Smart Specialisation from the perspective of Horizon 2020

"Universities as motors of innovation in Central and Eastern Europe"

Workshop organised by EUA-KRASP

Warsaw, 13/10/2016

- Role of DG RTD in smart specialisation

- Horizon 2020 Widening actions

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Role of DG RTD in Smart Specialisation - Background

- Origins of concept of Smart Specialisation Strategies (RIS3) in work of Commission's Knowledge for Growth expert group in 2008

- DG RTD closely involved in discussions on adoption of RIS3 as ex-ante conditionality for R&I funding under ERDF for 2014-2020 (2010-2011)

- Experts supported by DG RTD advised on development of RIS3 in EU 12 plus Greece, Portugal & Spain (2013)

- DG RTD expert groups reported on <u>clusters and smart specialisation</u> and in particular on the <u>role of universities and research centres in smart specialisation</u> (2013)

- Finally, an expert group examined RIS3 in the context of <u>Europe 2020 and wider R&I strategy</u> (2014/15).

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Expert group: universities and RIS3

- Established May 2013 within the Work Programme for the Coherent Development of Research Policies (CDRP) and reported end 2013.

- Aim of the expert group was to analyse the role of universities and research centres in the development and implementation of smart specialisation strategies, examine strengths and weaknesses (constraints), identify opportunities and propose recommendations for policy makers.

- Recommendations to the Commission, national and regional authorities and institutions included linking RIS3 and Widening actions; including universities fully in RIS3 process and integrating RIS3 in business-academic relations

- Complemented work of EUA and Smart Specialisation Platform

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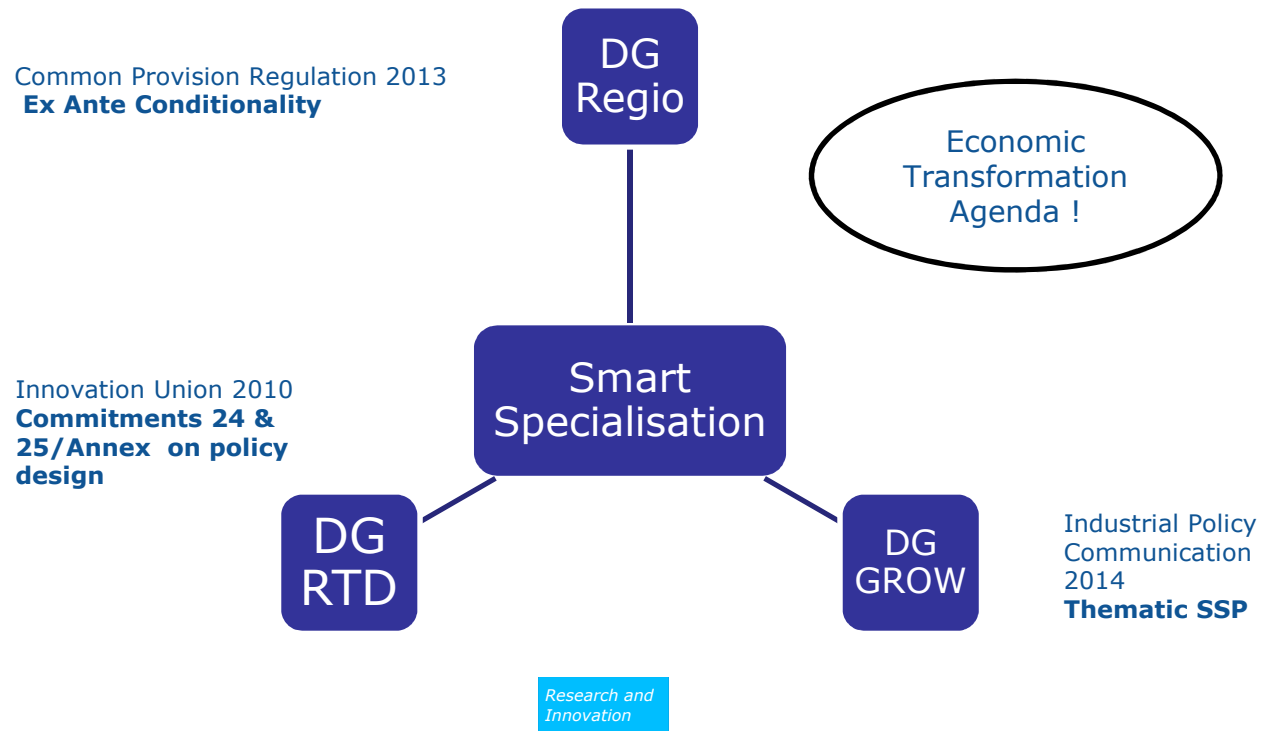# Role of DG RTD in adoption and implementation of RIS3

- Approximately 120 RIS3 adopted or subject to action plans (deadline end 2016)

- DG RTD consulted on content of RIS3 but **also** on related Operational Programmes (internal DG RTD Task Force oversaw the process)

- Since 2012, internal DG RTD working group involves Thematic Directorates in cohesion related issues (OP, RIS3, etc.)

- Close involvement of DG RTD in latest development: Thematic Smart Specialisation Platforms (TSSP) on energy, agri-food and industrial modernisation

- Essential link of RIS3 with synergies between Horizon 2020 and ESI Funds but RIS3 imposes **no** constraint on full participation of MS/regions in all aspects of Horizon 2020 (important issue for universities)

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DG RTD and RIS3 - future

- Indirect but important role of line DGs, including DG RTD, in monitoring and evaluation of Operational Programmes and RIS3

- In complement to TSSP, great scope for synergies and links to RIS3 in activities of Joint Technology Initiatives (JTI): at present Clean Sky in aeronautics and Bio-Based Industries Joint Undertaking, but also scope for others.

- Exchange of knowledge is essential for the promotion of synergies and RIS3. Important role for 'Knowledge Exchange Platform' established with the Committee of the Regions, prioritising Bio-economy & Key Enabling Technologies in 2016 and Energy and Public Sector Innovation in 2017.

- Finally, looking forward to post-2020, DG RTD will contribute to the examination of the future of RIS3 as we did to its origins

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S3: Policy linkages

Common Provision Regulation 2013
Ex Ante Conditionality

DG Regio

Economic Transformation Agenda !

Smart Specialisation

Innovation Union 2010
Commitments 24 & 25/Annex on policy design

DG RTD

DG GROW

Industrial Policy Communication 2014
Thematic SSP

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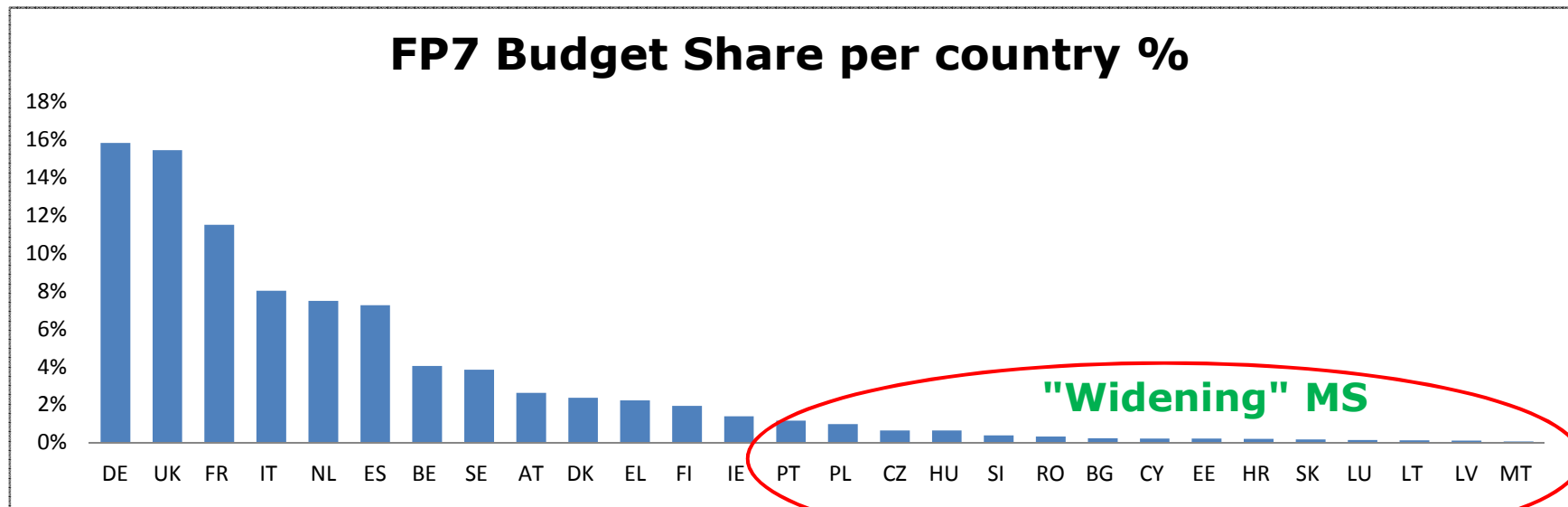
The Widening Package under H2020

Measures in Horizon 2020 under **Spreading Excellence and Widening Participation:**

- Teaming (institution building)
- Twinning (institutional networking)
- ERA Chairs (bringing excellence to institutions)

- NCPs (information, communication, support)
- Policy Support Facility (support for R&I Policy design)
- COST (stimulating cross border science networks)

Total Budget in H2020 ~ *€ 800 million*

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FP7 country participation

FP7 Budget Share per country %

"Widening" MS

Bar chart showing FP7 Budget Share per country: DE ~16%, UK ~15.5%, FR ~11.5%, IT ~8%, NL ~7.5%, ES ~7.5%, BE ~4%, SE ~4%, AT ~2.5%, DK ~2.5%, EL ~2%, FI ~2%, IE ~1.5%, PT, PL, CZ, HU, SI, RO, BG, CY, EE, HR, SK, LU, LT, LV, MT.

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Specific eligibility criteria for WIDENING

- Particular political objectives of WIDENING i

- Necessitate a <u>targeted approach</u> to help t   w performance in R&I

- H2020 legal text >>"low performing RD   s"

<u>Eligibility Criterion:</u> **The Composite Indica   ce**

  ➢ <u>Threshold</u>: MS below 7

"Low RDI Performing" or "Widening"

MS: Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Romania, Slovakia and Slovenia

AC: Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, Former Yugoslav Republic of Macedonia, Georgia, Moldova, Montenegro, Serbia, Tunisia, Turkey and Ukraine

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Teaming objective in H2020

- Creation of new (or significant upgrade of existing) Centres of Excellence in low R&I performing or "Widening" countries

The Partnership: 2 parties in each Teaming project

- (1) the COORDINATOR from a "Widening" country (must be a national/regional authority, research funding agency, university or res. organisation)

- (2) a university or res. organisation with an international reputation in R&I excellence (from all EU28 or AC)

➢ *Implementation in 2 Phases*

Teaming: Scheme Design

Phase 1: Funding the development of a **Business Plan** for the new/upgraded Centre of Excellence facilitated by a teaming process with a leading counterpart in Europe

Proposals (Phase 1):

- Demonstrate the long-term science and innovation strategy of the future Centre
- Outline how this strategy broadly fits with the RIS3 of the Widening country
- Demonstrate that the project is based on a true joint venture between the parties

Phase 2: Subject to the quality of the Business Plan, and the financial commitment for the project from other sources, the Commission may provide further substantial financial support for the **first steps of implementation** of the Centre

Proposals (Phase 2):

- Business Plan (Phase 1 deliverable) with robust financial commitments (national/ESIF/private funds)
- ➤ IMPORTANT: Access to Phase 2 is only available to those proposals already supported in Phase 1!

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Teaming 2014 Call: key stats

- **167** eligible proposals submitted from 20 countries (15 MS & 5 AC)

- Requested budget: **€73.8M** with €11.85M foreseen in the WP

- Average requested EU contribution per proposal: **€ 430.000**

- **31** proposals selected for funding from 14 "Widening" countries

- Most funded proposals in the area of **Physics & Chemistry** and **Medicine & Life Sciences**

- **Frequent 'advanced' partners** in proposals: DE (136) and UK (67)

- **Successful 'advanced' partners** - DE (21), AT (6), FI (6)

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Teaming: Lessons learned

Successful proposals marked by:
- Clear objectives / vision /excellence, engaging strategically in a path of innovative growth
- Well-chosen, carefully structured partnership & strong engagement from parties
- Long term science and innovation strategy
- **Broad alignment with national/regional Smart Specialisation Strategies**
- Long term financial commitments from relevant authorities
- Clear strategy on handling resources

For the next call proposers should:
- Clarify better their vision
- Make clear pointers to integration with medium to long term growth strategies
- Have clear plans on organisational and resource related issues

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ERA Chairs - Objectives

Objectives of the action:

- Bring high quality researchers and managers **(the ERA Chair and his/her team)** to universities and other research organisations with the potential for research excellence.

- Institutions should implement structural changes to achieve excellence on a sustainable basis.

Participants

- One single applicant (mono-beneficiary action) located in a Widening country.

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ERA Chairs: Proposal Design & Impact

Proposals:

- Bottom-up approach but connected with the ERA Chair holder expertise to fully capitalise on his/her presence;

- Include measures to foster ERA priorities (open recruitment, peer review, gender balance, Charter & Code);

- Include a plan to increase Research Capacity - if infrastructures foreseen present a strategy for funding (including possible use of ESIF funding).

Expected Impact:

- Increased attractiveness of institution and region for excellent researchers;

- Research excellence in the fields covered by the ERA Chair;

- Improved capability of the institution to succeed in competitive research funding;

- Institutional changes to comply with ERA priorities.

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ERA Chairs: The ERA Chair holder

- The ERA Chair should be an outstanding researcher and research manager with a proven record of leadership

- The ERA Chair appointment must follow an open and merit-based recruitment process - to be subjected to monitoring by the European Commission

- ERA Chair holder should be appointed in a full time position but part-time arrangements are possible

- The institution should ensure autonomy for the Chair and his/her team

- ERA Chairs can be of any nationality

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ERA Chairs 2014 call – Successful proposals

Institution Country	Proposals per Country in the main list
PT	4
EE	4
CY	2
PL	2
HR	1
RO	1
Total	14

ERA Chairs: Lessons learned

Lessons learned for future calls:

- Clearly define objectives towards institutional changes

- Demonstrate the role and autonomy of the ERA Chair holder

- Work Packages should be consistent and contribute to an overall Action Plan

- Management structures need to be well defined and simple.

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Twinning: Aim, Objectives & Partnership

Aim of the action:

Strengthen a defined field of research in a university or research organisation from a Widening country by linking it with at least two internationally-leading research institutions in other Member States or Associated Countries.

Main objectives:

- Enhance the S&T capacity of the institutions-Focus on institution in Widening country

- Raise the research profile of the institution and of its research staff

The Partners: (Minimum Conditions)

- **ONE** institution located in a "Widening" MS/AC (**COORDINATOR**)

- A **minimum of TWO** additional partners from two different MS or AC other than the country of the coordinator.

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Twinning: Proposal Design & Impact

Proposals:

- Scientific strategy for excellence and innovation in a defined area of research;

- Outline the scientific quality of the partners;

Activities supported:

- Short term staff exchanges; expert visits and short-term training; workshops; conference attendance; dissemination and outreach activities.
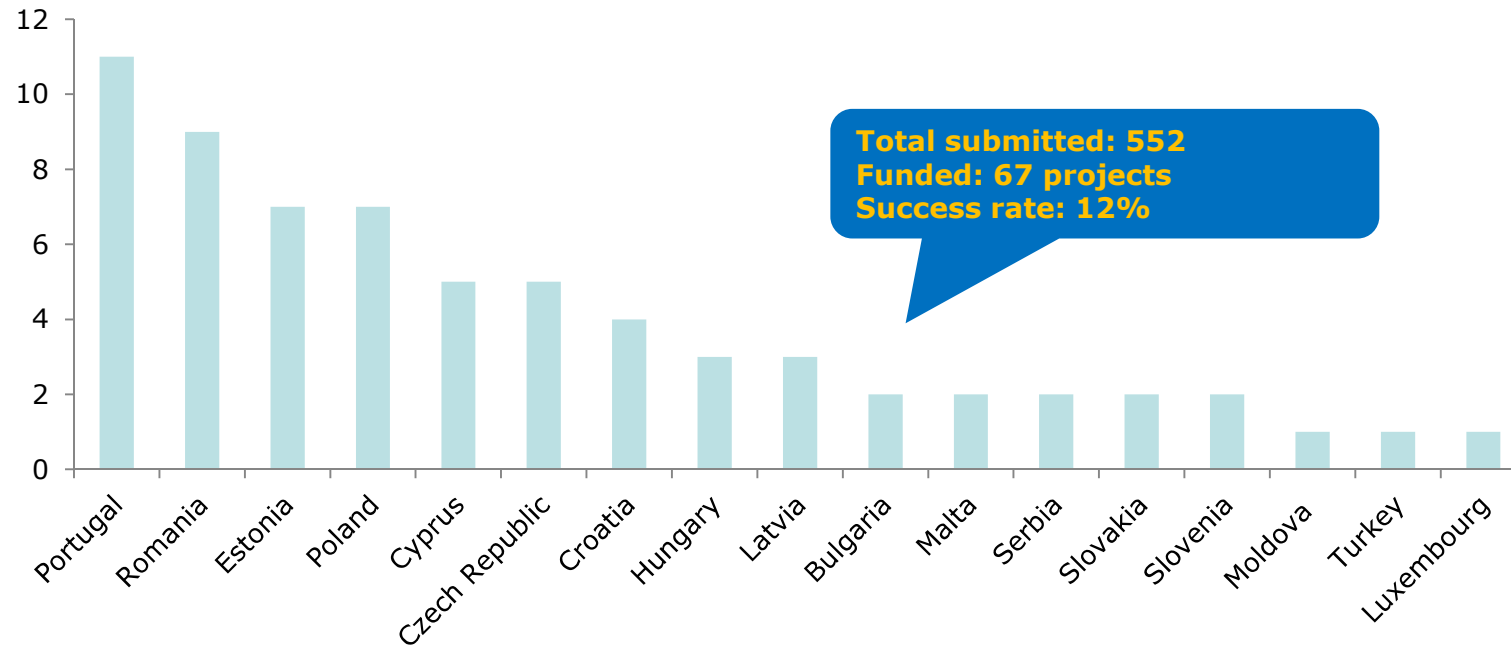
Expected Impact:

- Research excellence, in particular, in the selected field of research;

- Improved capability to succeed in competitive research funding;

- Enhanced reputation, attractiveness and networking;

- The expected potential impact of the project illustrated by a number of indicators.

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Twinning: 2015 call statistics
Successful Proposals: country of coordinator

Total submitted: 552
Funded: 67 projects
Success rate: 12%

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Twinning: Lessons learned

Lessons learned for future calls:

- Clear definition of the scientific strategy towards excellence in the relevant research field;

- Better illustration of the scientific qualities of "advanced" partners and their added value to the project;

- Outline the expected impact of the twinning exercise on the institution in the Widening country (and even at the national/regional level) based on specific indicators.

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Learn more:

Horizon 2020 Participant Portal:
http://ec.europa.eu/research/participants/portal/desktop/en/opportunities/index.html

Teaming 2014 Call press release:
http://europa.eu/rapid/press-release_IP-15-3885_en.htm

ERA Chairs 2014 Call press release:
http://ec.europa.eu/research/index.cfm?pg=newsalert&year=2015&na=na-090213

Thank you for your attention

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