



# **Industrial Technologies and Smart Specialisation: synergies between Horizon 2020 and European Structural and Investment Funds**

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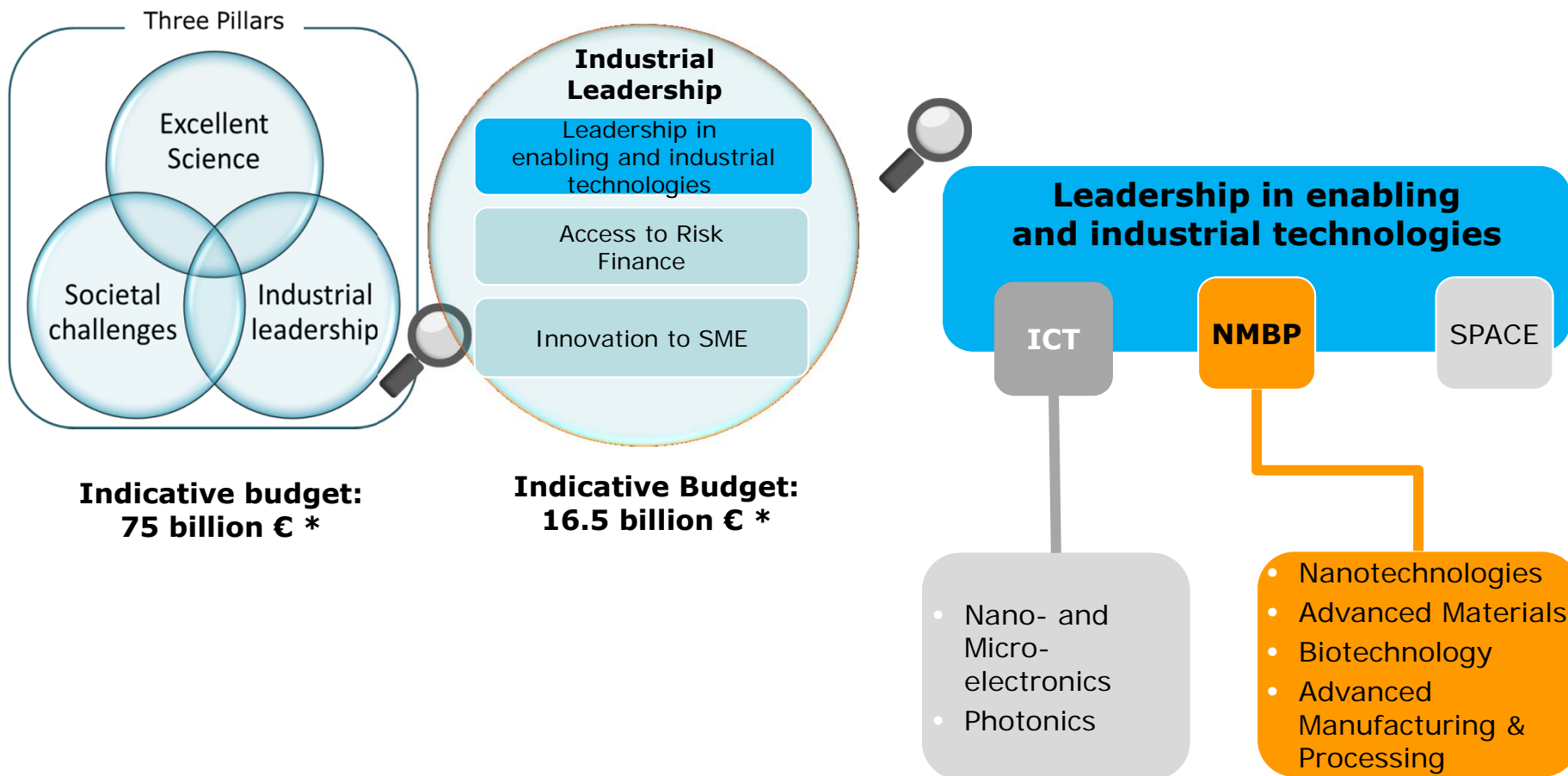
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## Horizon 2020: Key elements

- A single programme with three pillars:
  - Excellent Science
  - Industrial Leadership
  - Societal Challenges
- **Less prescriptive topics** – strong emphasis on expected impact
- More emphasis on **innovation and involvement of industry** e.g. industrial deployment of key enabling technologies, Public-Private Partnerships
- **Strategic approach**, two-year work programmes
- **Focus areas** bring together different technologies
- **Simplification** – in access and in participation rules

# KETs - NMBP in Horizon 2020



\* July 2015 – includes EIT, JRC, "Science with and for Society", "Spreading Excellence / Widening Participation", in addition to three priorities above



## Policy Context

### Five of the President's priorities:

- To boost jobs, growth and investment;
- To realise a connected digital single market;
- To implement a resilient Energy Union with a forward looking climate change policy;
- To develop a deeper and fairer internal market with a strengthened industrial base;
- To make Europe a stronger global actor

### Strategic priorities of Commissioner Moedas:

- Open innovation,  
Open science,  
Open to the world

<http://ec.europa.eu/research/openvision/index.cfm>





# What is Smart Specialisation?

*Regional framework policy for innovation driven growth that relies on an entrepreneurial process of discovery, that can reveal domains of economic activity where a country or regions excels or has the potential to excel in the future.*

*- Ex-ante conditionality for ERDF innovation investments*

*Source: Oecd report 2013*



# Why Smart Specialisation ?

- *Concentration of resources on priorities, problems and core needs (no sprinkler principle, no picking the winners, yes to catalytic investments).*
- *Evidence-based considering all assets and problems in a region, incl. External perspective / internal / global market.*
- *No top-down decision, but dynamic /entrepreneurial discovery process uniting key stakeholders around shared vision.*
- *Mobilisation of investments and synergies across different departments and governance levels (EU-national-regional).*
- *All forms of innovation – not only technology driven.*
- *Place-based economic transformation: rejuvenating traditional sectors through higher value-added activities, cross-sectoral links, new market niches by sourcing-in and disseminating new technologies rather than re-inventing the wheel; emerging sectors*



## *EU R&D and Innovation Policy Horizon 2020*

## *EU Cohesion Policy*

### *Differences*

*H2020 does not take into account geographic specificities in allocating funding. **Non-territorial**, mainly transnational approach.*

*Co-funding rates vary according to the region and programme. **Place-based approach** supporting economic and social cohesion*

*Awarded **directly to final beneficiaries** (firms, public and private R&D centres and Universities, including national and regional governments in certain cases – Art. 185, ERA-NET etc.), tackling the whole cycle of innovation, taking into account strategic approaches at EU level*

*Awarded **through** shared management exclusively to national and regional **public intermediaries**. **Largely focused on improving the R&I capacities and R&I eco-systems** with the objective of regional growth and place-based economic transformation towards higher added value and more knowledge-intensive activities (RIS3).*

***Through transnational competitive calls** addressed to international groupings through peer review **based in particular on excellence** criteria*

***Non competitive attribution** addressed to regional players **based on strategic planning** negotiation (however competitive calls possible and rising at national or regional level)*

### *Synergies and Complementarities: towards a more competitive Europe*

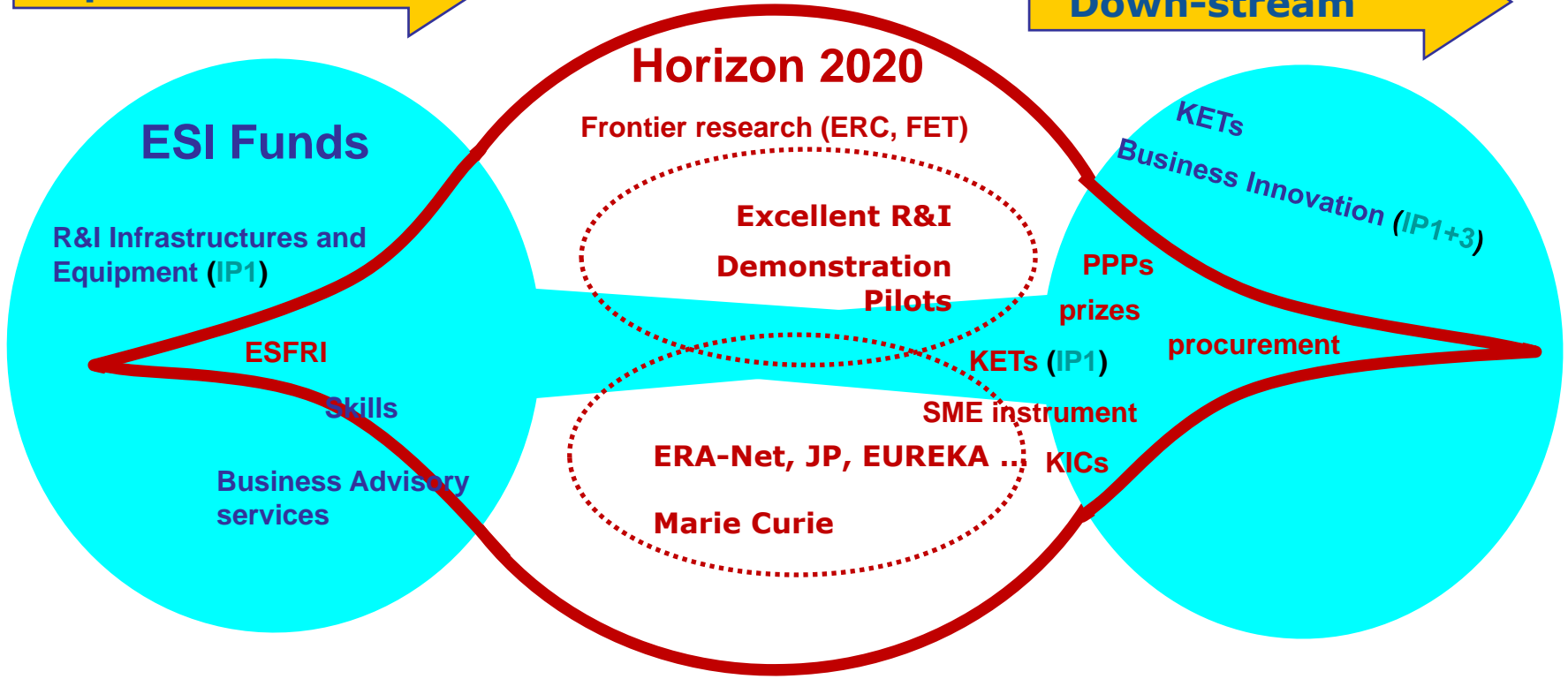
***Horizon 2020** will focus on tackling major societal challenges, maximising the competitiveness impact of **research and innovation** (Industrial leadership) and raising and spreading levels of **excellence** in the research base*

***Cohesion policy** will focus on galvanising **smart specialisation** that will act as a **capacity building** instrument, based on learning mechanisms and the creation of critical skills in regions and Member States.*



**"Up-stream"** →

→ **"Down-stream"**



**"Staircase to Excellence"**

**"Research Excellence"**

Hopefully also excellence, but **"Innovation Excellence"**

National/Region  
all R&I systems



Capacity Building

Research & Development

Innovation

Market

IP = Investment Priorities under the R&I thematic objective of the ERDF Regulation



# Different synergy scenarios

- 1. Upstream sequential combinations: ESIF investments enable H2020 participation**
- 2. Parallel use of funds under separate project / grant contracts that are mutually supportive**
- 3. Simultaneous use of funds in the same project**
- 4. Alternative funding through ESIF of H2020 projects that were positively evaluated**
- 5. Downstream sequential combination – H2020 of FP project results used or further developed under ESIF**



# Cohesion Policy in Romania

*Objective: to reach a modern and competitive economy and strengthen the regional and urban development.*

*Allocation of funds: approx. EUR 30.8 billion (CF+ERDF)*

- *1.06 billion for research and innovation*
- *532 million for ICT*
- *3.90 billion for low-carbon economy*
- *3.20 billion for competitiveness of SMEs*
- *Smart Specialisation Strategy sets priorities and directions:*

- Bio-economy,
- Information and Communication Technologies, Security and Space,
- Energy, Environment and Climate Change,
- Eco-NanoTechnologies and Advanced Materials.



# Where to find examples of synergies?

*A set of examples in different areas including NMBP have been published on:*

*<http://s3platform.jrc.ec.europa.eu/synergies-examples>*

*These include:*

- Ruđer Bošković Institute (RBI)-Zagreb-outlines upstream sequential type of synergies developed in the research area of biomedicine;*
- Centre of Advanced Research in Bionanoconjugates and Biopolymers – IntelCentre of "Petru Poni" Institute of Macromolecular Chemistry of the Romanian Academy*
- Research in novel materials with unusual electromagnetic properties - Institute of Electronic Materials Technology, Poland.*
- Promotion of high level international research (KTU's Institute of Materials Science), Latvia*
- etc*



## Basic Principles & Concept of Synergies and Cumulation

Recommendations for policy-makers and implementing bodies for strategy development, programme design and implementation mechanisms; Overview of Commission support (SWD(2014)205 final)

### Annex 1 Explanations by programme (differences, opportunities, management principles)

- ESIF & Cohesion Policy
- Horizon2020
- COSME
- Erasmus+
- CEF digital services
- Creative Europe

### Annex 2

#### Scenarios & hands-on advice for policy-designers & implementers by project format (also interesting for beneficiaries)

1. Horizon2020
  - Standard R&I projects
  - ERA Chairs, Teaming & Twinning
  - Marie Skłodowska-Curie researchers' mobility
  - ERA-NETs, Joint Programming Initiatives, Art. 185 initiatives and Art. 187 Joint Technology Initiatives
  - EIT / Knowledge and Innovation Communities
  - Research Infrastructures
  - Pre-Commercial Procurement and Public Procurement of Innovative Solutions
  - Innovation in SMEs
2. COSME – Enterprise Europe Network
3. ERASMUS+ - mobility, Knowledge & skills alliances
4. Creative Europe –innovation in& with Creative Industries
5. CEF - Digital Services Platforms – e-government interop.

**Guidance on synergies among and with financial instruments: short reference guide for Managing Authorities.**

See:

[http://ec.europa.eu/regional\\_policy/thefunds/fin\\_inst/index\\_en.cfm](http://ec.europa.eu/regional_policy/thefunds/fin_inst/index_en.cfm)

**Modernisation of EU State aid frameworks:**

See:

[http://ec.europa.eu/competition/state\\_aid/modernisation/index\\_en.html](http://ec.europa.eu/competition/state_aid/modernisation/index_en.html)

## Guidance for end beneficiaries

Pointing beneficiaries via a 6-step checklist to possible EU funding and support sources for R&I.



## Possible positive actions:

- **Get in touch and discuss synergies with the ESIF Managing Authorities in your country; integrate relevant policy measures in your Operational Programmes, based on local/ national RIS3 (Smart Specialisation Strategies)**
- **Discuss and get informed about the 'Seal of Excellence ' to channel well evaluated but not-funded Horizon 2020 project proposals that are largely located in an OP territory to the relevant MAs and can benefit from ERDF / ESF / EAFRD / EMFF funding;**
- **LOOK WHERE YOUR ACTIVITIES FIT IN** - training under the ESF; research and any infrastructures, under the ERDF.

**YOU NEED TO EXPLAIN WHY FUNDING YOUR PROJECT / INFRASTRUCTURE ETC. IS NOT ONLY VALUABLE FROM A SCIENTIFIC POINT OF VIEW BUT HOW IT HELPS THE GOALS OF THE STRUCTURAL FUNDS: CREATION OF JOBS, ECONOMIC AND REGIONAL DEVELOPMENT, CAPACITY BUILDING, CONTRIBUTION TO GROWTH AND COHESION ETC...**



# Stairway to Excellence national event in Romania (22/06/2016)

## Discussion topics

- *How to build up capacities for the excellent research & increase H2020 participation (upstream activities)*
- *How to better exploit research results in order to create social/economic impacts? (downstream activities)*
- *What are the incentives, obstacles and opportunities for policy makers and innovation stakeholders to maximise societal impact of EU R&I funding instruments? (stakeholder involvement)*
- <http://s3platform.jrc.ec.europa.eu/-/s2e-national-event-romania?inheritRedirect=true&redirect=%2F>

