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Strengths and bottlenecks in the Lithuanian R&I framework, with regard to Stairway of Excellence

Dr. Agnė Paliokaitė

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Outline

1. Factors determining the participation in Horizon 2020 / ESIF
2. Existing up/downstream activities and potential synergies
3. Challenges ahead

Source: Stairway of Excellence Study on Lithuania, commissioned by EC JRC IPTS, http://publications.jrc.ec.europa.eu/repository/bitstream/JRC97303/s2e%20report%20lithuania%20-%20final.pdf

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Factors determining participation in R&I calls funded by ESIF

Push factors not too different for PROs and companies:

- Capacity development. Focus on R&D infrastructures and covering HR costs, esp. for new researchers.
- Reduced R&D funding (PROs) and effect of economic and financial crisis (SMEs).
- Relatively low competition (at least 50% applications get funding).

Limiting factors:

- Limited absorptive capacities of indigenous SMEs, further constrained by economic crisis, competition btw measures, and lack of 'soft' capacity building and restrictive definition of 'R&D'.
- High administrative load (suboptimal - formal, technical, 'desk-top', long taking - selection procedures, excessive bureaucracy, limited flexibility esp. regarding public procurement) reduces the number of riskier R&I projects with potentially higher impact and facilitates substitution effect. Hence, public support may be replacing, rather than complementing, private expenditures on innovation and R&D.
- Limited human resources and administrative/management capacities (PROs).

Factors determining national participation in FP7 / Horizon 2020

Push factors:

- Dominance of the public sector R&I - stronger push factors and excellence base. Key motivation: scientific excellence, prestige and recognition at international level, possibility to update R&D skills and develop new generation of researchers. Institutional funding of PROs takes into account participation in FP7 / Horizon 2020.

Limiting factors:

- Companies:
  - R&D excellence and capacities to carry out/co-finance large scale projects.
  - High risks: high cost of coordination, low success rate, delayed commercialization.
- PROs:
  - Availability of human resources + high administrative load from both ESIF/FP7.
  - Individual motivation: researchers career system, high teaching load, salaries.
- Both: Weak links / contacts with EU networks and weak LT culture of cooperation.
- Systemic / governance factors limiting the synergies:
  - Coordination failures result in lack of efficiency and missed opportunities.
  - Evaluation and monitoring has been mainly missing the dimension of international value chains and intelligence on how regions diversify into new growth paths.
  - Weak employment of international peer review and other evaluation instruments for building R&D performers' capacity to compete at international level.

Existing up/downstream actions and potential synergies

ESIF → H2020

- Capacity building → R&D.
  - Upstream sequential funding (research infrastructures)
  - „Joint projects“. 30 projects funded by „Promotion of high level international research”.
  - **New.** Open partnerships.
  - **New.** Parallel laboratories
- Additional scores for international collaboration (LMT Global Grant, Intellect LT etc – continued in the new period).
- **New.** Innoconnect LT – involvement in Enterprise Europe Network.

+ Partial compensation of FP7/H2020 costs (only PROs), technical assistance and awareness raising (but not from ESIF).

H2020 → ESIF

- R&D → Innovation.
  - „New Opportunities“.
  - **New.** Inosertification, Inopatent.
  - **Potential.** Newly developed pre-commercial procurement measure could be linked to Horizon 2020 (70% co-funding).
- **New.** Simultaneous or alternative funding for high level Excellence Centres funded/not funded by Horizon 2020 „Teaming“.
- **Potential.** Alternative funding for nearly selected Horizon 2020 applications (Global Grant, LMT).

Key challenges ahead

- **Need to diversify R&I funds.** 2020 mark the possible tipping point after which, due to decreased ESIF, R&I activities might not only stagnate but diminish, unless new behaviour is created.
- **Smart specialisation.** A structural change, not 'old wine in new bottles'. Cross-border dimensions.

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Specific challenges

Streamlined targets, policies, incentives for internationalisation.

- None of smart specialisation priorities should include purely national agendas.
- Limit the RI infrastructure investments to those consortia who are able to demonstrate long term vision, strong industry commitment and international dimension.
- Targeted up/downstream actions: Parallel labs, ESFRI, alternative funding for nearly selected H2020 applications, take-up of H2020 results (prototypes etc)
- A new governance challenge for national policy makers - coordinated priorities and policies within the Baltic Sea Region. Interreg BSR – can be a good starting point.
- Improved coordination (*although coordination of timeframes and criteria of the calls didn't work in the past) and* communication btw ESIF authorities and R&D communities, as well as improved strategic intelligence capacities.

Facilitate links to EU networks and build cooperation culture

- Reinforce existing science-industry partnerships and their linkages with EU counterparts establishing framework for wider national participation in new types of EU level R&I collaboration.
- Extend and strengthen measures like Inoconnect to fund various networks and researchers mobility.

Specific challenges (continued)

Business R&D: critical mass and absorptive capacities. Making H2020 attractive for Lithuanian SMEs

- Tailored approach to business R&D capacity building: ESIF for building capacities of potential and new innovators, while pushing mature R&D performers towards H2020 and high impact innovations.
- Strengthen national framework for proactive position of Lithuanian entities in project preparatory activities through dedicated project assistance and partner search grant scheme available for both public and private R&D performers.

Motivation and skills at the level of individual researchers

- Change needs to happen at institutional level. Researchers' salaries and contracts. E.g. researchers' contracts should be adjusted to provide time to work with the business community and Horizon 2020.

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Dr. Agnė Paliokaitė,
Visionary Analytics

Agne@visionary.lt

Thank you