationale: maximize impact and efficiency of public funding.

- Research and innovation funds increased under cohesion policy from 6% of the funds in the 2000-06 period to around 25% in the 2007-13 period
- Roughly 9% of the public spending on R&I in the EU came from the EU budget, divided almost equally between the 7th FP & the Structural Funds
How to achieve synergies (2)?

... 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
Case Studies - Summary

- Case studies - examples of synergies between ESIF and Horizon 2020 implemented across the EU – NOT ONLY EU13
- Developed in-house (IPTS) and by national experts (EU13)
- Studies being developed in-house

- Alsace and innovative therapeutics
- Central European Institute of Technology (CEITEC)
- EIT – CLIMATE Knowledge and Innovation Communities (KICs)
- Nanohealth, Swansea University, Wales, UK
- Scottish approach to Synergies
- TEMIS Science Park - microtechniques Cluster - Franche Comté (FR)

- More details at: [http://s3platform.jrc.ec.europa.eu/cases-studies](http://s3platform.jrc.ec.europa.eu/cases-studies)
Case Studies - Objectives

• Provide examples where SF (ESIF) and FP7(H2020) funds have been combined in order to amplify the R&I investments and their impact

• 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
Case Studies - Approach

• Build on methodological framework by IPTS to ensure comparability and coverage of selected aspects
• Desk based research
• Interviews with relevant individuals (guiding questions provided by IPTS)

PLEASE NOTE: CASE STUDIES ARE STILL A WORK IN PROGRESS
Example 1 - CEITEC

Background
• Centre of scientific excellence in the fields of life sciences and advanced materials and technologies
• Research facilities created with an investment of around 300 M€ (85% from ERDF) ➔ Provide top quality equipment and laboratory facilities in one place
• Various funding mechanisms subsequently combined in a complementary manner, using the "core facilities" as motivator to attract top experts and engage in international and inter-sectorial research projects.

Type of synergy
• Upstream sequential: ESIF investment that has enabled FP7/H2020 participation
Diagram of the complementarities of the funds in the knowledge triangle

- **RESEARCH**
  - SF PROJECT 1: research facilities
  - FP7 - Regions of Knowledge: SynBiosis
  - FP7 - FP - REGPOT: Sylica
  - FP7: 8 IEF, IIF MCF
  - FP7/H2020: 2 ERC grants

- **Training**
  - Continuous professional training, PhD fellowships

- **Innovation**
  - Knowledge dissemination, knowledge transfer etc.

- **H2020: ERC – ERA chairs**

- **FP7: 8 IEF, IIF MCF**

- **FP7/H2020: 2 ERC grants**
Ex. 1 - CEITEC

Structural Fund Project

- Central European Institute of Technology (~189.5M€ EU contribution): Centre of Excellence, catalysing the existing basic and applied research in South Moravia;

Main Framework Programme Projects

- Sylica project (REGPOT ~3.9M€ EU contribution) – fosters strategic partnerships with major EU research institutions; attract external users of the RI and of the research results including industry
- The ERA Chair (FP7 Pilot call ~2.2M€ EU contribution) - supports the on-going structural shift in the culture of the scientific community
- SynBIOsis (REGIONS ~0.94M€ EU contribution) – valorisation of two research-driven clusters, CEITEC and AREA Science Park (IT) and strengthen collaboration with business sector.
- FP7-IDEAS-ERC and FP7-PEOPLE grants support excellence in research, reintegration of national research and foster international mobility
Ex. 1 – CEITEC. Mechanisms facilitating synergies

*Early Regional (South Moravia) Strategy for R&I (2002)*, combining and concentrating funds for research, education and innovation activities in the S&T field in which the region had prior strength (life science and material)

**CEITEC has clear vision /mission supported by a strategy**

- **Attract best scientists** ➔ transparent, flexible and clear rules for career progress preventing inbreeding, intersectoral and international mobility, regular evaluation, competition
- **Cutting-edge equipment** ➔ motivator to attract and support top experts from around the world.
- **Focus on high-quality scientific research** ➔ independent evaluation of the quality of scientific performance performed according to international standards
- **Transparent rules for cooperation** – set by CEITEC
Ex. 1 - CEITEC

**Institutional framework - provides support for the implementation of the strategy**
- Management structure
- International Scientific Advisory Board
- Science Support Office

**Regional support**
- Brokerage events
- South Moravian Centre or International Mobility
- South Moravian Innovation Centre and Innovation Park
- Innovation Vouchers
Example 2 – Climate KIC

Background
• EIT Knowledge and Innovation Community (KIC) on Climate change mitigation and adaptation – Climate-KIC
• Put effort into fostering synergies
  • aligning KICs activities and regional investments through the EIT's Regional Innovation Scheme
  • connecting KIC activities and regional Operational Programmes
  • bridging the H2020 funded KIC projects to European Structural and Investment Funds
• Focus on two interrelated projects - Pioneer Cities and Transition Cities

Type of synergy
• Sequential
Ex. 2 – Climate KIC

Framework Programme/H2020 Projects

- FP7 from EIT-KICs pot – Pioneer Cities (2010-2014)

Identify and share solutions for tackling climate change in urban areas across Europe. The project brought together cities/regions from across the Continent (to consider solutions for the transition to a low carbon society. Includes training (PhD, MSc, professional)

Structural Fund Project

- Transition Cities (EIT-KICs, ERDF, national and private funds)

Activities in relation to the three priority areas: i) promote new start-ups; ii) leverage in other EU funds; iii) enable cities to explore new institutional and business models for low carbon society
Ex. 2 – Climate KIC – Project examples

**Frankfurt Initiative – Pioneers Cities – FP7/H2020**
- Cut energy in Frankfurt by using the combined heat and power
- Involved - City Council, the Energy Agency, municipalities, development agencies and companies

**Emilia Romagna Region – Transition Cities – ERDF**
- 60 projects funded for the establishment of wind plants, PV plants, energy efficient SMEs, saving building energies, CHP plants, etc.
- based on the mixed funds (FP7/H2020, ERDF and private funding) and bank credits

**Overall** - The case represents the "sequential Funding" as the research findings of the "Pioneer Cities" led to the "Transition Cities" projects using ERDF. Also "parallel funding" model as both projects are still active and complement each other
Example 3 – Centre for Nanohealth

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

**SF Project 1**: Research centre in nanohealth

Including acquisition of:

- Nano/Micro Fabrication Facility
- Printing Equipment
  - AEROSOL PRINTER
  - BIOPLOTTER
- Rheology Equipment
- Molecular & Tissues Culture Facilities
- Cell Imaging Suite
- Characterisation Equipment

2009-2015 (£10mil ERDF and £11.3mil local funding)

**FP7 Project 1**: SME FP7 2008 – Ambulatory Magneto-Enhancement of Transdermal High Yield Silver Therapy (AMETHYST)

**National Project**: Engineering and Physical Sciences Research Council (EPSRC), UK call – Nanoparticle Cytometrics: a quantitative analysis of the toxic effect of nanoparticles
Ex. 3 – Centre for Nanohealth

Other Projects

- INTERREG Ireland and Wales - Celtic Alliance for Nanohealth (CAN)
- REGPOT New Molecular Solutions in Research and Development for Innovative Drugs (INNOMOL) – Realise the research potential of Institut Ruđer Bošković (Zagreb)
- National Funding - EPSRC Building Global Engagements in Research
- Many links with local businesses
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

Limiting factors
• Administrative complexity of combining different funding sources – time sheets etc
• General issue related to sustainability of the facility
Preliminary lessons 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
Thank you!

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

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