



Opportunities and challenges for RIS3 implementation - from design to implementation

**Lyon
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Smart Specialisation Platform
IPTs, DG JRC, EC**

Content

- 1. The new organisation of JRC and introduction to S3 platform activities***
- 2. Quick reminder of the Smart specialisation concept*
- 3. Basics on Cohesion Policy & shared management*
- 4. Focus on Synergies between funding*
- 5. Focus on Monitoring and evaluation*



European Commission

7 Institutes in 5 Member States



IRMM – Geel, Belgium

- Institute for Reference Materials and Measurements

Staff: \cong 250



IE – Petten, The Netherlands

- Institute for Energy

Staff: \cong 180



ITU – Karlsruhe, Germany

- Institute for Transuranium elements

Staff: \cong 250



IPSC - IHCP - IES – Ispra, Italy

- Institute for the Protection and the Security of the Citizen
- Institute for Health and Consumer Protection
- Institute for Environment and Sustainability

Staff: \cong 350, 250, 370

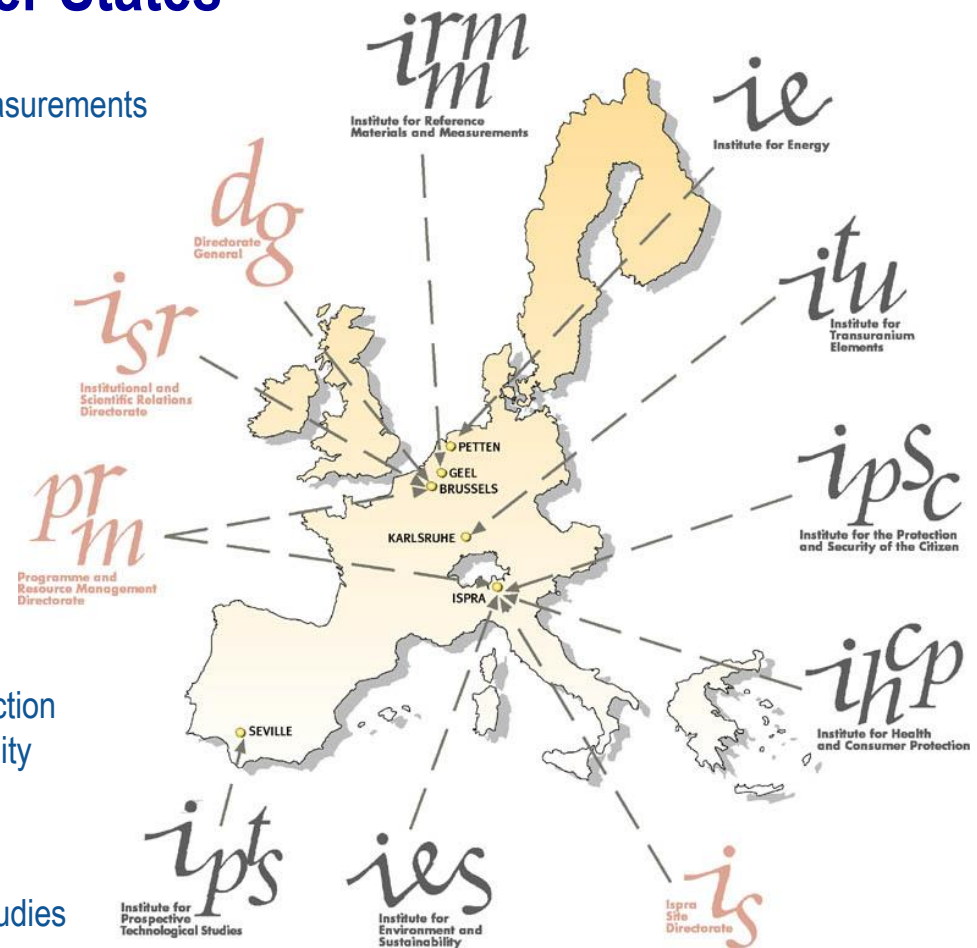


IPTS – Seville, Spain

- Institute for Prospective Technological Studies

Staff: \cong 250

Total staff: ~ 2300 people



The new organisation of JRC

Dir. A Strategy & coordination (Brussels)

Knowledge production

Dir B
Growth &
innov
(Seville)

B.3
**Territorial
develop.**

Dir C
Energy
transport
clim
Change
(Petten)

Dir D
Sustainabl
ress.
(Ispra)

Dir E
Space
Security
&
migration
(Ispra)

Dir F
Health
consumer
& referenc
e material
(Geel)

Dir G
Nuclear
safety &
security
(Karlsruh
e)

Dir. H Knowledge Management (Ispra)

Dir I Competences (Ispra)

Dir. R Support (Brussels)

Activities of the S3 Platform

**Synergies ESIF-H2020
"Stairway to
excellence"**

**Guidance and analysis:
RIS3 Guide;
Digital Agenda
Toolbox;
S3 policy briefs**

**Support to
lagging regions**

**Interactive web
tools, S3 Newsletter
and Website**

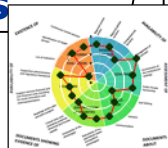
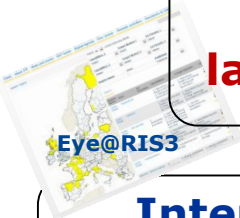
**Trans-national
learning and Peer
Review**

**Value chains and
alignment of
innovation
roadmaps**

**RIS3
assessment
and support to
REGIO desks**

**Thematic focus
on actors,
process, common
features and
priorities**

**Focused approach on
digital growth (CONNECT)
and energy (ENER)**



Content

1. *The new organisation of JRC and introduction to S3 platform activities*
2. ***Basics on Cohesion Policy & shared management***
3. *Reminder of the Smart specialisation concept and forthcoming challenges*
4. *Focus on Synergies between funding*
5. *Focus on Monitoring*



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REGULATION (EU) 1303/2013 Applies to the European Regional Development Fund (ERDF)

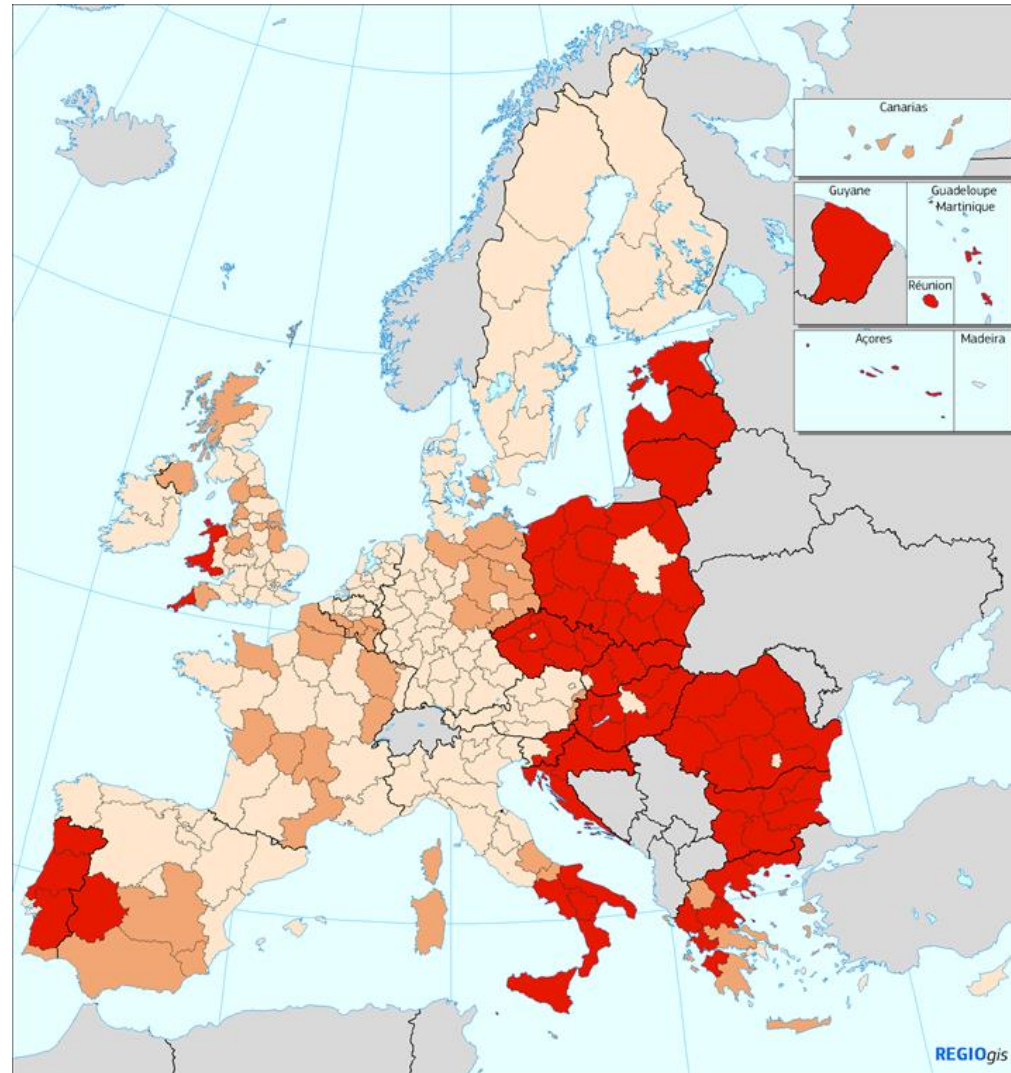
Ex-ante conditionality

" ...
A national or regional smart
specialisation strategy is in place that:

- is based on a SWOT or similar analysis to concentrate resources on a limited set of research and innovation priorities
 - outlines measures to stimulate private RTD investment
 - contains a monitoring mechanism
- " ...

ERDF Eligibility map 2014-2020
Based on GDP per capita in PPS, 2007-2009

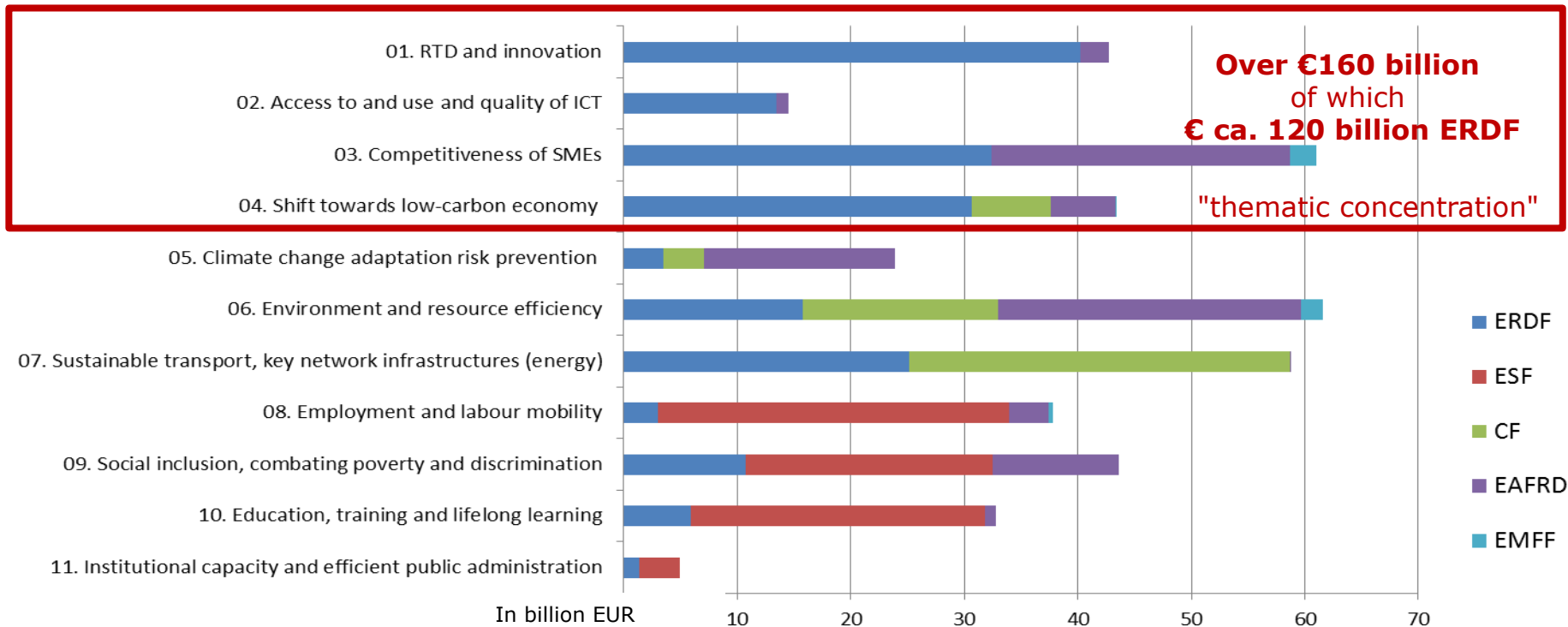
-  Less developed region (GDP/head: less than 75%)
-  Transition regions (GDP/head between 75% and 90%)
-  More developed region (GDP/head: more than 90%)



REGIOgis

ESIF programming 2014-20: State of Play

- EUR 451 billion of ESIF + EUR 183 billion of national co-financing
- 456 national (thematic) and regional and 79 Interreg cooperation programmes
- Concentration on 11 Thematic Objectives



~€40 billion of the ERDF budget for 11 thematic objectives is allocated to TO1

- Over half of TO1 allocation will be invested in 4 countries: PL, ES, DE and IT.

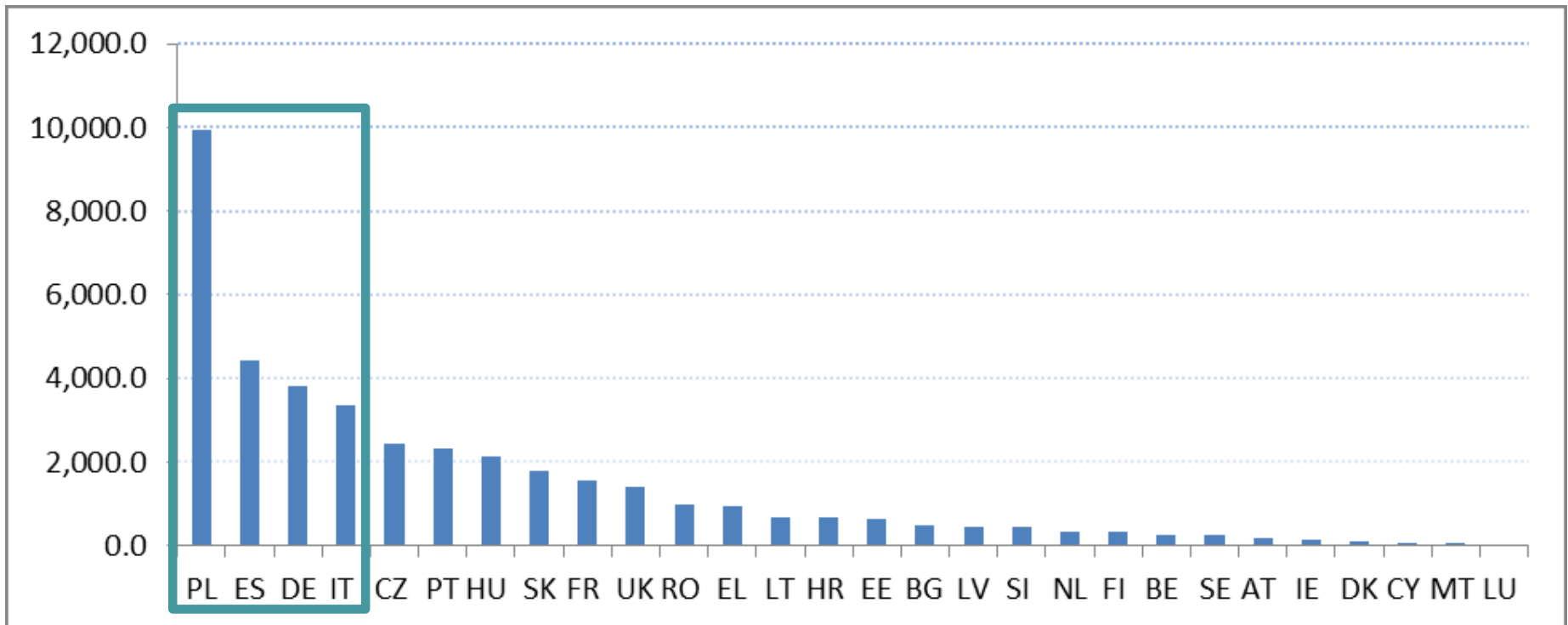
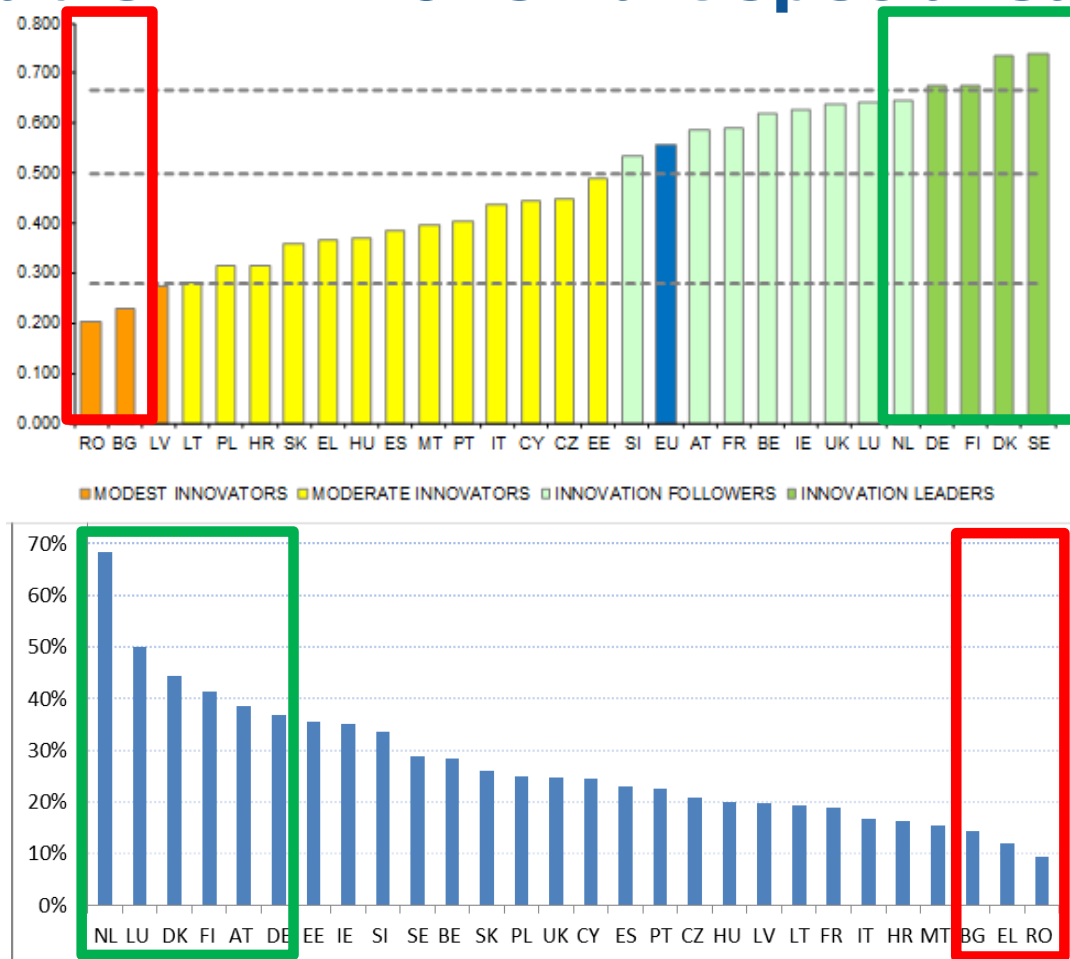


Figure. Financial allocation to TO1 ERDF, (million euros) subject to possible changes until all operational programmes are adopted



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Innovation leaders use more proportion of available ERDF for smart specialisation



Figures: Innovation scoreboard 2015 and Share of ERDF allocation for TO1 in total ERDF allocation for 11 thematic objectives (%)

Mix depending on
specific objectives
and must support the
relevant Smart
Specialisation Strategy

Types of support for RIS3 in SMEs

- Research and innovation processes in SMEs (including voucher schemes, process, design, service and social innovation)
- Public research and innovation infrastructure
- Technology transfer and university-enterprise cooperation primarily for SMEs
- Research and innovation activities in public research centres
- Investment in infrastructure, capacities and equipment in SMEs linked to research activities

70%

- Research and innovation processes in large enterprises
- Cluster support and business networks
- Research and innovation activities in private research centres
- Research and innovation infrastructure, processes focusing on low carbon
- Investment in infrastructure, capacities and equipment in large enterprises linked to research activities
- Research and innovation infrastructure (private including science parks)

30%

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Smart Specialisation strategy as defined in the Common Provision Regulation 1303/2013

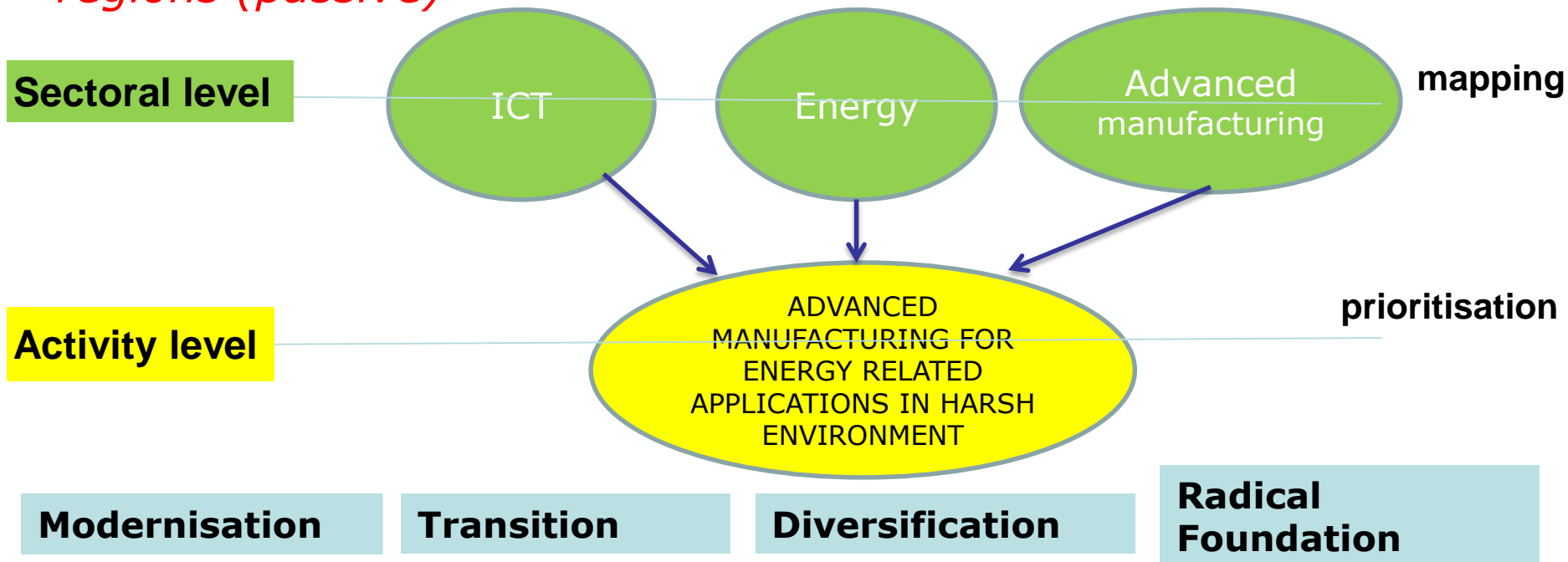
The national or regional innovation strategies which:

- set **priorities**
- in order to build **competitive advantage**
- by developing and **matching research** and innovation own strengths **to business needs**
- in order to address **emerging opportunities** and market developments

The notion of specialisation

It is about developing new specialities based on regional concentration of knowledge, competence and market potential (dynamic)

Not understood as a sector or specialised relative to other regions (passive)



Main challenges to make RIS3 work:

Ensuring continuity

- RIS3 is conceived as an on-going (and reiterative)
- Process with stakeholder involvement (Entrepreneurial Discovery Process),
- Monitoring and adjustments

Implementation tools & capacities

- Selection criteria
- Appropriate support tools (leadership participatory methods)
- Administrative capacities to design such tools and manage them effectively and efficiently

International opening and cooperation

- Generate critical mass via combining forces
- Complementing capacities and linking related regions
- Synergies with Horizon 2020
- Art. 70 of CPR



Entrepreneurial discovery process means a genuine involvement of local innovation actors to develop and implement S3

Principles for selection criteria for RIS3 related calls

- All projects shall be in **line with a national or regional smart specialization strategy** (for TO1) including those that focus on horizontal measures.
- To support the ongoing Entrepreneurial Discovery Process there is exceptionally also the **limited opportunity for experimentation**, e.g. through separate calls.
- Calls should **not target sectors but areas of economic opportunity** e.g. advanced materials for energy production application in harsh environment.
- Specific **target groups should be identified** to serve the realization of the specific objective and maximising the number of partners involved (e.g. SMEs, researchers in specific academic domains, business support institutions).
- **Synergies with Horizon2020** should be promoted and taken into consideration.

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= Policy Synergies!

Concept of synergies

- **Improve the quality of national & regional innovation policies**, including type of support measures
- **Enhance the impact of investments**, incl. "durability", links btw. projects, building on previous projects of other instruments
- **Amplify projects / initiatives** by joining forces under different funds to generate critical mass: cumulation / alternative funding
- **Strengthen cooperation and complementarity across Europe** by teaming up different capacities in leading and lagging regions thanks to smart specialisation
- **Strengthen cooperation between innovation actors and policies relevant for innovation** (skilled & creative people, research, enterprises, investors, market access, different Ministries and departments and on different levels, legal and administrative framework conditions...)

Novelties for synergies in 2014-20 ESIF Regulations

- **Possibility to combine H2020 and ESIF money in the same project** via a derogation from the non-cumulative principle of Art. 129 Fin. Regulation that prohibits a beneficiary to receive 2 EU grants for a project (**Art. 65(11) CPR***)
- **More ESIF can be spent outside operational programme territory** (e.g. to pool funding for technology parks, clusters, research infrastructures abroad, ...) if for the benefit of the programme area: **Article 70(2) CPR** (also contract research is possible outside OP territory irrespective of Art 70(2)!)
- **Stronger obligation to work with innovation actors in other regions & Member States** beyond "INTERREG": **Art 96(3)d CPR**
- **Alignment of similar cost options** possible for easier combining of funds: lump sums, flat rates, standard scales of unit costs under ESIF may use the H2020 rules applicable for similar types of operations and beneficiaries (**Art 67(5)b, 68 CPR**)
- **Obligation to develop smart specialisation strategies, including seeking synergies and complementarity** with Horizon2020 and other centrally managed EU programmes and involvement of Horizon 2020 stakeholders in RIS3 development process and obligation to foresee **up- & down-stream measures to Horizon 2020** in RIS3: **Annex 1 to CPR, Section 3.4.**

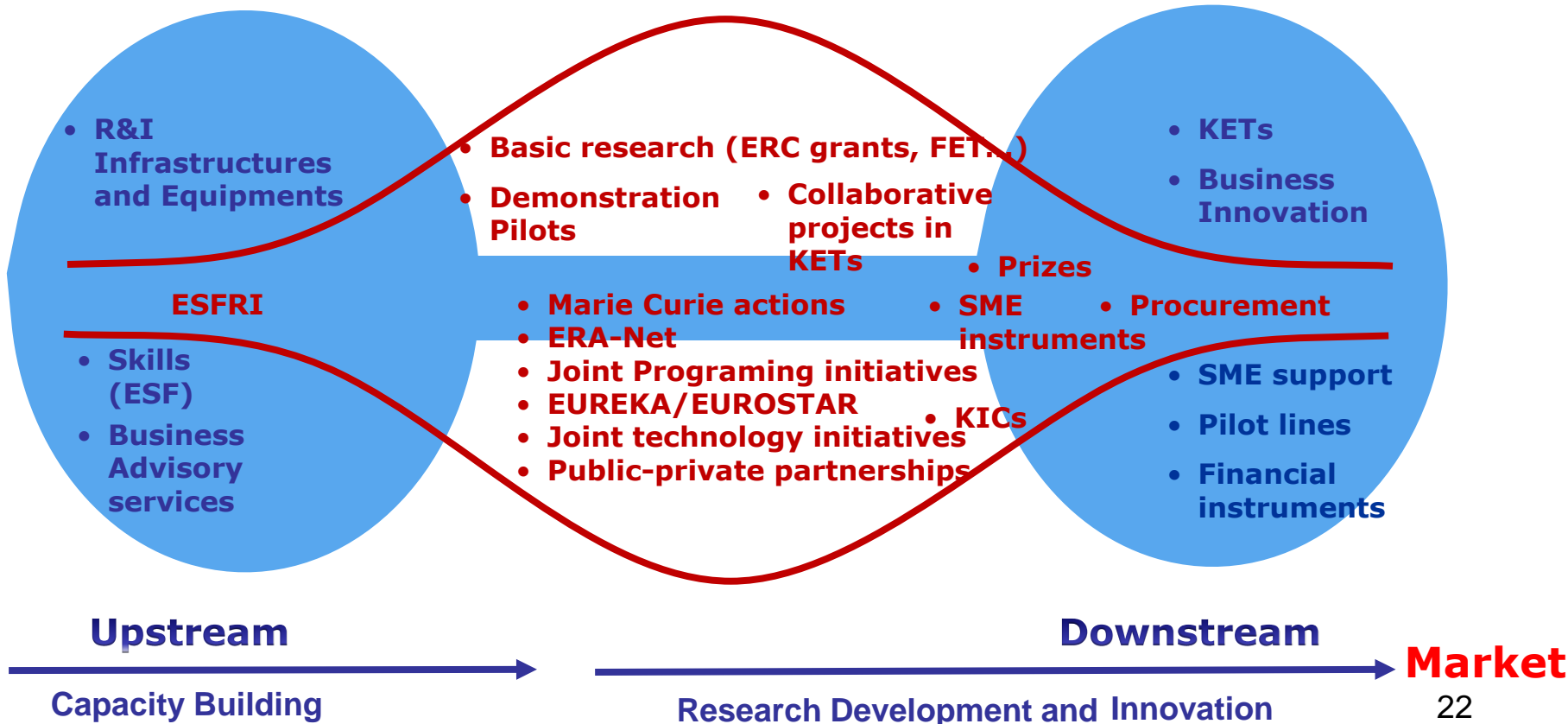
How to achieve synergies?

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

ESI Funds

Horizon 2020

ESI Funds



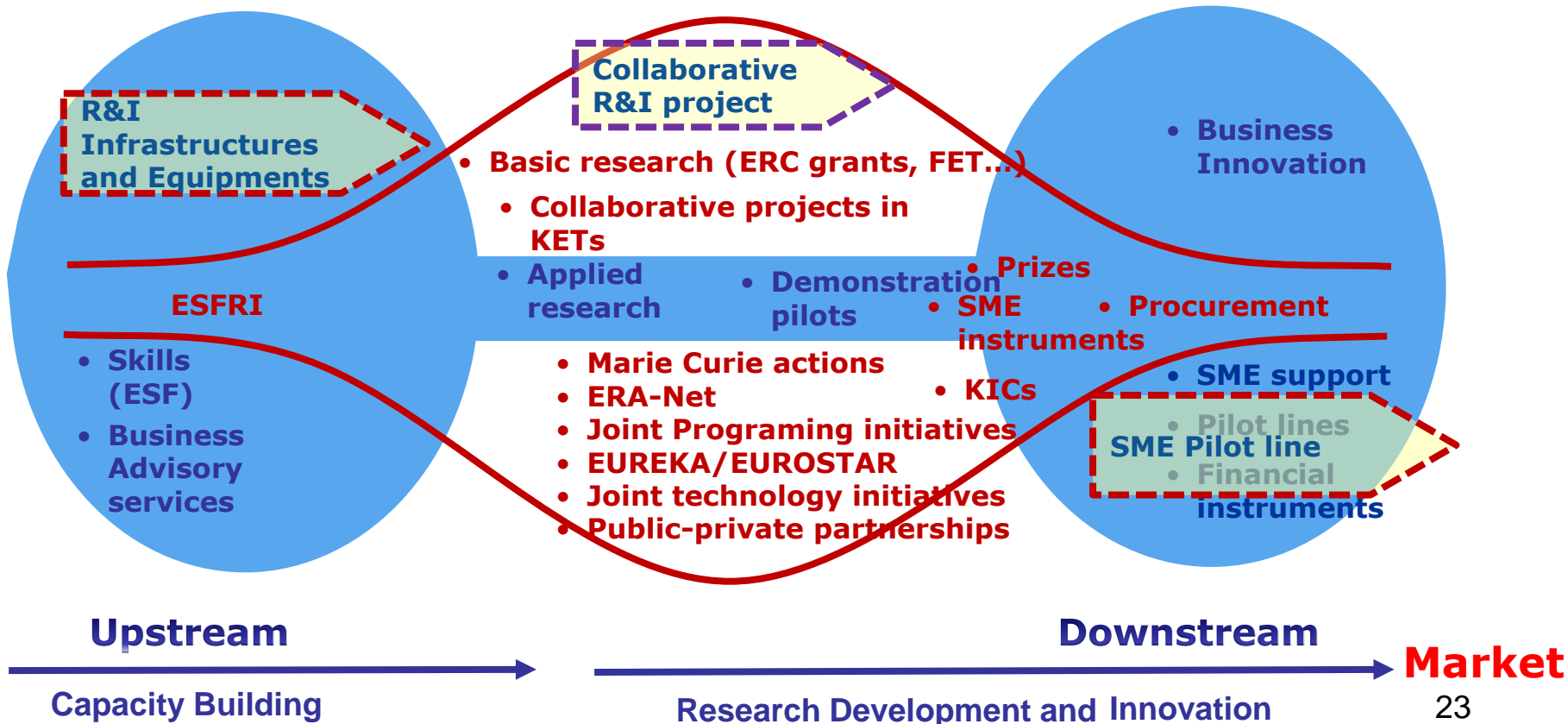
Successive projects from different instruments that build on each other

ESIF Grant agreement
Horizon 2020 Grant

ESI Funds

Horizon 2020

ESI Funds



Example of successive/parallel projects downstream activities



Innovative tools against potato blight, Jõgeva Plant Breeding Institute

Nationally Funded Project 1: Breeding and maintenance breeding of potatoes and related studies on agro-technology and seed. Production, 2003-2008

Nationally Funded Project 2: Phenotypic and genotypic characterisation of Estonian populations of *Phytophthora infestans*; epidemiology of potato late blight, 2005-2008

FP Project: EUCABLIGHT: Potato Late Blight Network For Europe 2003-2006
Estonian Partner: Jõgeva PBI; €1.12m

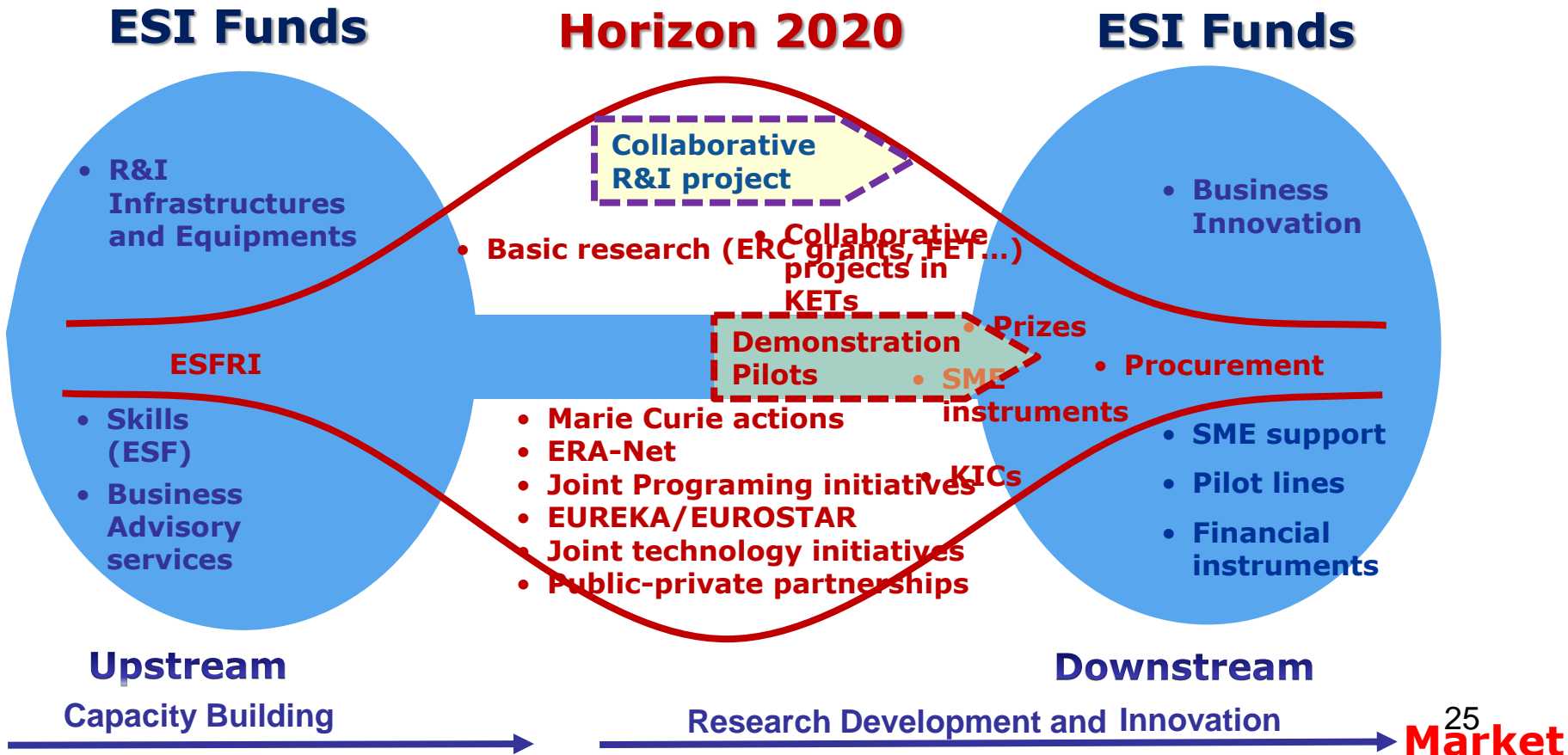
SF Project 1: Implementation of site specific monitoring system for decision support on late blight control and irrigation management in potatoes
Partners: Jõgeva PBI and TÜ Talukartul; 2011-2013; €0.12m

SF Project 2: BALTORGPOTATO (INTERREG; Estonia-Latvia) 2011-2013; €0.35m

2003

2013

Parallel projects that complement each other



Example of successive/parallel projects upstream activities



CzechGlobe – Global Change Research Centre

ESIF Project: Research centre in global change – state of the art research infrastructure and equipment (2010 – 2014, 28mil Euro)

FP7 Project 1: EUFAR2— European Facility for Airborne Research in Environmental and Geo-sciences 2014-18

FP7 Project 2: PREMIVM Low-cost, hand-held, and non-invasive optical sensor for multiparametric field analysis of grapes and leaves in vineyards 2011-13

FP7 Project 3: EPPN – European Plant Phenotyping Network 2012-15

FP7 Project 4: ANAEE - Infrastructure for Analysis and Experimentation on Ecosystems 2012-16

FP7 Project 5: BASE - Bottom-up Climate Adaptation Strategies towards a Sustainable Europe 2012-16

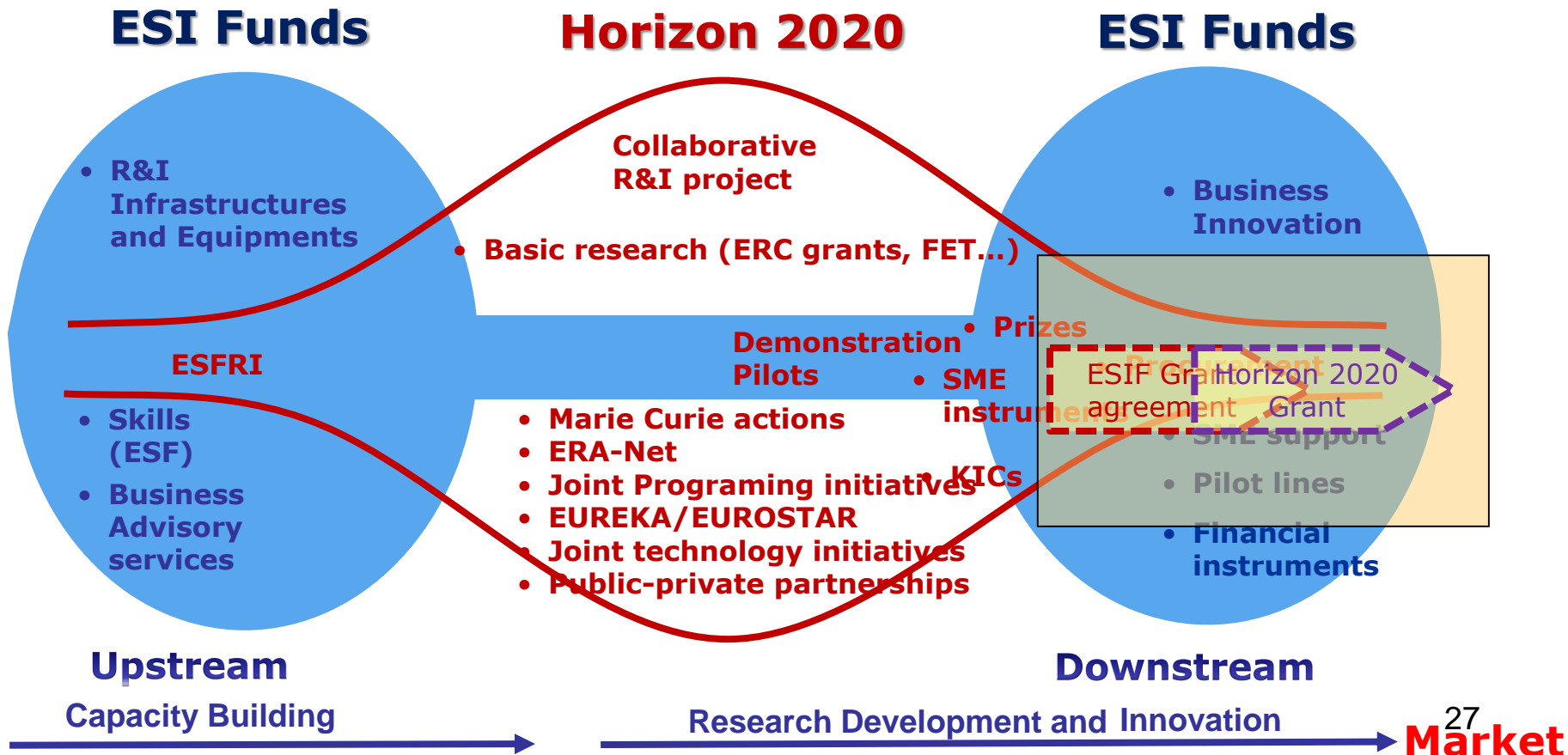
2010

2018

Projects that cumulate Horizon2020 and ESIF grants

ESIF Grant agreement

Horizon 2020 Grant





The CLEANSKY Joint Undertaking

Complementary activities may be added and described by the applicant

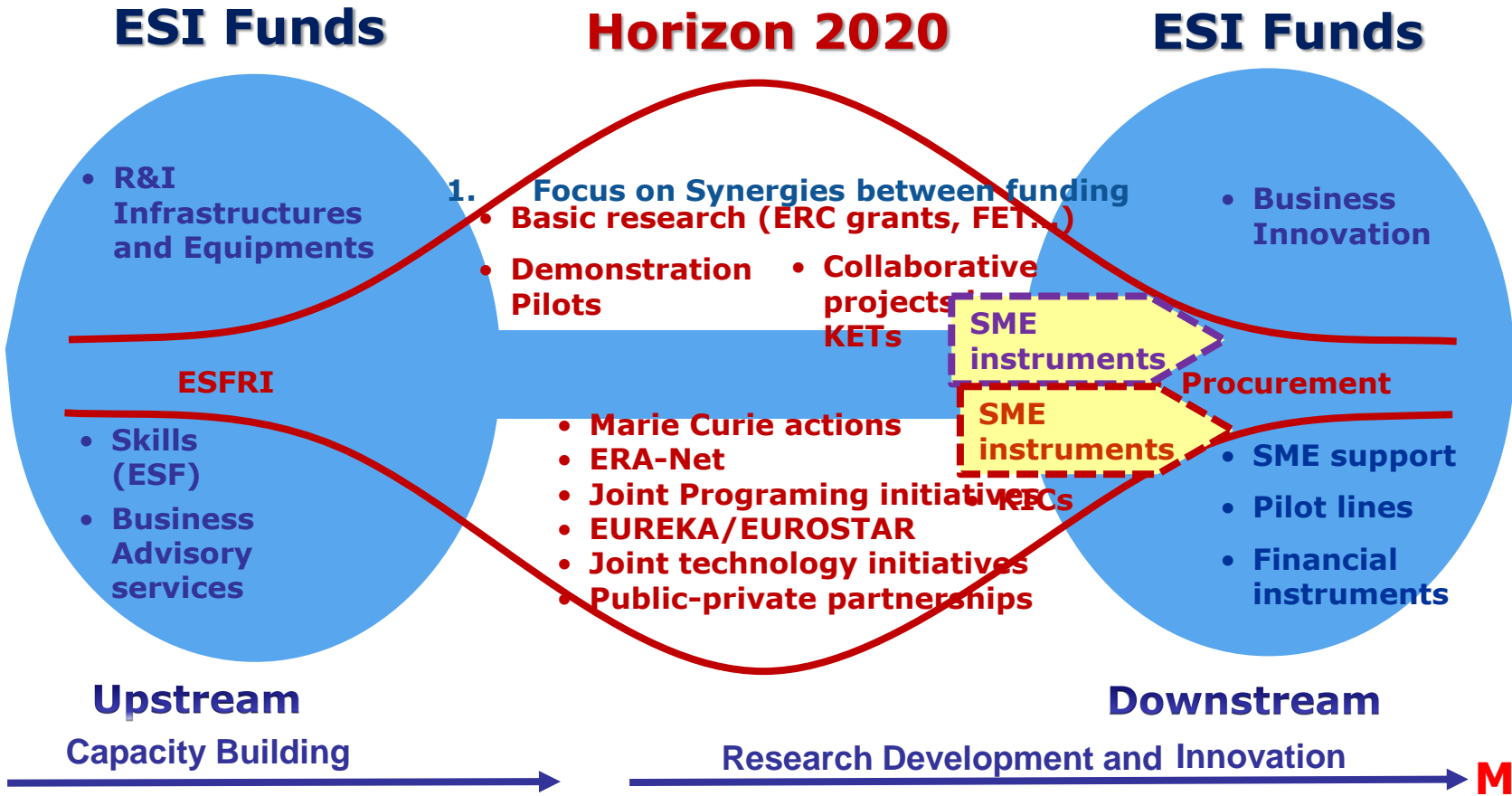
- **at proposal application stage or**
- **may be proposed (alternatively) by the selected applicant at start or during project implementation phase**

Complementary activities are evaluated by the Cleansky evaluation panel and applicant receive a label to present to ESIF management authorities be directly funded

- **There is an agreement between Cleansky JU and Regions (MoU)**
- **There are always 2 grant agreements (with specific funding rules)- reminder ESIF support is under State aid framework when JU funding not.**



Alternative funding

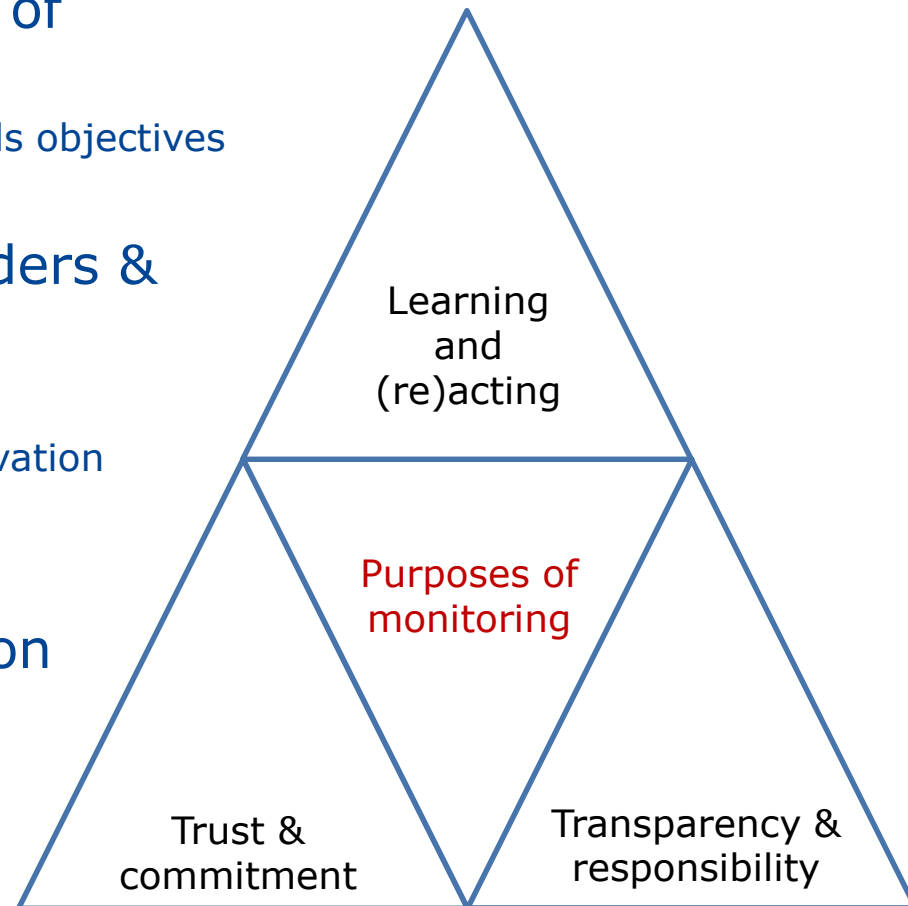


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Why a monitoring system for RIS3?

1. Inform on development & effects of transformation processes
 - Early warning to steer policy measures towards objectives
2. Support participation of stakeholders & promote trust
 - Drive entrepreneurial discovery
 - Provide the basis for causal narratives of innovation processes that can be easily communicated
3. Condense & clarify the intervention logic of the strategy
 - Help people understand the meaning and the effects of strategic actions



How to design and implement a RIS3 monitoring mechanism?

- *RIS3 strategies are not written "in stone", a strategy should be able to adapt to various environmental changes.*
- *EDP should be at the core of the monitoring (who else knows better what is happening)*
- *Changes in the 'ecosystem' can be*
 - (1) Technological related (eg emergence of new technology in an area changing the external context): the outward vision*
 - (2) economy related (eg emergence or disappearance of a key stakeholder on the territory) : the inward vision*

Support to regions & Member States

- Monitoring system = crystallisation of the intervention logic
- Monitoring results and policy output for each S3 priority! (≠ OP monitoring)
- Legal requirement based on ESIF Regulation 1303/2013, ANNEX XI

Policy brief & article

"Monitoring Mechanisms for Smart Specialisation" → Collects input from S3 Platform, DG REGIO & expert workshop
& "Monitoring Innovation and Territorial Development in Europe: Emergent Strategic Management" (forthcoming), *European Planning Studies*

Dedicated website & survey

<http://s3platform.jrc.ec.europa.eu/monitoring>

- Methods, case studies, good practices & data sources
- Survey gathered information on processes to better target our activities

Phase 1 – Recognition of challenges and needs

Economic stagnation; predominance of traditional SMEs with limited presence in international markets; unexploited potential of internationally renowned territorial assets

Phase 2 – Formulation of strategic objectives

Address specific bottlenecks preventing access to international markets: increase diffusion of frontier technologies in traditional SMEs to lower production costs and enhance territorial branding

Phase 3 – Selection of possible solutions to meet the objectives

PRIORITIES

E.1 Levers

Process innovation to enhance fresh products preservation

E.2 Domains/Markets

Agro-food

POLICY MIX

E.3 Actors

SMEs;
R&D centres

E.4 Instruments

Vouchers for accessing high-value-added R&D services; competitive grants for SME consortia + R&D centres

Figure 2. An illustration of the logic of intervention in agro-food.

(3) Monitoring results

Identify explicitly **expected changes** for each S3 priority

Define a result variable & a corresponding **result indicator** for each expected change

- Promote use of survey-based indicators or alternative sources (ethnography, focus groups, etc.) if no official data are available
- A result indicator is defined by three elements: (i) result variable, (ii) baseline value, (iii) target value

Expected changes, result variables & indicators should be consulted with the stakeholders participating to the EDP

(3) Monitoring output

Identify explicitly **output indicators** for each policy instrument

Link output indicators **to specific results**

- Difficulty: identify output targeted to a specific expected change
→ Instruments in a policy mix can act towards several priorities!
- In order to properly reconstruct the policy causal chain, it is recommended to follow the indicators for each priority
- For each indicator, target values should be defined

Appropriate targets for output indicators should be **consulted with the stakeholders** participating to the EDP

Dashboard for integrated visualisation

Priorities	Expected changes	Result indicators	Policy mix	Output indicators
Priority 1 Process innovation in agrofood	Increase adoption among SMEs of advanced technologies for the conservation of fresh products (expected adoption rate of 30% in 5 years)	# SMEs introducing innovative processes for fresh <div style="border: 2px solid green; padding: 5px; margin-top: 10px;"> <p>Policy instruments may serve several priorities. Recommended to break down output indicators by priority in order to reconstruct cause-effect chain</p> </div>	Mix 1 Vouchers for R&I	# SME financed for technological transfer (# and e of chers actually nt; # and e of grants d) rget values - Timeframes
		- Targets - Timeframe		

S3 Platform work on monitoring

Support to regions & Member States

- Monitoring system = crystallisation of the intervention logic
- Monitoring results and policy output for each S3 priority! (≠ OP monitoring)
- Legal *requirement* based on ESIF Regulation 1303/2013, ANNEX XI

Methodological note & policy brief

"Monitoring Mechanisms for Smart Specialisation" → Collects input from S3 Platform, DG REGIO & expert workshop "Monitoring S3"

Dedicated website & survey

<http://s3platform.jrc.ec.europa.eu/monitoring>

- Methods, case studies, good practices & data sources
- Survey to gather information on processes and better target our activities → **result analysis October 2015->Paper published in May2016**

Various tools available on the S3 platform

- *Eye@RIS3*
- *ESIF - Viewer*
- *ICT Monitoring Tool*
- *Regional Benchmarking*
- *EU Trade*
- *Synergies Tool*



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Most popular smart specialisation areas are related to Energy, Health and ICT

Eye@RIS3 database can help identify partners for cooperation

Select region

Match of the following fields:

Capabilities 1 Target Market 1 EU Priority 1

Capabilities 2 Target Market 2 EU Priority 2

	Target Markets
forestry	1. Agriculture, forestry and fishing
aquaculture	2. Fishing and aquaculture
ably, waste and activities collection, and supply	1. Manufacturing and industry 2. Food, beverage and tobacco products
re, forestry	1. Tourism restaurants and recreation
and animal hunting and service activities	
ufacturing and	1. Manufacturing and industry
ter, electronic and optical products	2. Computer, electronic and optical products
transporting and storage	1. Transporting and storage
Ellada	
Description	
	2. Smart green and integrated transport systems

- Most frequently cited fields of RIS³ are related to:**
- Energy
 - Health
 - ICT
 - Agro-food
 - Advanced materials
 - Services / Tourism
 - Eco-innovation
 - Advanced manufacturing
 - Creative industries

See: <http://s3platform.jrc.ec.europa.eu/map>

ICT Monitoring Tool

All selected (28) ▾ All selected (209) ▾ 12 selected ▾

[▶ Show advanced filters](#)

Total: 21,453 million

Grouped by country (28) [By region](#)

Poland	
Italy	
Spain	
Hungary	
France	
Czech Republic	
Greece	

All ICT related Categories of Intervention

- ERDF - ICT categories of intervention
 - Broadband and digital networks
 - e-Government
 - Digital content
 - e-Inclusion
 - e-Health and active and healthy ageing
 - ICT SME support and e-commerce
 - Smart grids
 - Smart cities
 - Non-core ICT categories of intervention in TO2
- ESF - Digital skills
- FAERD - ICT in rural funds

[Search](#)

[Export summary to pdf](#) [Export to excel](#)

[By category of intervention \(27\)](#) [By type](#)

Lithuania	351 M
Sweden	277 M
Estonia	223 M
Latvia	175 M
Slovenia	122 M
Ireland	102 M
Cyprus	75 M



European Commission

Synergies Tool

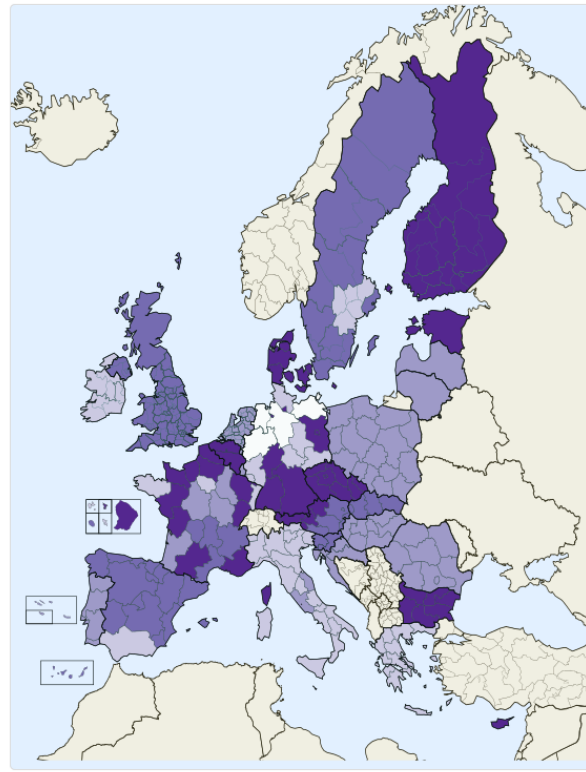
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Synergies Tool

Economic Data
GDP - Euro per capita

Structural Funds
Total ESIF Research & Immo...

Horizon 2020
Total H2020



Economic Data

Structural Funds

Horizon 2020

GDP - Euro per capit:

Total ESIF Research :

Total H2020

Search

Export

Region	GDP - Euro per capita	Total ESIF Research & Innovation	Total H2020
Abruzzo [ITF1]	27	84.74 M	143.31 M
Alentejo [PT18]	77	489.13 M	60.52 M
Algarve [PT15]	81	88.16 M	29.66 M
Alsace [FR42]	21	38.95 M	2.57 M
Anatoliki Makedonia kai Thraci [EL11]	20	135.69 M	26.80 M
Andalucia [ES61]	2	1,538.65 M	1.53 M
Aquitaine [FR61]	56	210.73 M	1.19 M
Aragon [ES24]	102	79.03 M	1.23 M
Attiki [EL30]	18	245.02 M	157.02 m
Auvergne [FR72]	102	67.91 M	51.48 M
Baden-Wuerttemberg [DE1]	201	209.53 M	2.10 M
Basilicata [ITF5]	31	125.22 M	6.66 M
Basse-Normandie [FR25]	179	81.73 M	5.02 M
Bayern [DE2]	202	214.70 M	188.89 M
Berlin [DE3]	203	372.24 M	334.09 M
Bolzano [ITD1]	35	18.76 M	109.20 M
Border Midland And Western [IE01]	21	63.80 M	635.60 m
Bourgogne [FR26]	50	57.17 M	1.52 M
Brandenburg [DE4]	204	450.07 M	93.29 M
Bratislavsky Kraj [SK01]	92	163.56 M	35.14 M

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