

THE EU INNOVATION POLICY

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Summary

The article presents the main assumptions of the innovation policy in the EU. It describes the territorial scope of that policy, the instruments supporting the innovation and their implementation in the EU. The list of programs to support innovations includes: Key Enabling Technologies; Special Economic Zones; Leading National Research Centers; TAFTIE (The European Network of Innovation Agencies); Joint Research Centre; European Cooperation in Science and Technology (COST).

Keywords: innovation policy, instruments, conditions, territorial scope

Introduction

The role of innovation in Polish economy gradually grows. Thanks to innovations, planning, preparing, production and using of new products, industrial processes and services are faster and more effective. They have a key impact on better job creating, development of ecology society and improvement of life quality, as well as maintaining high level of European competitiveness on the global market. Innovation in European economy plays more and more important role in process of developing competitiveness, both in particular countries and regions as well as entire continent. Innovation policy goes to create appropriate system, which will be able to ensure effective connections between science, technology, administration and market.

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Definition of innovation policy

Innovation policy is an element of science and technology policy. Its main goal is to support economy innovation, what means help in starting new products, services, technological processes and management. The innovation policy is focused on firms, especially small and medium-sized enterprises (SME), for which it is always a risk to launch innovations. This is achieved by creating a climate friendly for innovation, supporting innovative culture and developing services for innovation⁴.

Innovation policy of the state is very important for innovation activity of enterprises. It is defined as state activity, which supports the innovation processes in economy by institutional, economical, law and others instruments in order to realize the goals according to social-economical policy.⁵

The goal of innovation policy is to support the innovation economy, defined as help in starting new products, services, technological processes and management⁶. The other important goal concerns investment in human capital and creation of infrastructure stimulating intellectual development and leading to using knowledge in practice⁷.

According to international standards set in the OECD documents (Frascati Manual and Oslo Manual), innovation policy is one of economical policies and involves the following areas⁸:

- strengthening links in national innovation system,
- creating and developing effectiveness of starting innovations, both in engineering and technology, as well as in organization and education,
- use of innovation as a crucial element of economic growth and increasing number of sustainable jobs,
- structural, technical, technological and quality changes in industry,
- international cooperation and globalization processes in the economy.

Innovation policy seeks to create the right system that will provide effective connections between science, technology, administration and market. As a result of these links, it is possible to quickly launch innovations increasing the competitiveness of the market and improve the quality of life of the society.

⁴ <http://www.pi.gov.pl>

⁵ W. Janasz, K. Kozioł-Nadolna, *Innowacje w organizacji*, PWE, Warsaw 2011

⁶ E. Stawasz, *Innowacje a mała firma*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź 1999

⁷ E. Passella, *Podnoszenie konkurencyjności regionów w Polsce poprzez wdrażanie innowacji w małych i średnich przedsiębiorstwach* [in:] M. Klamut (Ed.), *Polityka budowy regionu konkurencyjnego. Strategie – modele – postęp technologiczny*, Wydawnictwo Akademii Ekonomicznej im. O. Langego we Wrocławiu, Wrocław 2000

⁸ W. Janasz, K. Kozioł-Nadolna, *Innowacje w organizacji*, PWE, Warsaw 2011

Contemporary innovation policy is: ⁹:

- policy of promoting innovations and diffusion of technologies,
- policy treating innovations as a network process, shared by many independent stakeholders,
- policy of “soft” support for technology’s users, containing consulting, training, information and promotion services, as well as human flow between enterprises and different institutions cooperating with them,
- policy, in which state is a coordinator and easing factor, which creates institutional frames for self-regulation of flowing and innovation diffusion,
- in majority of developed countries it is a domain of regional policy,
- it is addressed to SME’s sector, although the effects of many projects undertaken by this policy may also be used larger enterprises.

Contemporary state innovation policy becomes an indispensable component of small enterprises’ environment of in the field of innovation. Its role is to help firms to build absorptive and innovative capacity and to facilitate the access to external services for innovation. In other words, the aim of innovation policy is to minimize the difficulty of making and implementation of innovation, reducing the risk and uncertainty and assistance in making the optimal choice for companies deploying innovations.

Scope of the EU innovation policy

The scope of innovation policy can be divided into three different levels of innovation effects on the development of the European policy in relation to the areas of its operation.

The first level includes the supranational level, which consists of

- **Europe 2020 Strategy** is the EU’s growth strategy for the next decade. It aims at smart, sustainable and inclusive growth with greater coordination of national and the European policy¹⁰.

The strategy identifies five headline targets, concerning employment, education, research and development, climate change and energy as well as poverty. These in turn are broken down into seven flagship initiatives. They provide a framework by which the EU and national authorities mutually reinforce their efforts in the areas of supporting / complementary priorities

⁹ *Oslo Manual, Guidelines for Collecting and Interpreting Innovation Data*, third edition, a joint publication of OECD and Eurostat, OECD 2005

¹⁰ *EUROPE 2020 A strategy for smart, sustainable and inclusive growth*, Brussels, 3.03.2010, COM (2010) 2020 final

of the Europe 2020 Strategy. These areas are: innovation, the digital economy, employment, youth, industrial policy, poverty, resource efficiency.

- **Digital Agenda for Europe** is one of the seven flagship initiatives of the Europe 2020 Strategy, which sets targets for growth in the European Union by 2020. The Digital Agenda proposes better use of the potential of information and communication technologies to support innovation, growth and progress¹¹.

The main goal of the Digital Agenda is to develop a digital single market and thereby achieve sustainable economic and social benefits, aiming to lead Europe towards a smart, sustainable and inclusive growth.

- **Innovation Union** is one of the seven flagship initiatives announced in the Europe 2020 Strategy. Its aim is to improve conditions and access to finance for research and innovation and to ensure that innovative ideas can be turned into products and services that drive economic growth and create jobs¹².

The project focuses on R&D and innovation policy, in the context of resolving the biggest challenges for society, such as climate change, energy and resources efficiency, health and demographic change. It also unfolds the Europe 2020 objectives in the areas of research, development and innovation, as well as a complement of other flagship initiatives such as the ‘Digital Agenda’, ‘Youth on the Move’ and ‘Agenda for new skills and jobs’.

The next level of innovation policy impact is the national level, which consists of such documents as :

- **Long-term National Development Strategy: Poland 2030. A third wave of modernity.** It is a strategic document setting out the vision and directions of development of the country in the long term until 2030. Together with the National Spatial Development Concept, it is a framework of a new strategic agenda in a time horizon of 2030. It is complemented by the Medium-term Strategy of National Development and 9 horizontal strategies for 2020. It is both a continuation and explication of the report Poland 2030. Development Challenges¹³. The concept of the Long-term National Development Strategy is based on the presentation of the most important 25 decisions to be taken as soon as possible to ensure the economic and social development in

¹¹ Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions, A Digital Agenda for Europe, Brussels, 19.5.2010, COM(2010)245 final

¹² *EUROPE 2020 A strategy for smart, sustainable and inclusive growth*, Brussels, 3.03.2010, COM (2010) 2020 final

¹³ *Trzecia fala nowoczesności Długookresowa Strategia Rozwoju Kraju*, Ministerstwo Administracji i Cyfryzacji, Warsaw, 11.01.2013

the perspective of 2030, aimed at improving the quality of life. The third wave of modernity means the ability to connect modernization, innovation, digital impetus to the improvement of quality of life and civilization leap, which Poland in the next 20 years must make to avoid the danger of periferisation. The strategy also identifies the key challenges of macroeconomic policy, including the need for a reallocation of public expenditure for development.

- **The National Strategy of Regional Development 2010-2020: Regions, Cities, Rural Areas** is a comprehensive medium-term strategic document relating to a regional policy of socio-economic development¹⁴. This document defines the objectives and priorities of the Polish development in territorial dimension, as well as rules and instruments of regional policy, the new role of the regions in the context of regional policy and draft of coordination of actions undertaken by ministries. The document also outlines how public entities, in particular the government and regional governments achieve the strategic objectives of national development.

The last level is the impact of innovation policy is regional level, which includes:

- **Regional Innovation Strategies (RISes)** are based on analysis of technological needs, possibilities and potential of the sector and scientific research, as well as companies in the field of management, finance, training, organization, and the technology itself¹⁵. They aim to assist regional or local authorities and other regional development organizations in defining and implementing an effective system for encouraging innovation in the region. Strategies define innovative policies and methods of construction and optimization of regional innovation supporting infrastructure.
- **Regional Operational Programes (ROP)** are documents specifying the areas and activities to promote the development of the province. This program is a fundamental instrument of development, which are disposed by regional government authorities. The choice of individual indicators and the construction of ROP takes into account the rules on thematic concentration, differentiation between various regions and the level of wealth and absorption capacity. The ROP includes changes taking place in the regions, as well as indicators quantifying the objectives set in the strategic documents, i.e. the Europe

¹⁴ *Krajowa Strategia Rozwoju Regionalnego 2010-2020: Regiony, Miasta, Obszary wiejskie*, Ministerstwo Rozwoju Regionalnego, Warsaw 2010

¹⁵ <http://www.pi.gov.pl/PARP>

2020 Strategy, the National Development Strategy Poland 2030, the National Strategy of Regional Development, or strategies prepared for the individual regions. These indicators concern not only the number of inhabitants but also matters related to innovation, entrepreneurship level, expenditure on research and development, transport, infrastructure and environmental protection.

Instruments supporting innovation in the European Union

The most important instruments supporting the development of innovation include:

- **Key Enabling Technologies (KET)** - key enabling technologies in the EU have been recognized to play an increasingly important role in the development of industrial and technological base necessary to implement smart, sustainable and inclusive growth in Europe¹⁶. They are also essential for strengthening Europe's capacity for innovation and development of new products and services needed for smart, sustainable and inclusive growth in Europe. As part of an integrated approach to KETs, dedicated support will be provided for activities utilizing the accumulated benefits from combining several KETs, in particular through the promotion of a wider pilot and demonstration projects.
- **Special Economic Zones (SEZ)** – Polish administratively separated areas where investors can pursue economic activity on preferential terms. The purpose of this support instrument is to accelerate regional development by attracting new investment and promoting job creation¹⁷. SEZ are an investment incentive, contributing to the increased inflow of new projects to Poland. Zones' functioning is planned by 2026.
- **Leading National Research Centers (KNOW)** are flagship units of Polish science. Competition for the KNOW status is aimed at basic units of universities, research centers, as well as research consortia¹⁸. Conditions to apply for KNOW status include conducting research at

¹⁶ Communication From The Commission To The European Parliament, The Council, The European Economic And Social Committee And The Committee Of The Regions 'A European strategy for Key Enabling Technologies – A bridge to growth and jobs' /* COM/2012/0341 final */

¹⁷ <http://www.mg.gov.pl/Wspieranie+przedsiebiorczosci>

¹⁸ www.nauka.gov.pl/krajowe-naukowe-osrodki-wiodace

- the highest level, right to award science degrees, conducting doctoral studies associated with the ongoing research and ensuring high quality education.
- **TAFTIE (The European Network of Innovation Agencies)** is an association of organizations working to support and promote the European economic potential by promoting innovative products, processes and services¹⁹. The aim is to develop cooperation between member organizations and to support participation in international projects related to innovation and research and development.
 - **Joint Research Centre**, whose mission is to provide pro-customer scientific and technical support in creating, shaping, implementation and monitoring of the European Union policies. JRC's key areas for action are: food, chemical products and health; environment and sustainable development; nuclear safety and protection of nuclear installations and horizontal activities such as reference materials and measurements; technical and economic forecasts, public security and combating fraud.
 - **European Cooperation in Science and Technology(COST)** brings together researchers and experts from different countries and different fields, creating an European Research Area. COST does not fund research itself, but supports collaboration by researchers and experts meetings, conferences or short term scientific exchanges²⁰. COST announced calls for proposals for actions contributing to the scientific, technological, economic, cultural or societal development of Europe.

Terms of supporting innovation policy of the European Union

Increase of innovations in the economy depends on strong cooperation between the science sector and the industry. This requires the use of instruments which on the one hand encourage entrepreneurs to take measures for the development of enterprises, based on implementation of research results, and on the other hand they encourage scientists to take up research and development according to the needs of entrepreneurs²¹. It plays an important

¹⁹ <http://www.taftie.org/>

²⁰ <http://www.cost.eu/>

²¹ T. Geodecki, Ł. Mamica, *Polityka Innowacji*, Polskie Wydawnictwo Ekonomiczne, Warsaw 2014

role to support the development of business environment and activity of entrepreneurs. It seems that it is necessary to reform the rules and methods for granting state aid in the European Union to increase the level of innovation and productivity, by creating a more efficient instrument for control the external effects of state aid that affect the market and competition.

At this moment, EU countries must overcome the same barriers associated with innovation development of their economies. Problematic, however, is to establish common guidelines that would contribute to breaking these barriers without compromising the competitiveness of the internal market²². It should be noted that the definition of a common policy on the EU innovation is possible, provided that it will have common objectives as well as a framework for improving the functioning of the internal market. It also should enable EU countries to make an individual choice of support instruments, corresponding to the level of development of a Member State.

Number of forms of support proposed by the Commission in “Framework for State aid for research, development and innovation” along with various categories of aid intensity, creates complicated system, which is unfriendly to entrepreneurs²³ because there are too many forms of support. It appears, therefore, that the Commission should adopt a more flexible formula and allow Member States to identify and determine the priorities of needs on their own – keeping the limit of general funds.

Definition of a common policy on innovation in the European Union is possible on condition that the common objectives and a framework for improving the functioning of the internal market will be defined. EU Member States differ in the level of innovation in the economy, as well as in terms of adopted policies. Thus the role of the European Union should be the definition of a common framework and recommendations setting the goals that must be achieved to allow EU Member States to choose the most appropriate instruments of implementation by themselves.

Conclusions

The EU innovation policy has many directions and instruments, which provide stakeholders with a possibility of involvement in its implementation. Innovation policy is currently a very important sphere of the EU activity.

²² M.A. Weresa, *Polityka Innowacyjna*, Polskie Wydawnictwo Ekonomiczne, Warsaw 2014

²³ Communication from the Commission — *Framework for State aid for research and development and innovation* (2014/C 198/01)

In different circumstances, it is a chance to solve the socio-political problems, because the demand for innovation could be formed by combining social objectives with attention to quality and social conditions. The reference is, inter alia, the development of multimedia for educational needs, social mobility or protection of the environment.

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