

SCIENCE

OVERVIEW

Science and innovation in Latvia are the key resources to achieve the state development aims, therefore the main aims of science and technology development policy are to promote the change of national economy model in Latvia, e.g., promoting the transition from labour-consuming economy towards knowledge economy.

Drawing up the aims and objectives of national science and technology development policy in Latvia the following principles are being observed:

- development of science and technology is the determinant factor for sustainable development of economy, to ensure the welfare of society and preserve environment and natural resources;
- science and research are the basis of national culture, national identity and self-awareness and necessary prerequisite for the development;
- science, research and innovation in Latvia form an integral, harmonic part of the European Research Area and the science in the world;

The scientific potential in Latvia should be developed on the basis of existing scientific traditions. Such traditions exist in organic chemistry, medical chemistry, genetic engineering, physics, materials science and information technologies as well as in several social and humanitarian sciences. The highest number of inventions, which are patented both nationwide and abroad, are made in the branch of medical chemistry. From 2001 till 2006 Latvian scientists of this field acquired 147 patents. These patents mainly protect inventions in the field of new medicine, e.g., mildronat and its descendants, new medicaments to cure cancer and cardiac-blood-vessel medicaments.

The scientific activities in Latvia are determined by the Law on Scientific Activity and other normative acts and policy planning documents. At the moment it is important to implement the Framework Programme for Research and Technological Development for the years 2009-2013 stating the priority in the development of science and technology and the tasks of the government policy to be achieved.

Scientific institutions in Latvia are scientific institutions, higher education establishments, commercial companies as well as other institutions in the articles of association by-law or constitution of which scientific activity and participation in the process of acquiring and improving scientific qualification is provided for and which are registered in the Register of scientific institutions. There are 133 scientific institutions, inter alia, 12 institutions are state founded. The scientific work is mainly organised in Riga and Riga region but during the last years the gradual development of scientific research capacity is taking place in regions, too.

The total funding for research and development in 2008 in Latvia constituted 99,5 million lats or 0,61% of gross domestic product (GDP), the funding from public sector (state and higher education) comprised 0,3% but foreign funding (inter alia, structural funds) – 0,15% of GDP.

SCIENCE IN FIGURES

Proportion of people employed in research from total number of employees, %	0.95
inter alia, in higher educational establishments, %	0.67
State Patent applications in 2008	206
Trademark applications in 2008	1536
European Patent applications in 2007	20
European Patent applications in first three quarters of 2008	14

DEVELOPMENT

In order to increase the competitiveness of Latvian science the expertise of independent science, technology and innovation system was organized in 2009 initiating the development of hierarchic system of state scientific institutions and consolidation of state scientific institutions. In 2010 the work will be continued to develop effective management system, implementing three level hierarchy of scientific institutions – about 25 scientific institutions on regional level, 4-5 scientific institutions on the European level and 10 scientific centres of state significance and it is planned to allocate the funding from the European Regional Development Fund.

According to the aims determined by the European Union level of „EU2020” strategy that should be achieved by 2020, investment in scientific research should constitute 3% of GDP. Despite the strict fiscal policy for the forthcoming years in our country, Latvia has set the quantitative target concerning the investments in science and development: in 2015 1.0-1.5% of GDP but in 2020 1.5 -2.0% of GDP.

SCIENCE

In order to achieve the science and technology development policy and quantitative targets concerning investments in research and development it is necessary:

- to support scientific activities in order to renew and develop intellectual potential and infrastructure;
- to optimize the structure of state budget expenses and to improve the effective application of current funding in order to secure necessary investments in science and technology development, thus achieving the stage when mechanism of public funding allocation is able to ensure increasing raise of investments in greater part of private sector
- to promote competitiveness of scientific activities at the international level and promoting international cooperation in the field of science and technology development
- to promote the transfer of science and technology by implementing institutional environment for innovative activities and support measures for developing public and private partnership;
- continue to implement support measures with the aim to support access to financial resources for small and medium size businessmen and for innovative projects in business management (seed capital, risk capital, loans with reduced interest);

In order to implement purposefully the science policy and use effectively financial resources, since 2001 the Cabinet of Ministers determines priority directions in science to finance fundamental and applied research. In 2009 five priority directions in science were determined for years 2010-2013: 1) energy and environment; 2) innovative materials and technologies; 3) national identity; 4) public health; 5) sustainable usage of local resources – new products and technologies.

Latvia has been actively involved in international scientific programmes. During the Seventh Framework Programme (2006-2013) till the end of December 2009 there were 551 project proposals submitted and 123 project proposals were successful (pass-rate – 22.32%, in 2008 the pass-rate was 17%, for comparison the average pass-rate in the EU is 21.68%). Taking into account the low number of scientists in Latvia in comparison to the EU memberstates, this is a significant achievement of Latvian scientists.

SUPPORT FROM STRUCTURAL FUNDS IN 2007-2013

- 1 000 full time scientific workers will be recruited in the field of science;
- 780 full time scientific workers will be supported which constitutes 10% of total number working in scientific research
- 200 research projects and 30 international collaboration projects will be supported;
- 35 scientific institutions will be renovated and modernised
- academic network of national significance will be developed to ensure scientific activities and research

INTERNATIONAL COOPERATION

Latvia is especially interested in promoting the international cooperation in the field of the adopted priority directions in science in 2009 in the framework of adopted agreements and implemented projects as well as searching for new cooperation possibilities. The current main activities in the field of science are the following:

- Participation in the European Union research and technology development programmes (Framework programme, EUREKA, Eurostars, COST, ERA-Net etc.);
- Activities aimed to ensure the integration of Latvian science and research in the European Research Area by supporting the involvement in technology platforms and in other common international level activities;
- By promoting the exploration in the field of space research in Latvia the international cooperation is developed in this field, inter alia, in the framework of European Union programmes and the European Space Agency;
- In order to promote bilateral and multilateral cooperation in the field of scientific research and technology development among EU memberstates and other countries, the international interministerial and intergovernmental agreements and cooperation documents are signed among partner organisations.

CONTACTS AND INFORMATION SOURCES

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