UDC 336: 334: 338: 005: 35

Bogoyavlenska Yu. V., Doc., Ph.D., Dr. Zhytomyr Polytechnic State University

Research and Innovations Capacity Development in the EU and for widening countries

The European Union recognises significant role of research and innovations (R&I) for guaranteeing the European leadership. The new phase of competitive struggle between global leaders – the EU, the USA, and China – created new strategies for each of them. At the same time economic development impossible without small and medium sizes enterprises effective functioning, new types of financial models appearing, outsourcing and outstaffing, interregional cooperation between widen and widening counties.

Huge impact and contribution to socio-economic development has R&I development. To enable research and development (R&D) there's should be capacity. And for each stakeholder should be visible and understandable at least three answers on the questions, namely:

- who key actors are;
- what are their capacities;
- what competences should be developed also by the means of co-operation.

The EU has forty years history of investments into R&I. The strategy for providing global leadership realising also by the means of the framework programmes (FP). The most recognizable are Horizon2020, Horizon Europe, EIT, Interreg Europe, etc. Also funds had been created and functioning, for example European Regional Development Fund (ERDF). Same steps are keeping doing by the USA. At the same time the USA are not will to invest on pre-seed stages, – this type of expenses are mostly provided by the established after the second world war universities, which have the biggest budgets now. In cooperation with business R&I capacity development happens. China has state strategy regarding all directions, and too hierarchal. Between these two giants to stay leaders for EU is one of the priorities.

The age of technologies with faster return of investments than half of the century ago and even less causes transformation in budgets structures in widen and widening countries. Each state, at the same time, planning 2% of GDP for the state defense, because selves' protection in modern wars is about technologies as well. For example, Lithuania plans 3.2% of GDP. The capacity also depends on structure and strength of economy, labour forces, business climate. Ability to innovate should be proposed and developed by the means of policies and within the countries platforms on each stage of people and institutions life-cycle.

There's a difference between widen and widening countries. Each programme reviews strategies to make possible advanced R&D systematically, to produce new knowledges for innovations, to be competitive during long period of time. The list of widening countries which recommended to be supported by widen countries are reviewing for each FP. It is necessary to increase performance of R&I systems of widening countries (up to 9 times by various assessments), wide throughout all regions. Partnership should be established, outcomes and deliverables should be in-line with joint strategy, guarantee sustainability. Thus, each actor deals for R&D should pay special attention on innovations, and for business it means innovations in products and in processes, inner culture of creating R&I, R&D infrastructure improvement.

From R&D efforts on all levels (international, national, cluster, organisational) appears advantages, key for the EU-economy, and leadership. The EU invests 56.6 billion euros into innovation and research in 2021-2027 [1]; through smart specialisation strategy (S3), interregional innovation investments mobilisation of innovational potential of the EU regions keep going.

Widening countries are encourage to the developing by supporting with valuable information, knowledge, resources, legislative norms and EU-standards sharing, trainings, webinars, shadowing, best practices supporting implementation. On the microeconomic level within the institutions in widening countries it's valuable to develop HRS4R and related strategies, to implement talent management systems, to organise regular trainings for competencies development. Joint partner strategies are welcomed.

This means that these long-term investments (public financing of R&I) creating added value, boostering long-term economic grow, social wellness, creating new teams of people, firms, jobs, transforming clusters. And, it's very important for local and global development, for the EU-leadership.

References:

1. Research and Innovation. European Commission. URL: https://ec.europa.eu/regional_policy/policy/themes/research-innovation_en (date: October 28, 2024).

The paper "Research and Innovations Capacity Development in the EU and for widening countries" has been developed within the framework of the project "Widen performance in research and innovation capacity and competence Across EU" ("WIDE AcrossEU" 101 158 561 Horizon Europe program. Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.



