GOVERNMENT OF THE REPUBLIC OF LITHUANIA

RESOLUTION
No 1263

of 24 November 2008

ON THE APPROVAL OF THE DEVELOPMENT PROGRAMME FOR THE INTEGRATED SCIENCE, STUDIES AND BUSINESS CENTRE (VALLEY) SANTARA

Vilnius

Implementing the provisions of Objective 4 of Part II, "Implementation of the Microeconomic Policy", of the National Lisbon Strategy Implementation Programme 2008-2010 approved by Resolution No 1047 of Government of the Republic of Lithuania of 1 October 2008 (*Valstybės žinios* (Official Gazette) No 124-4718, 2008), pursuant to paragraph 21 of the Concept of the Establishment and Development of Integrated Centres (Valleys) of Science, Studies and Business, approved by Resolution No 321 of the Government of the Republic of Lithuania of 21 March 2007 (*Valstybės žinios* (Official Gazette) No 40-1489, 2007), with regard to the decisions adopted during the 17 July 2008 sitting of the Commission on the Development of Science, Technologies and Innovation formed by Resolution No 366 of the Government of the Republic of Lithuania 4 April 2005 (*Valstybės žinios* (Official Gazette) No 45-1449, 2005; No 114-4644, 2007) and with regard to Minutes No TE-37 of the 20 November 2008 sitting of the Commission on the Development of Integrated Centres (Valleys) of Science, Studies and Business, formed by Order No ISAK-1118/4-231 of the Minister of Education and Science and the Minister of Economy of 5 June 2007 (*Valstybės žinios* (Official Gazette) No 64-2465, 2007), the Government of the Republic of Lithuania has resolved:

1. To approve the Development Programme for the Integrated Science, Studies and Business Centre (Valley) SANTARA (as appended).

2. To instruct:

2.1. the Ministry of Education and Science to adopt, by 17 February 2009, the description of the laboratory equipment of the integrated science, studies and business centre

(valley) SANTARA after coordinating it with the ministries providing funds to acquire this equipment;

2.2. the Ministry of Education and Science, the Ministry of Finance to take part in the implementation of the Development Programme for the Integrated Science, Studies and Business Centre (Valley) SANTARA (hereinafter referred to as "the Programme").

3. To recommend that Vilnius University, Vilnius Gediminas Technical University, public institution Visoriai IT Park, public institution Santariškės Clinic of Vilnius University Hospital, public institution Vilnius University Children's Hospital, public institution State Pathology Centre, Vilnius City Municipality, public institution Central Project Management Agency, AB Turto Bankas, the Association of Innovative Medical Technologies and Biopharmacy, and the Association Santaros Slėnis, established by the initiators of the integrated centre of science, studies and business SANTARA, should participate in the implementation of the Programme.

Interim Prime Minister Gediminas Kirkilas

Interim Minister of Education and Science Algirdas Monkevičius

APPROVED By
Resolution No 1263 of the Government of the
Republic of Lithuania of 24 November 2008

DEVELOPMENT PROGRAMME FOR THE INTEGRATED SCIENCE, STUDIES AND BUSINESS CENTRE (VALLEY) SANTARA

I. GENERAL PROVISIONS

1. The purpose of the Development Programme for the Integrated Science, Studies and Business Centre (Valley) SANTARA (hereinafter referred to as "the Programme") is to establish the nucleus of knowledge economy in the Santariškės-Visoriai and Saulėtekis districts of Vilnius city, thus concentrating potential and creating more advantageous conditions for the interaction of research, studies and business in the areas of biotechnology, biopharmacy, molecular medicine, informatics, ecosystems and safe environment. The Programme aims to create modern infrastructure serving the needs of research, studies and technological development, to apply scientific results in industry and business more vigorously, to encourage the establishment of new economic operators of technological profile oriented to the application of scientific results, to create the conditions for the cooperation of knowledge-intensive businesses with the institutions of science and studies as well as groups of researchers, to attract more foreign investments to the Lithuanian business and science, and to boost the competitiveness of the Lithuanian science and technologies on the international market. SANTARA, an integrated centre (valley) of science, studies and business (hereinafter referred to as "the Valley") is being established to develop the Lithuanian research sectors of biotechnologies, biopharmacy, molecular medicine, innovative medical technologies, informatics, ecosystems and safe environment. The valley's location is in the territories of Santariškės-Visoriai and Saulėtekis in Vilnius city.

2. The Programme implementation began in 2008 and the end is scheduled in 2013.

3. The Programme's coordinators are Association Santaros Slėnis, founded by the Valley's initiators, also the Ministry of Education and Science and the Ministry of Economy; the measure implementing bodies are specified in the Programme's annex.

4. The Programme was developed pursuant to the Concept of the Establishment and Development of Integrated Centres (Valleys) of Science, Studies and Business, approved by Resolution No 321 of the Government of the Republic of Lithuania of 21 March 2007 (*Valstybės žinios* (Official Gazette) No 40-1489, 2007) and the High Technology Development Programme 2007-2013, approved by Resolution No 1048 of the Government of the Republic of Lithuania of 24 October 2006 (*Valstybės žinios* (Official Gazette) No 114-4356, 2006), to implement Order No ISAK-207/4-33 of the Minister of Education and Science and the Minister of Economy of 29 January 2008 on the Invitation to Prepare Projects for the Development of Integrated Centres of Science, Studies and Business (*Valstybės žinios* (Official Gazette) No 22-828, 2008), also the General National Programme for Cooperation

between Research and Science on the One Hand and Business on the Other, approved by Order ISAK-563 of the Minister of Education and Science of 3 March 2008 (*Valstybės žinios* (Official Gazette) No 29-1036, 2008).

5. The Programme will help to achieve the objectives, priorities and tasks set out in the Lithuanian Strategy for the Use of European Union Structural Assistance 2007-2013, approved by European Commission Decision K(2007)1808 of 26 April 2007 and in the programmes implementing it: the Operational Programme for Human Resource Development 2007-2013, approved by Decision K(2007)4475 of the European Commission of 24 September 2007, and Operational Programme for Economic Growth, approved by Decision K(2007)3740) of the European Commission of 30 July 2007, priority 1: "Research and technological development for competitiveness and growth of the economy".

6. The implementing projects for individual measures under the Programme must comply with the Project Administration and Financing Rules, approved by Resolution No 1443 of the Government of the Republic of Lithuania of 19 December 2007 (*Valstybės žinios* (Official Gazette) No 4-132, 2008), with the Rules of Compliance with the Expenditure and Funding Requirements for Projects Implemented under the Lithuanian Strategy for the Use of European Union Structural Assistance 2007-2013 and the Operational Programmes Implementing It, approved by Resolution No 1179 of the Government of the Republic of Lithuania of 31 October 2007 (*Valstybės žinios* No 117-4789, 2007), also with the requirements of the Procedure of State Project Planning, approved by Order No ISAK-997 of the Minister of Education and Science of 8 April 2008 (*Valstybės žinios* (Official Gazette) No 44-1665, 2008) and other legislative acts.

7. In accordance with the provisions of the Programme, the economic benefits created by the Valley will also be available to separate companies that will use the Valley infrastructure and research results as far as such use does not violate the European Union (hereinafter referred to as "EU") and Lithuanian legislation concerning state aid.

8. The scientific centres established in the valley will ensure open access to the available equipment for all interested natural and legal persons. The rules for the establishment and management of open access centres shall be approved by the Minister of Education and Science.

II. ANALYSIS OF THE ENVIRONMENT

9. The national sustainable development priorities, rapid economic growth and increasingly intensive use of energy resources have brought about the need for integration of science, studies and business. The knowledge society and competitive economy are the two major priorities of long-term development in Lithuania.

10. In recent years, research and experimental development (hereinafter referred to as "R&D") spending has been on the rise in Lithuania. In 2007 it reached LTL 803.1 million, up from LTL 657.8 million in 2006, LTL 542 million in 2005, LTL 472.7 million in 2004, and

LTL 381.8 million in 2003. The analysis of the distribution of these expenses between fundamental and applied R&D reveals a decreasing trend in the expenses on fundamental research (from 52.6 per cent in 1995 to 30.8 per cent in 2007), in contrast to the expenses on experimental development, which have rocketed from 7.8 per cent in 1995 to 32.1 per cent in 2007. Such a tendency demonstrates that more and more research projects are business-oriented, i.e. pursued with the intention of meeting the needs of business operators by developing new materials, technologies, products and installations or by making essential improvements to the already developed and introduced ones. Although in absolute values the research and development expenditure has been mounting in Lithuania, it still lags behind the EU average (per million residents) according to other indicators.

11. In 2003, business contributed 56 per cent of the total R&D funding in the EU, 67 per cent in the USA and 72 per cent in Japan. However, businesses accounted for merely 16.7 per cent of the R&D expenses in Lithuania. In 2007, R&D expenses of businesses totalled 28.5 per cent of overall R&D expenditure. The extent of business investment in R&D is primarily determined by the Lithuanian business structure, in which the most research-intensive high and medium-high technology business sectors occupy but a modest share. With that in mind, in is necessary to encourage the institutions of science and studies to initiate research that may result in technologies that could be rapidly applied in business, also to develop high technologies and to encourage scientists to create new business operators (start-ups and spin-offs) that would use the findings of the research conducted by these institutions. In is also necessary to promote creative innovative activities and innovation dissemination (technology transfer). Business operators in Lithuania must improve innovative capacities, invest in personnel training and R&D activities carried out within business operators by attracting researchers from the public sector. It is important to create advantageous conditions for establishing new science-intensive enterprises. Cooperation with the institutions of science and studies should not be based only on procurement of services.

12. Business operators need to become equal partners in research. This sort of cooperation would be more meaningful and productive, i.e. it would serve better to stimulate Lithuanian state science and studies institutions to direct their activities towards commercialization of their research work. The R&D expenditure of the Lithuanian public sector, i.e. of the government and of higher education, totalled 0.53 per cent of the gross domestic product (hereinafter referred to as "GDP") in 2004, 0.52 per cent of the GDP in 2005 and 0.47 per cent of the GDP in 2006 (data of the Department of Statistics). Although these indicators are not far behind the EU27 average, the effectiveness of the use of the public sector R&D expenditure is low in Lithuania. Separate areas (biotechnologies, lasers, electronics etc) boast impressive research potential, however it is not sufficiently utilized. One of the main reasons for that is the fact that research institutions, universities and economic operators do not cooperate closely enough in performing research, designing new products and technologies for the market. Moreover, the infrastructure of institutions of science and studies is usually outdated and inadequate to meet the market needs. To ensure advantageous

conditions for cooperation between institutions of science and studies and economic operators, it is necessary to provide direct funding to research facilities that would be relevant to the business sector as well.

13. Many of the said tasks may be addressed through the establishment of SANTARA, an integrated centre (valley) of science, studies and business, in the Santariškės-Visoriai and Saulėtekis districts in Vilnius. The Santariškės-Visoriai district already now boasts a number of science and medical institutions as well as businesses. It is also home to an academic town of research institutes, namely the Institute of Biochemistry, the Institute of Mathematics and Informatics, units of the Nature Research Centre, units of the state research institute Innovative Medicine Centre. Santariškės has a town of health, which is home to Vilnius University Hospital Santariškės Clinic, Vilnius University Children's Hospital, Vilnius University Institute of Oncology with a specialized Oncology Clinic, the public institution State Pathology Centre, and the National Food and Veterinary Risk Assessment Institute. The Santariškės-Visoriai district has private-capital scientific-industrial enterprises that are already operating or have plans to actively enlarge their operations in the areas of biotechnologies, biopharmacy, light technologies and medical diagnostics: private limited companies UAB Sicor Biotech, UAB Valentis, UAB Biotechnological Pharmacy Centre Biotechpharma, UAB Biota, UAB Biocentras, UAB Bioeksma, UAB Eksmos Medicininės Technikos Centras, UAB Medelkom, UAB Fermentas, UAB Grida Lab and others. They focus both on research as well as production, they export the major part (about 65 per cent) of their products and make regular investments in high-tech research. Visoriai is home to a Visoriai Information Technology Park, a number of IT companies: UAB Baltic Amadeus, joint Lithuanian-Dutch company UAB VTEX, joint Lithuanian, Russian and Dutch company UAB TEV, UAB ImPro and others. Association Infobalt, uniting over 100 Lithuanian IT companies, has also moved its operations to Visoriai. The Saulėtekis district is home to certain faculties of Vilnius University and Vilnius Gediminas Technical University, research units and dormitories for students and foreign research interns. The knowledge economy cluster covers the area of 62 hectares (including 2.4 hectares intended for the development of business support infrastructure). It is also place for the Saulėtekis, an Integrated Centre (Valley) of Science, Studies and Business, whose scientists are hoped to participate in joint projects in related fields. The Saulėtekis district currently sees the development of the National Centre for Physical and Technological Sciences which operates on the basis of the joint operation and partnership agreement, involving the following participants: Vilnius University, Vilnius Gediminas Technical University and the state research institute Centre for Physical Sciences and Technology; it also sees the enlargement of the Laser Research Centre of Vilnius University, Centre of Civil Engineering of Gediminas Technical University, and the National Open Access Scientific Communication and Information Centre. There are plans to enlarge the science and technology park in the Saulėtekis district by adjusting its infrastructure to accommodate both large as well as small biotechnological and biomedical businesses, and possibly to establish an incubator for part of businesses dealing with biotechnologies, and

innovative medical technologies and pharmacy technologies (hereinafter referred to as the BIO). To this end, the state has allotted 0.6 hectares of the state land at 15 Saulėtekio Alley, currently held under the right of loan-for-use by the public institution Saulėtekio slėnis. Another 1.8 hectares of the state-owned land at Saulėtekio Alley 9, currently held by the right of loan-for-use by Vilnius University, is planned to be given for further development of the science and technology park and the BIO technology business incubator.

14. However, a school of higher education has yet to establish its division in the Santariškės-Visoriai district. Although it focuses on third-level studies (doctoral at research institutes and residency at hospitals) and partly on second-level studies (projects for a Master's degree thesis are carried out here), interaction with universities is still insufficient. To an extent, this is a result of the long distances between the Santariškės-Visoriai district and the main faculties (Natural Sciences, Medicine) of Vilnius University as well as the Faculty of Fundamental Sciences of Vilnius Gediminas Technical University. The situation is somewhat better as far as studies in informatics are concerned: Visoriai is quite close to a unit of Vilnius University Faculty of Mathematics and Informatics, which graduates informatics specialists (Didlaukio str. 47, Vilnius).

15. A number of important scientific institutions matching the profile of the Valley operate outside the Valley which is being developed. They include the Institute of Biotechnology, units of the state research institute Innovative Medicine Centre and units of the Nature Research Centre. One of the key objectives of the Valley development is to concentrate and consolidate the said state research institutes as well as the respective units of Vilnius University and Vilnius Gediminas Technical University with the institutions already present in Santariškės-Visoriai and Saulėtekis Alley.

16. The areas of the Valley's activities and R&D are envisaged with regard to the formed structure of the Valley's institutions, the capacities of the Valley's initiators, partners and participants as well as the need for scientific knowledge and innovation. They are:

16.1. biotechnology;

16.2. innovative medical technologies, molecular medicine and biopharmacy;

16.3. ecosystems and sustainable development;

16.4. informatics and communication technologies.

17. Over the last century, the achievements in the biotechnological science and industry made an obviously important contribution to the improvement of the living standards of human beings. This is reflected by the growing life-expectancy, more accurate disease diagnostics and better-quality treatment, a wider choice of food, improved food safety and environmental pollution control. Modern biotechnology remains one of the most promising areas of technological development and the largest investment sector around the world. The European Commission believes that biotechnology is the primary factor of economic development in the coming decades and therefore purposeful and long-term measures are necessary to ensure that the potential of this technology is used. Lithuanian biotechnological products are competitive in the global product and science market and they have no

equivalents in the Central and Eastern Europe. Therefore, the conditions necessary for further development of biotechnological research and effective use thereof to raise the competitiveness of the Lithuanian industry are in place.

18. The Lithuanian biotechnology industry was built through purposeful development of fundamental research, turning research findings into needed products. Of particular note are Lithuania's biotech industry leaders, UAB Sicor Biotech and UAB Fermentas.

At present, more than 15 per cent of the entire staff of biotech companies are holders of doctoral degrees.

All in all, these companies employ over 500 workers and their performance indicators in the 2000-2006 period were as follows: the sales rose threefold (from LTL 30 million to LTL 87 million), the added value generated jumped fourfold (from LTL 12 million to LTL 48 million), the added value per employee grew 2.5 times larger (from LTL 47.000 to LTL 150.000), while the export tripled (from LTL 26 million to LTL 74 million).

19. In Vilnius city, the main players in the biotechnological research area are the Institute of Biotechnology and the Institute of Biochemistry, state research institute Innovative Medicine Centre, Institute of Oncology of Vilnius University, units of Vilnius University and Vilnius Gediminas Technical University, as well as the research units of UAB Fermentas and UAB Sicor Biotech. These institutions perform fundamental and contracted research and cooperate with Lithuanian and foreign companies and research institutions in training highly qualified specialists. Vilnius University Faculty of Mathematics and Informatics has launched a programme for bioinformatics majors. Each year more and more biotechnology researchers, having earned degrees or completed traineeship abroad, are returning to Lithuania. Over the last five years, 17 Lithuanian researchers returned to the Institute of Biotechnology alone bringing back their knowledge, experience and grants awarded by international funds after more than three years of scientific practice abroad.

20. The Lithuanian Health Programme, approved by Resolution No VIII-833 of the Seimas of the Republic of Lithuania of 2 July 1998 (*Valstybės žinios* (Official Gazette) No 64-1842, 1998), and the Lithuanian National Strategy for Public Health Care 2006-2013, approved by Resolution No 941 of the Government of the Republic of Lithuania of 27 July 2001 (*Valstybės žinios* (Official Gazette) No 66-2418, 2001; No 70-2574, 2006), are under implementation in Lithuania. The mortality structure of the Lithuanian population corresponds to that of the developed countries, while the level of infant mortality is approaching the EU average. However, public health has not yet become a long-term interest of the State, which is reluctant to take measures for its preservation and strengthening mainly due to high costs and to recognize that the whole economic prosperity relies on the health of the population. The average life expectancy of the Lithuanian population is declining.

21. Lithuania enjoys the necessary critical mass required for further relationship between medical science and business (including health care institutions). In 2007, health care

study programmes were completed by 1,219 students, including 429 graduates of Vilnius University. At present, medical students pursue their degrees at institutions of studies and science under 27 programmes. In various areas of medicine and biopharmacy, Santariškės-Visoriai district employs over 600 scientists and researchers. An even greater concentration of the scientific potential is likely after the transfer here of the Faculty of Medicine of Vilnius University and of the units of the state research institute Innovative Medicine Centre. All that will allow developing innovative medical and pharmaceutical technologies that will help increase the effectiveness of the treatment methods employed by the Lithuanian health care institutions.

22. The National Strategy for Sustainable Development, approved by Resolution No 1160 of the Government of the Republic of Lithuania of 11 September 2003 (*Valstybės žinios* (Official Gazette) No 89-4029), 2003) establishes, among others, the following priorities: a more effective use of natural resources and waste treatment; reducing danger to human health; mitigation of global climate change and its effects; better protection of biodiversity; better protection and rational management of the landscape.

23. Research on the basis of which the implementation of these priorities may be possible is carried out by several Lithuanian institutions of science and studies, including the Nature Research Centre, the relevant departments and other structural divisions of Vilnius University and Vilnius Gediminas Technical University. A part of these institutions are already based in the territory of the envisaged location of the Valley and the remaining ones should be moved here when it is established.

24. Information technologies are the crucial factor of globalization and technological progress as well as the basis of the development of the knowledge society. An increasingly large share of the national product in the developed states is made up by information products. Emphasizing the importance of information technologies to the new information society and aiming to speed up the EU technological progress, the EU has announced the development of these technologies a priority and allocated major investments in the related research, their application as well as optimization of production.

25. The prospects and the purposefulness of developing the production of IT products in Lithuania are determined by the following factors: the need for intellectual activities in IT; the traditions and experience in developing computer hardware and software; high qualification of IT specialists trained in Lithuania.

26. At present the country boasts around 1,000 IT companies that employ more than 15,000 informatics specialists. These companies are making more and more products and expanding their contribution to Lithuania’s economy. Several dozen companies are already producing for foreign clients and many of them are joint companies of Lithuanian plus foreign capital. It is important that both the urban and the rural population of Lithuania benefit from the opportunities created by the IT.

27. In Vilnius city, the greatest research potential in the sphere of information technologies has been demonstrated by the Institute of Mathematics and Informatics, Vilnius

University and Vilnius Gediminas Technical University. The research conducted covers the following areas: research into identification processes, data analysis, digital modelling and optimization problems, multimedia, thus also languages, technologies and interactive systems;

research into theoretical and methodological basics of informatics, school informatics problems, computerized systems and methods of computer network engineering and their application in developing new information technologies;

the problems in transferring cultural heritage into digital media; methods of programme system engineering and software development, also hardware design technologies. Currently, 700 IT specialists are employed in Visoriai, 450 of them working for business companies. Roughly 20 per cent of the services rendered by IT companies based in Visoriai are exported to EU states and the USA.

28. The Valley under development is in compliance with the legislation adopted by the local authorities: Vilnius City Strategic Development Plan 2002-2011 and Vilnius City Master Plan until 2015.

III. PROGRAMME OBJECTIVE AND TASKS

29. The objective of the Programme is to establish a valley aimed at the development of the sectors of biotechnology, molecular medicine and biopharmacy, innovative medical technologies, ecosystems and sustainable development, informatics and communication technologies in Lithuania, to enable starting up of business and development of fundamental and applied science competitive on the international market, also to train highly qualified specialists in the said R&D areas.

30. The following shall be the main tasks of the Programme:

30.1. To create a modern research infrastructure for the needs of research, studies and technological development in the areas of biotechnology and molecular medicine – to establish a joint centre for life sciences that will consist of the current state research institutes, namely the Institute of Biochemistry and the Institute of Biotechnology (pursuant to the Restructuring Plan for the Network of State Research Institutions Related to the Development of Integrated Centres (Valleys) of Science, Studies and Business, approved by Resolution No 989 of the Government of the Republic of Lithuania of 1 October 2008 (*Valstybės žinios* (Official Gazette) No 117-4453, 2008), they will be merged into a unit of Vilnius University, the Life Sciences Centre), the relevant divisions of the Faculty of Natural Sciences and the Faculty of Medicine of Vilnius University, the Nanobiotechnology Laboratory of Vilnius Gediminas Technical University, and the Research Centre of Vilnius University Institute of Oncology.

30.2. To create modern research infrastructure serving the needs of innovative medical technologies, molecular medicine and biopharmaceutical research, studies and technological development – to establish a Joint Innovative Medicine Centre on the basis of the state research institute Innovative Medicine Centre, relevant departments and clinics of Medical

Faculty of Vilnius University, and the Bioinformatics Laboratory of the Faculty of Fundamental Sciences of Vilnius Gediminas Technical University.

30.3. To establish up-to-date research infrastructure serving the needs of research and studies of the ecosystem and sustainable development, as well as the needs of environmental technology development and, building on that foundation, to gather the most qualified Lithuanian specialists for joint activities – to establish a Joint Nature Research Centre on the basis of the Nature Research Centre as well as the relevant units of the Faculty of Natural Sciences of Vilnius University.

30.4. To create modern research infrastructure serving the needs of IT and telecommunication research, studies and technological development, i.e. to acquire equipment for the IT Open Access Centre, which will be in the premises of Vilnius University and the Institute of Mathematics and Informatics.

30.5. To create the conditions necessary for businesses to cooperate with institutions of science and studies and necessary for the formation of the origins of knowledge-intensive businesses on the basis of commercialization of research findings, and to increase the competitiveness of business on the global market – to establish an IT Cluster which, by way of association, will be formed by Vilnius University, Institute of Mathematics and Informatics and IT businesses (UAB Baltic Amadeus, UAB VTEX and UAB TEV, UAB ImPro, UAB BOD Group, UAB Teltonika and others).

30.6. To upgrade and modernize the infrastructure of university studies in biotechnologies, medicine, ecosystems and sustainable development; to reinforce the interaction among science, studies and business in order to improve the quality of studies.

30.7. To coordinate the Valley development and to ensure cooperation between science and business.

IV. DEVELOPMENT OF THE VALLEY

31. There will be three main areas of investment in the Valley's infrastructure:

31.1. establishment of research centres by building new infrastructure objects, setting up new research laboratories, renovating the existing ones and consolidating the available human resources (Joint Centre for Life Sciences, Joint Innovative Medicine Centre);

31.2. establishment of new research centres by renovating the available research laboratories and consolidating the available human resources (the Joint Nature Research Centre, the Centre of Information Technologies and Higher Education);

31.3. establishment of the Valley's science and technology parks.

32. In accordance with the areas of the Valley's activities and R&D, open access research equipment centres shall be established. These centres will provide public access to the infrastructure developed for science, studies and business.

33. The Joint Centre for Life Sciences will operate on the basis of a partnership agreement. Its key function is to concentrate the efforts of scientists and the available

scientific equipment to address common scientific issues, jointly participate in the implementation of Lithuanian and foreign scientific programmes, and coordinate the subject themes of research projects carried out at the centre. On the basis of the available and newly acquired scientific equipment, the participants of the Joint Centre for Life Sciences will form open access centres of scientific equipment, which will be available, under the same terms, to both the participants of the Valley as well as other institutions of science and studies and business operators. The building that will house the Biotechnology Institute and the Biochemistry Institute (that will become part of the Centre for Life Sciences of Vilnius University, following the merger with Vilnius University) and relevant units of Vilnius University and Vilnius Gediminas Technical University, will be built in a state-owned land plot at Saulėtekio Alley 9 in Vilnius (Vilnius University Campus), that is currently held by Vilnius University on the basis of loan-for-use. Once the building of the Joint Centre for Life Sciences is built, its respective premises, pursuant to the legislation, will be transferred, under the right of loan-for-use or trust, to Vilnius University and Vilnius Gediminas Technical University. The Joint Centre for Life Sciences will actively cooperate and share the available resources of scientific equipment with the National Centre for Physical and Technological Sciences, the Joint Innovative Medicine Centre, other research institutions based in Vilnius, Vilnius University hospitals and businesses. One of the units of the Joint Centre for Life Sciences, the Open Access Centre for Medical Nanophotonics and Visualization, will be established at the existing premises of Vilnius University Institute of Oncology (P. Baublio str. 3B, Vilnius).

34. The Joint Innovative Medicine Centre will operate on the basis of a partnership agreement. Its key function is to concentrate the efforts of scientists and the available scientific equipment for dealing with common scientific issues, while participating in the implementation of Lithuanian and foreign scientific programmes and coordinating the topics of research carried out by the centre's participants. The participants of the Joint Innovative Medicine Centre will form research equipment open access centres, which will be available, under the same terms, to both the participants of the Valley as well as other institutions of science and studies and business operators. The Joint Innovative Medicine Centre will be established in a new building erected specially for that purpose. The building that will house the state research institute Innovative Medicine Centre will be constructed in a state-owned land plot at the intersection of Santariškės and P. Baublio str., Vilnius, which is held on the basis of loan-for-use by the state research institute Innovative Medicine Centre . According to the plan, the applicant for the building and equipment of the Joint Innovative Medicine Centre will be the state research institute Innovative Medicine Centre. The Joint Innovative Medicine Centre is being established with direct participation of Vilnius University, public institution Santariškės Clinic of Vilnius University, public institution Children's Hospital of Vilnius University, the public institution State Pathology centre, and the National Food and Veterinary Risk Assessment Institute, which allocate substantial resources for the research

areas to be developed at the Centre. The Joint Innovative Medicine Centre will pursue active cooperation with other centres and businesses of the Valley.

35. The capacities of the research carried out by the Joint Innovative Medicine Centre will be reinforced together with the other partners of the Valley, primarily with the health care institutions present in the Santariškės medical town and with the infrastructural objects under development. The Joint Innovative Medicine Centre will be able to jointly use the capacities of the Centre of Biological Resources (biobank and tissue bank), the infrastructure of the public institution State Pathology Centre, and the modern Visualization and Nuclear Medicine Research Centre. The development of the said objects of the Valley is pursued using the EU resources administered by the Ministry of Health, also the funds of the State Investment Programme and other departments, and it is an inseparable part of the Programme. The aim will be to achieve the optimum use of the opportunities opened up by the exceptionally expensive equipment of these Valley objects, therefore:

35.1. the development of the open access centre Digital and Molecular Pathology Laboratory will be carried out in coordination with the Santariškės Clinic of the public institution Vilnius City University Hospital (Santariškių str. 2) as well as the state institution State Pathology Centre (P. Baublio str. 5, Vilnius), which will establish the Centre of Biological Resources (biobank and tissue bank) at the state institution State Pathology Centre; in the case of scientific necessity, the infrastructure of these institutions and additional equipment will be used.

35.2. On the basis of the principles of complementarity, efforts will be made to integrate the Biomodel and Pre-Clinical Research Laboratory of the open access centre with the infrastructure of the Biomodel and Pre-clinical Research Centre (breeding-ground) being established at the premises of the state research institute Innovative Medicine Centre (Molėtų rd. 29, Vilnius), and the keeping of the acquired apparatuses (of the Biomodel and Pre-clinical Research Laboratory) at the premises of the Joint Innovative Medicine Centre or the state research institute Innovative Medicine Centre will be adjusted accordingly.

35.3. The arrangement of the Visualization and Innovative Medical Technology Research Laboratory will be selected with regard to the development of the Visualization and Nuclear Medicine Research centre, as the arrangement of the latter will have to comply with the special requirements applicable to nuclear medicine facilities.

36. The Joint Nature Research Centre will operate on the basis of a partnership agreement. Its key function is to concentrate the efforts of scientists and the available scientific equipment for dealing with common scientific issues, while participating in the implementation of Lithuanian and foreign scientific programmes and coordinating the topics of research carried out by the centre's participants. On the basis of the available and newly acquired scientific equipment, the participants of the Joint Nature Research Centre will form research equipment open access centres, which will be available, under the same terms, to both the participants of the Valley as well as other institutions of science and studies and business operators. The Institute of Geology and Geography of the Nature Research Centre

will be moved to the renovated premises at Mokslininkų str. 12, Vilnius, which will be vacated after the current Institute of Biochemistry, which is part of Vilnius University, is moved to the premises of the Joint Centre for Life Sciences.

37. The research necessary in the development of the areas of informatics and communication will be provided by the Faculty of Mathematics and Informatics of Vilnius University, the Institute of Mathematics and Informatics of Vilnius University, and the respective departments of the Faculty of Fundamental Sciences of Vilnius Gediminas Technical University. On the basis of the available and newly acquired scientific equipment, a Research Equipment Open Access Centre will be formed, which will be available, under the same terms, to both the participants of the Valley as well as other institutions of science and studies and business operators.

38. Growth of scientific potential will be ensured through: cooperation of universities, research institutes and business partners in training specialists of the first and second levels of studies; training doctoral students in doctoral studies at Vilnius University, Vilnius Gediminas Technical University and joint doctoral programmes of universities and research institutes; reintegration of Lithuanian scientists working abroad; attracting of foreign scientists via exchange programmes and scientist subsidy schemes; cooperation with industrial and business companies, using the intellectual potential of their researchers.

39. The maintenance of the created new R&D infrastructure will be ensured with the resources received by the Valley's scientists from international and national scientific programmes, the research performed to the orders received from business companies, as well as appropriations from the Republic of Lithuania State Budget to research performed by Master and doctoral programme students.

40. Continuity of the research topics of the Valley will be ensured through the projects of the 7th Framework Programme of research, experimental development and demonstration, which were launched in 2008: Safety and Efficacy of a New and Emerging Dental X-ray Modality (SEDENTEXCT); Secure, Trusted and Legally Ruled Collaboration Environment in Virtual Life (Virtual Life); Evaluation of Legislation and Related Guidelines on the Procurement, Storage and Transfer of Human Tissues and Cells in the European Union – an Evidence-Based Impact Analysis (TISS.EU); Inter-connected European Information and Documentation System for Ethics and Science: European Ethics Documentation Centre (ETHICSWEB); Baltic Grid Second Phase; Pan-European Network for the Study and Clinical Management of Drug Resistant Tuberculosis, Small Molecule Inhibitors of the Trimeric Influenza Virus Polymerase Complex, Metastatic Tumours Facilitated by Hypoxic Tumour Micro-Environments.

41. The established centres of the Valley will increase the competitiveness of Lithuanian scientists participating in the EU fundamental science programmes. The centres' scientists will have more opportunities to respond to the calls under to 7^{th} Framework Programme (2007-2013) and the 8^{th} Framework Programme (after 2013) on the subjects of

Environment (including climate change); Food, Agriculture, Fisheries and Biotechnologies; Health; Information and Communication Technologies.

42. The Joint Innovative Medicine Centre will help to increase the effectiveness of the implementation of international medical programmes and to contribute to the implementation of the programme of the EU joint technology initiative on Innovative Medicines (hereinafter referred to as IMI). The entities of the Joint Innovative Medicine Centre will cooperate in the area of innovative medical research to improve the process of developing medicines. Participation in the IMI by representatives of science and centres of clinics, small and medium businesses, patient organizations and public authorities (including regulators) will accelerate the use of the results. The Joint Innovative Medicine Centre will be in a position to make a sound contribution to solving the problems identified in the IMI: (1) to improve prediction of the safety and the efficacy of new drug candidates and treatment technologies in the early development phases, before the costly clinical trials are carried out; (2) to tackle the current multiplication of research efforts, both in the private and public sector, by jointly developed knowledge management systems; (3) to bridge gaps in training of professionals to ensure a more skilled workforce for the sector of drugs and medical technologies.

43. The Joint Nature Research Centre will help raise the efficacy of the performance of Lithuania's obligations in the Helsinki Commission (HELCOM) and the International Council for Exploration of the Sea (ICES), take part in the implementation of the State Environmental Monitoring Programme, the National Sustainable Development Strategy, the requirements of the Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ 2004 special edition, Chapter 15, Vol. 2, p. 102) and Council Directive of 2 April 1979 on the conservation of wild birds (OJ 2004 special edition, Chapter 15, Vol. 1, p. 98), the Convention of Biological Diversity, the European Landscape Convention and the Lithuanian landscape policies, also in the formation of the network of NATURA 2000 areas.

44. The establishment of the valley will contribute to the reorganization of the network of Lithuanian institutions of science and studies. These plans have already been acted upon through the provisions of Article 93(4) of the Law of the Republic of Lithuania on Higher Education and Research (*Valstybės žinios* (Official Gazette) No 54-2140, 2009), paragraphs 16(2) and 16(3) of the Plan Reforming the Network of State Research Institutions Involved in the Development of Integrated Science, Studies and Business Centres (Valleys) by merging the Institute of Ecology of Vilnius University, the Institute of Botany and the Institute of Geology and Geography into the Nature Research Centre; and by merging the Immunology Institute of Vilnius University and the Experimental and Clinical Medicine Institute of Vilnius University into the state research institute Innovative Medicine Centre, and by merging the Institute of Biochemistry and the Institute of Biotechnology into Vilnius University. It has been planned for the early stages of the Valley development to establish the Centre for Life Sciences on the basis of the Institute of Biochemistry and the Institute of Biotechnology, following their merger into the Vilnius University.

45. Participation in the Valley's activities will benefit Vilnius University:

45.1. it will improve the quality of Bachelor studies in biophysics, biology, biochemistry, molecular biology, ecology, geography, hydrology and metrology, geology, hydrogeology and engineering geology, bioinformatics, information technologies, informatics and software systems, continuous medical studies, Master studies in biophysics, biochemistry, genetics, microbiology, neurobiology, zoology, medical biology, environmental research and environment management, ecology, general geography and landscape management, hydrometeorology, geological photography, search and prospecting, hydrogeology and engineering geology, informatics, computer modelling and software systems, and professional qualification studies in genetics and laboratory medicine. Reinforcements will be made to the doctoral studies in biochemistry, geology, geography, informatics, biology, ecology and environmental research, biophysics, botany, zoology, medicine and public health.

45.2. Close cooperation among science, studies and various business areas will ensure high qualification of the trained professionals and their faster involvement in scientific or industrial activities, also help to determine the need for specialists more accurately and to respond to it more adequately. Cooperation with businesses in the implementation of R&D projects will enable students and teachers to gain a better understanding of the needs of the market. This will improve the qualification of trained specialists and increase the efficacy of the use of the research facilities as well as the diversity of the research topics.

45.3. The Faculty of Natural Sciences and the Faculty of Medicine as well as the respective student dormitories of Vilnius University will be moved to the Valley's territory.

46. Vilnius Gediminas Technical University will enjoy more opportunities to improve the quality of the Bachelor studies in IT services management, engineering informatics, bioengineering and information system engineering as well as Master studies in engineering informatics, medical and bioengineering image processing, information electronic systems, information technologies, and information system software engineering. The Nanobiotechnology Laboratory and the Bioinformatics Laboratory of Vilnius Gediminas Technical University will be transferred to the territory of the Valley.

47. Cooperation between scientific and business establishments will cover all the main areas of the Valley concept: research and its application in business, studies, and student integration into the labour market. This is the only way to give the partners the highest value and to make the best use of their knowledge and competence.

48. Development of the Valley's business support infrastructure is an initiative of the representatives of the sectors of information and communication technologies, biotechnologies and biopharmacy founded on the principles of public and private partnership with the aim to create a favourable environment for the transfer of the results of the work of the centres of science and studies operating in the Santariškės-Visoriai district to the high-tech business and to ensure the growth of the Lithuanian high-tech business sector and of its international competitiveness. One of the key tasks of this initiative is linked to the promotion of the establishment and development of new high-tech companies (especially spin-offs).

49. According to the plan, this initiative will be implemented by coordinated efforts of the existing organizations, namely the public institution Visoriai IT park, Association Infobalt, the Association of the Pharmaceutical Industry Companies and the Association of Innovative Medical Technologies and Biopharmacy as well as of the newly established public institution Biotechnology and Biopharmacy Research Park.

50. With regard to the common needs and specific characteristics of the sectors of information and communication technologies (hereinafter referred to as "ICT") and BIO, the envisaged business support infrastructure of the valley consists of three major parts:

50.1. an ICT technology park:

50.1.1. an ICT business incubator and technology centre;

50.1.2. the R&D and training centre of the ICT cluster;

50.2. a BIO technology park:

50.2.1. Section 1 of the BIO technology business incubator;

50.2.2. Section 2 of the BIO technology business incubator;

50.3. the territory for the green field investments by ICT and BIO technology parks and companies as well as for the development of the business support infrastructure.

51. The infrastructure of the Visoriai ICT technology park will be developed in a 6.9 ha territory (in the public designation land plots of 6.1 and 0.8 ha) between Geležinio Vilko, Mokslininkų and Akademijos streets in Vilnius. Construction of two new technology park buildings is envisaged in this territory: one building of the ICT business incubator and technology park and one building of the R&D and training centre of the ICT cluster (with a data centre). Another part of the territory will be adapted for green field investments by the ICT and BIO technology companies, yet this will require installation of the necessary engineering networks and communications and granting the Valley the status of an economic project of national significance.

52. The business incubator will be developed with the aim of encouraging the establishment in the ICT sector of new high-tech companies, thus creating the preconditions for expanding the Visoriai ICT companies' cluster as well as increasing its competitiveness. The business incubator will have the capacity for 15 to 25 small and medium-sized businesses (200 jobs). The clients of the business incubator will be offered the full package of services relevant in starting a business as well as advantageous conditions of access to the technology park's infrastructure. On that basis, the criteria for the selection of companies to the business incubator will be established. The successful companies of the business incubator will enjoy the conditions necessary for the development of their activities within the technology centre premises or given an opportunity to settle in the territory designated for green field investment by ICT and BIO technology companies. According to the estimates, the premises of the technology centre will be able to house 15 to 25 promising ICT sector enterprises (450-550 jobs) at a time.

53. The R&D and training centre of the ICT cluster (approximately 7,000 sq m) will be constructed and fitted out using the resources of the EU structural assistance 2007-2013

and the ICT cluster participants. This centre should contain common use laboratories and experimental production premises that will be used for the following purposes: 1)development of high added-value ICT products and services; 2) development of joint products and services of the cluster's participants; 3) this laboratory and the industrial premises will become the technical facilities enabling rapid testing of the technological business ideas of the personnel of research and studies as well as experimental production. An infrastructure for the development of professional skills (computer classrooms, premises for conferences and seminars) as well as a data centre with active equipment will be established at the centre. The participants of the cluster, UAB Baltic Amadeus, UAB VTEX, UAB TEV, UAB ImPro, UAB BOD Group, UAB Teltonika and others, plan to improve ICT products of the in the following areas: information search systems, tools for producing and indexing digital content, business process management solutions, multimedia solutions, wireless technology and data transfer in transport and medicine, Blue-Ray technologies, crystal data storage structures and other innovative ICT areas.

54. The BIO technology park will be developed in accordance with the network principle, bearing in mind that for medical technology and biopharmacy start-ups it is crucial to be located in the neighbourhood of the Valley's respective research infrastructure (RI) centres. The following specialized company establishment and development promotion structures operating on the basis of BIO technologies will be created:

54.1. Section 1 of the BIO technology business incubator: the superstructure of the building of the public institution Vilnius University Hospital Santariškių Clinics (Santariškių str. 2, Vilnius);

54.2. Section 2 of the BIO technology business incubator (a more technologically complex section of the incubator, located in the territory allotted for the disposition of the Visoriai IT Park (at the intersection of Geležinio Vilko, Mokslininkų and Akademijos streets, Vilnius).

A public institution or a company with experience in the areas of biotechnologies, innovative medical technologies or pharmacy could become the operator of the business incubators after a competitive selection procedure.

55. The potential leaseholders of the premises of the business incubators will have to comply with both the high-tech company eligibility criteria and the special target group criteria (such as conformity with the R&D areas of the specific research centre of the Valley, the level of science to business cooperation, the soundness of ideas, compliance with the small and medium business criterion).

V. THE CRITERIA FOR PROGRAMME ASSESSMENT

56. The following are the Programme assessment criteria (the envisaged performance indicators of the Programme):

56.1. the number of projects for R&D facilities development;

56.2. the total area of laboratories;

56.3. the total area of R&D premises:

56.4. the total area of set up premises;

56.5. the total area of renovated premises;

56.6. the number of laboratories provided with equipment;

56.7. the number of established and operating research centres;

56.8. the number of jobs in joint research;

56.9. the number of implemented projects of infrastructure development and upgrading;

56.10. the number of cooperation agreements signed by research institutions, research and business companies (during 6 months after project completion);

56.11. the number of established or renovated training laboratories;

56.12. the number of established or renovated places for students at dormitories;

56.13. the number of projects aimed at the improvement of the R&D and innovation environment;

56.14. the area of the investment-ready Valley territory;

56.15. the number of organized international events and fairs;

56.16. the amount of private investment attracted to the infrastructure of research and technology transfer (million LTL);

56.17. the number of established or developed scientific technology parks;

56.18. the number of small and medium-sized businesses established in the supported infrastructural objects of the technology park over the three years following the completion of the project.

VI. ENVISAGED RESULTS

57. The envisaged Programme implementation results (in 2013):

57.1. 32 projects for the development of R&D facilities will be implemented.

57.2. The total area of the established laboratories will reach 10.120 sq m.

57.3. The total area of set up R&D premises will reach 2.370 sq m.

57.4. The total area of the set-up premises will reach 4.490 sq m.

57.5. The total area of renovated premises will reach 8.000 sq m.

57.6. 28 research laboratories will be provided with equipment.

57.7. Three research centres will be established and in operation.

57.8. There will be 600 jobs in joint research.

57.9. One infrastructure development and upgrading project will be implemented.

57.10. 23 cooperation agreements will be signed by research institutions, research and business companies (during 6 months after project completion).

57.11. 40 training laboratories will be established or renovated.

57.12. 800 places for students at dormitories will be established or renovated.

57.13. 4 projects for the improvement of the infrastructure of the R&D and innovation environment will be implemented.

57.14. The investment-ready area of the Valley's territory will amount to 14 ha.

57.15. 3 international events and fairs will be organised.

57.16. LTL 100 million of private investment will be attracted to the infrastructure of research and technology transfer;

57.17. Two science and technology parks will be established and developed.

57.18. 25 small and medium-sized businesses will be established in the financially supported infrastructural objects of the technology park over the three years following the completion of the project.

VII. PROGRAMME IMPLEMENTATION, MONITORING AND CONTROL

58. The programme shall be funded from the EU structural fund resources coordinated by the Ministry of Education and Science, Ministry of Economy, Ministry of Health and other ministries, as well as from the resources of other programmes:

58.1. The measures under the tasks specified in paragraphs 30.1-30.4 and paragraph 30.7 of the Programme are directly related to the implementation of the General National Programme for Cooperation Between Research and Science on the One Hand and Business on the Other Hand, approved by Order No ISAK-563 of the Minister of Education and Science of 3 March 2008, the implementation of the measures under Priority 1, "Research and technological development for competitiveness and growth of the economy", of the Operational Programme for Economic Growth, and the implementation of the measures, coordinated by the Ministry of Education and Science, under the activities of the General National Complex Programme, approved by Order No ISAK-2336 of the Minister of Education and Science of 3 December 2007 (*Valstybės žinios* (Official Gazette) No 7-262, No 122-4641, 2008).

58.2. The measures of the task specified in paragraph 30.5 are directly related to the implementation of the measures under Priority 1, "Research and technological development for competitiveness and growth of the economy", of the Operational Programme for Economic Growth.

59. The Programme implementation measures, their implementing bodies and the preliminary requirement for funds in order to implement them are set out in the Annex to the Programme.

60. Association Santaros Slėnis and the implementing bodies for the Programme's implementing measures and activities shall submit information on individual state projects to the Ministry of Education and Science. Planning of individual state projects corresponding to the Programme's measures and activities in the areas coordinated by the Ministry of Education and Science shall be organized in accordance with the requirements of the Procedure of State Project Planning, approved by Order No ISAK-977 of the Minister of

Education and Science of 8 April 2008 (*Valstybės žinios* (Official Gazette) No 44-1665, 2008).

61. The monitoring of individual projects implementing the Programme shall be carried out, in accordance with the indicators laid down in the Annex to the Programme, by the Central Project Management Agency, the public institution Lithuanian Business Support Agency, the Ministry of Education and Science, the Ministry of Economy and the Ministry of Health.

62. By June 20 and by December 20 each year, Association Santaros Slėnis and the implementing bodies for the Programme's implementing measures and activities shall submit to the Ministry of Education and Science information on the implementation of the Programmes measures and indicators. At the end of the year, the Ministry of Education and Science shall present, together with its annual activity report, the Report on the Implementation of the Physical and Financial Indicators of the Programme, to the Government of the Republic of Lithuania.

63. The assessment activities for the Programme and its projects (strategic analysis, review of the quantitative and qualitative result indicators, the current, the intermediate and the final assessment) shall be organized pursuant to the Plan of the European Union Structural Aid Assessment, approved by Order No 1K-018 of the Minister of Finance of 15 January 2008 (*Valstybės žinios* (Official Gazette) No 9-314, 2008).

64. State property acquired in implementing the Programme shall be transferred to the participants of the Valley with the right of trust or loan-for-use in accordance with the legislation.

65. An integral part of the Programme is the Description of the Justification and Implementation of the Development Programme for the Integrated Science, Studies and Business Centre (Valley) SANTARA (Annex to the Programme).

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Annex to the Development Programme for the Integrated Science, Studies and Business Centre (Valley) SANTARA

DESCRIPTION OF THE JUSTIFICATION AND IMPLEMENTATION OF THE DEVELOPMENT PROGRAMME FOR THE INTEGRATED SCIENCE, STUDIES AND BUSINESS CENTRE (VALLEY) SANTARA

I. GENERAL PROVISIONS

1. The purpose of the Description of the Justification and Implementation of the Development Programme for the Integrated Science, Studies and Business Centre (Valley) SANTARA (hereinafter referred to as "the Programme") is to justify the infrastructural, financial and organizational measures necessary for the establishment and successful functioning of the integrated science, studies and business centre (Valley) SANTARA (hereinafter referred to as "the Valley").

The Valley is a link among science, studies and business intended to develop competitive fundamental and applied science as well as Master and doctoral studies.

II. LOGICAL JUSTIFICATION OF THE PROGRAMME

2. The infrastructure of open access research (hereinafter referred to as "RI") created while implementing the Programme, combined with the already present research capacities of the Valley's founders, will make it possible to ensure integration of science, studies and business in the Valley and to create a favourable environment for the transfer of scientific knowledge and technologies to business. In order to use the new RI opportunities and to focus the national scientific potential on the tasks of the Valley, the establishment of four nuclei of the Valley is planned: Joint Centre for Life Sciences, Joint Innovative Medicine Centre, Joint Nature Research Centre and the Cluster of Information Technologies. These nuclei will use the common RI to optimize the interaction of all of the valley's partners and their units.

3. In implementing the Programme, the following actions are envisaged:

3.1. Creation of the RI:

3.1.1. construction of the building of the Joint Centre for Life Sciences (comprising relevant research and training laboratories of the Institute of Biochemistry and the Institute of Biotechnology, which, following the reform of the network of the Lithuanian higher education and research institutions, will become part of Vilnius University, as well as the laboratories of Vilnius Gediminas Technical University and Vilnius University) and acquisition of scientific laboratory equipment;

3.1.2. construction of the building of the Joint Innovative Medicine Centre (comprising the premises used by the State Research Institute Centre for Innovative Medicine, including the open access premises), acquisition of scientific laboratory equipment;

construction of the Visualization and Nuclear Medicine Research Centre and acquisition of scientific laboratory equipment;

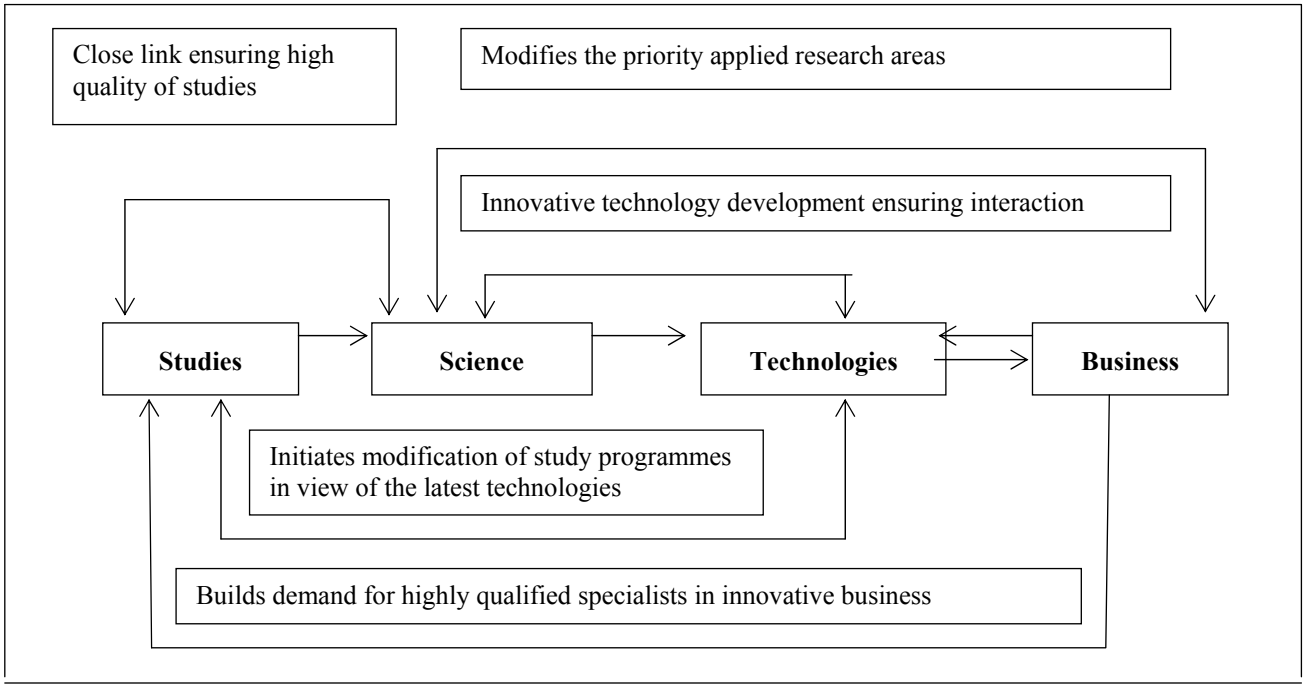

Fig. 1 **Integration of science, studies and business in the Valley**

3.1.3. Reconstruction of the premises of the infrastructural units complementing the Joint Innovative Medicine Centre: reconstruction of the premises of the Centre of Biological Resources (at the public institution State Pathology Centre) and of the Centre of Biomodels and Pre-clinical Research (at the Immunology Department of the state research institute Innovative Medicine Centre);

3.1.4. renovation of the premises of the Joint Nature Research Centre (consisting of the respective departments and laboratories of the Nature Research Centre, as well as of the Faculty of Natural Sciences of Vilnius University) and acquisition of scientific laboratory equipment.

3.1.5. reconstruction and construction of the premises of the participants of the Information Technology Cluster, namely Vilnius University Faculty of Mathematics and Informatics and the Institute of Mathematics and Informatics of Vilnius University, acquisition of scientific and technological equipment; construction and fitting out of the R&D and training centre with shared laboratory and experimental premises of the Information and Communication Technology (hereinafter referred to as "ICT") Cluster.

3.2. Creation of the infrastructure of cooperation between businesses and institutions of science and studies:

3.2.1. construction and outfitting of the ICT business incubator and technology centre;

3.2.2. design, construction and outfitting of the incubator of medical technology and pharmacy businesses and new products (section 1 of the business incubator of the technology park for biotechnologies, innovative medical technologies and pharmacy (hereinafter referred

to as "BIO") – the superstructure of the Vilnius University Hospital Santariškių Clinics, approximately 1.500 sq m (Santariškių str. 2, Vilnius); section 2 – 1.500 sq m (at the intersection between Geležinio Vilko, Mokslininkų and Akademijos streets, Vilnius in the territory allotted to Visoriai IT Park;

3.2.3. installation of the engineering networks and transport communications in the ICT and BIO technology parks and in the territory of the green field investments by companies.

3.3. Development of the study infrastructure of the valley, i.e. the transfer of Vilnius University Faculty of Natural Sciences and Faculty of Medicine as well as the respective dormitories to the Valley.

4. Within the Valley's RI, the scientific and technological equipment already held by the Valley's founders as well as that acquired under the provisions of the Programme are united to create open access research equipment centres. The rules for the establishment and management of these open access centres shall be approved by the Minister of Education and Science.

5. The description of the equipment acquired by the open access research equipment centres shall be approved by the Ministry of Education and Sciences in coordination with the ministries allocating funds to acquire that equipment. The complexes of equipment shall be formed according to the available scientific potential on the basis of the principle of complementing the existing equipment and with regard to the development prospect of the respective R&D area as well as to the opportunities of cooperation with business companies.

III. THE ORDER OF PRIORITY OF THE PROGRAMME'S PROJECTS AND THEIR LOGICAL LINKS

6. Implementation of public infrastructure projects of three groups is envisaged in the Programme: creation of the research infrastructure; creation of the infrastructure for cooperation between businesses and institutions of science and studies; creation of the infrastructure of studies. All the said project groups are interrelated and aimed at the implementation of the Programmes objectives and tasks.

7. Within the project groups, projects are divided into two main subgroups: construction and reconstruction of buildings; acquisition of research equipment. Each subgroup consists of projects of a similar type, however they are intended to establish different nuclei of the Centre.

8. Physical infrastructure projects for the Valley's nuclei (construction of new buildings and reconstruction of the existing ones) and scientific equipment acquisition projects will be implemented simultaneously. Such project implementation enables acquisition of scientific equipment until the completion of building construction. Research centres thus established could become fully operative by the end of the Programme implementation. Moreover, the risk arising due to possible changes in the prices of research equipment to be acquired would be avoided.

9. The infrastructure of cooperation between businesses and institutions of science and studies will be created through clusterization of the businesses and institutions of science and studies in the main areas of ICT and BIO technology parks and the Valley.

10. The transfer of the respective dormitories of the Faculty of Natural Sciences and the Faculty of Medicine to the territory of the Valley will be carried out by way of renovation of state-owned real property, with respect to the current legal base and situation on the real property market. A delay of 12-24 months is possible in implementing these projects compared to other projects.

IV. IMPLEMENTING MEASURES OF THE PROGRAMME'S TASKS

11. The Programme's implementing measures correspond to the tasks. Supervision of the implementation of individual projects under the Programme's measures is carried out by project operators, which supply information necessary for project implementation (Table 1).

Table 1. Implementing measures for the Programme's tasks and preliminary requirement of funds

Tasks	Measures	Implementing bodies	Year of implementation	Preliminary requirement of funds (LTL thou.)					
				Total	2009	2010	2011	2012	2013
1. To create modern research infrastructure serving the needs of research, studies and technological development in biotechnology and molecular medicine	1.1. To design and construct the building of the scientific laboratories of the Joint Centre for Life Sciences	Vilnius University, Vilnius Gediminas Technical University	2009–2012	107.500 (Ministry of Education and Science, European Regional Development Fund)	3.500	35.620	35.920	32.460	
	1.2. To acquire laboratory equipment for the Joint Centre for Life Sciences	Vilnius University, Vilnius Gediminas Technical University, Vilnius University Institute of Oncology	2009–2012	31.800 (Ministry of Education and Science, European Regional Development Fund)	9.000	11.335	10.000	1.465	
2. To create modern research infrastructure serving the needs of research, studies and technological development in innovative medical technologies, molecular medicine and biopharmacy	2.1. To design and construct the building of the Joint Innovative Medicine Centre (except the Visualization and Nuclear Medicine Research Centre)	State research institute Innovative Medicine Centre, Vilnius Gediminas Technical University	2009–2012	18.600 (Ministry of Education and Science, European Regional Development Fund) 18.945 (State Real Property Renovation Programme)	3.666 3.789	7.603 7.577	5.634 5.684	1.697 1.895	

Tasks	Measures	Implementing bodies	Year of implementation	Preliminary requirement of funds (LTL thou.)					
				Total	2009	2010	2011	2012	2013
	2.2. To acquire open access laboratory equipment for the Joint Innovative Medicine Centre (except for the Visualization and Nuclear Medicine Research Centre)	State research institute Innovative Medicine Centre, Vilnius Gediminas Technical University, public institution Vilnius University Hospital Santariškių Clinics	2009–2012	19,400 (Ministry of Education and Science, European Regional Development Fund)	2.723	6.166	8.158	2.353	
	2.3. To construct and to fit out the Open Access Visualization and Nuclear Medicine Research Centre	Ministry of Health or its authorized institution	2009–2011	13.900 (Ministry of Health; Operational Programme for Cohesion Promotion of the European Regional Development Fund and the Cohesion Promotion Fund)	1.000	11.900	1.000		
	2.4. To reconstruct and fit out the premises of the Biological Resources Centre and the Centre of Biomodels and Pre-clinical Research Centre	State research institute Innovative Medicine Centre, public institution State Pathology Centre	2009–2012	4.000 (Ministry of Economy, European Regional Development Fund) 1.300 (State Investment Programme)	4.000	400	400	500	

Tasks	Measures	Implementing bodies	Year of implementation	Preliminary requirement of funds (LTL thou.)					
				Total	2009	2010	2011	2012	2013
3. To create modern research infrastructure to serve the needs of research and studies into ecosystems and sustainable development as well as environmental technology development; and, on that basis, to gather the highest-qualification Lithuanian specialists for joint activities, i.e. to establish a Joint Nature Research Centre	3.1. To construct the scientific laboratory section of the Nature Research Centre (on the existing foundation in the building of Vilnius University Institute of Ecology)	Nature Research Centre	2011	6.000 (Ministry of Education and Science, European Regional Development Fund)			6.000		
	3.2. To reconstruct the building of the Experimental Aquarium Facilities of the Nature Research Centre (Verkių str. 98, Vilnius)		2010	5.000 (Ministry of Environment, European Regional Development Fund)		5.000			
	3.3. To reconstruct the premises of the Division of Geology and Geography of the Nature Research Centre	Nature Research Centre, AB Turto Bankas	2012	3.000 (State Real Property Renovation Programme)				3.000	
	3.4. To acquire laboratory equipment for the Joint Nature Research Centre	Vilnius University, Nature Research Centre	2010–2013	10.700 (Ministry of Education and Science, European Regional Development Fund)		4.075	3.075	2.275	1.275

Tasks	Measures	Implementing bodies	Year of implementation	Preliminary requirement of funds (LTL thou.)					
				Total	2009	2010	2011	2012	2013
4. To create modern research infrastructure serving the needs of research, studies and technological development in information technologies and telecommunications	4.1. To acquire research equipment for the IT Open Access Centre	Vilnius University	2011–2012	6.000 (Ministry of Education and Science, European Regional Development Fund)			4.000	2.000	
5. To create the conditions necessary for cooperation of businesses with institutions of science and studies and for the formation of the origins of knowledge-intensive businesses on the basis of commercialization of research findings; to improve the competitiveness of business on the global market	5.1. To install the engineering networks and communications in the ICT and BIO technology parks and in the territory of the green field investments by companies.	Vilnius University, State research institute Innovative Medicine Centre, public institution Visoriai IT Park	2009–2010	12.000 (Ministry of Economy, European Regional Development Fund)	6.000	6.000			
	5.2. To build and fit out an ICT business incubator and technology centre	Public institution Visoriai IT Park, Vilnius University	2010–2012	10.000 (Ministry of Economy, European Regional Development Fund) 3.,000 (other funds)		2.000 7.000	4.000 10.000	4.000 18.000	

Tasks	Measures	Implementing bodies	Year of implementation	Preliminary requirement of funds (LTL thou.)					
				Total	2009	2010	2011	2012	2013
	5.3. To build and fit out the R&D and Training Centre of the ICT Cluster (with a data centre)	Public institution Visoriai IT Park, Vilnius University	2009–2012	30.000 (Ministry of Economy, European Regional Development Fund; funding received by competition) 30.000 (other funds)		8.000	11.000 10.000	11.000 20.000	
	5.4. To construct and fit out sections 1 and 2 of the BIO Technology Park's business incubator	Association of Innovative Medical Technologies and Biopharmacy, the research park operator selected through tendering procedure, State research institute Innovative Medicine Centre, public institution Vilnius University Hospital Santariškių Clinics	2010–2012	9.000 (Ministry of Economy, European Regional Development Fund) 9.000 (other funds)		3.500 3.500	3.500 3.500	2.000 2.000	

Tasks	Measures	Implementing bodies	Year of implementation	Preliminary requirement of funds (LTL thou.)					
				Total	2009	2010	2011	2012	2013
6. To upgrade and modernize the infrastructure of university studies in biotechnologies, medicine, ecosystems and sustainable development; to reinforce the interaction among science, studies and business in order to improve the quality of studies.	6.1. To move Vilnius University Faculty of Medicine and Faculty of Natural Sciences as well as the respective dormitories to the Valley.	AB Turto Bankas, Vilnius University	2010–2013	101.315 (State Real Property Renovation Programme)		5.000	28.000	30.000	38.315

Tasks	Measures	Implementing bodies	Year of implementation	Preliminary requirement of funds (LTL thou.)					
				Total	2009	2010	2011	2012	2013
7. To coordinate the Valley development and to ensure cooperation between science and business.	7.1. To establish Association Santaros Slėnis	Vilnius University, Vilnius Gediminas Technical University, Vilnius University Institute of Oncology, Nature Research Centre, State research institute Innovative Medicine Centre, public institution Visoriai IT Park, public institution Vilnius University Hospital Santariškių Clinics, Association of Innovative Medical technologies and Biopharmacy, and others	2008						
	7.2. To coordinate the implementation of the Programme	Association Santaros Slėnis	2009–2013	3.000 (Ministry of Education and Science, European Social Fund)	759	900	731	610	

V. FUNDING SOURCES FOR THE PROJECTS UNDER THE PROGRAMME'S MEASURES MATCHING THE TASKS

12. Individual projects corresponding to the Programme's measures shall be implemented in accordance with the administration and funding requirements for the projects of EU structural funds (the European Regional Development Fund and the European Social Fund) as well as the requirements of the national legislation. The operators of projects eligible for funding under the state project planning procedure shall present additional descriptions in line with the regulations approved by the Ministry of Education and Science or other ministries.

13. The funding sources for the projects under the Programme measures are set out in Table 2.

Table 2. Funding sources for projects under the Programme's measures

Project no	Projects matching the Programme's measures	Preliminary requirement of funds (LTL thou.)	Funding sources				
			Ministry of Education and Science, European Regional Development Fund	Ministry of Education and Science, European Social Fund	Ministry of Economy, European Regional Development Fund	State Real Property Renovation Programme	other
CREATION AND DEVELOPMENT OF THE VALLEY'S R&D INFRASTRUCTURE							
1.	Establishment of the Centre of Life Sciences						
1.1.	Design and construction of the building of the Joint Centre for Life Sciences	107.500	107.500				
1.2.	Acquisition of laboratory equipment for the Joint Centre for Life Sciences	31.800	31.800				
2.	Establishment of a Joint Innovative Medicine Centre						
2.1.	Design and construction of the building of the Joint Innovative Medicine Centre (except the Visualization and Nuclear Medicine Research Centre)	37.545	18.600			18.945	
2.2.	Acquisition of open access laboratory	19 400	19 400				

Project no	Projects matching the Programme's measures	Preliminary requirement of funds (LTL thou.)	Funding sources				
			Ministry of Education and Science, European Regional Development Fund	Ministry of Education and Science, European Social Fund	Ministry of Economy, European Regional Development Fund	State Real Property Renovation Programme	other
	equipment for the Joint Innovative Medicine Centre (except the Visualization and Nuclear Medicine Research Centre)						
2.3.	Design and construction of the Open Access Visualization and Nuclear Medicine Research Centre and acquisition of equipment	13.900					13 900 (Ministry of Health, Operational Programme for Cohesion Promotion; resources of the Cohesion Fund, European Regional Development Fund and national co-financing)
2.4.	Reconstruction and fitting out of the Biological Resources centre and the premises of the Biomodel and Pre-clinical Research Centre	5.300			4.000		1 300 (resources administered by the Ministry of Health)
3.	Establishment of a Joint Nature Research Centre						
3.1.	Construction of the scientific laboratory section of the Nature Research Centre (on	6.000	6.000				

Project no	Projects matching the Programme's measures	Preliminary requirement of funds (LTL thou.)	Funding sources				
			Ministry of Education and Science, European Regional Development Fund	Ministry of Education and Science, European Social Fund	Ministry of Economy, European Regional Development Fund	State Real Property Renovation Programme	other
	the existing foundation in the building of Vilnius University Institute of Ecology)						
3.2.	Reconstruction of the building of the Experimental Aquarium Facilities of the Nature Research Centre (Verkių str. 98, Vilnius)	5.000					5.000 (Ministry of Environment)
3.3.	Reconstruction of the Division of Geology and Geography of the Nature Research Centre	3.000				3.000	
3.4.	Acquisition of laboratory equipment for the Joint Centre for Life Sciences	10.700	10.700				
4.	To acquire modern research equipment for the IT Open Access Centre						
4.1.	Acquisition of research equipment of the IT Open Access Centre	6.000	6.000				
5.	Creation of the infrastructure of cooperation between businesses and institutions of science and studies						
5.1.	Installation of the engineering networks and communications in the ICT and BIO technology parks and in the territory of the green field investments by companies	12.000			12.000		
5.2.	Construction and fitting out of the ICT business incubator and technology centre	45.000			10.000		35.000**
5.3.	Construction and fitting out of the R&D	60.000			30.000		30 000**

Project no	Projects matching the Programme's measures	Preliminary requirement of funds (LTL thou.)	Funding sources				
			Ministry of Education and Science, European Regional Development Fund	Ministry of Education and Science, European Social Fund	Ministry of Economy, European Regional Development Fund	State Real Property Renovation Programme	other
	and Training Centre of the ICT Cluster (with a data centre)						
5.4.	Construction and installation of sections 1 and 2 of the BIO Technology Park business incubator	18.000			9.000		9.000**
6.	Development of the studies infrastructure						
6.1.	Construction of the training division and dormitories of the Faculty of Natural Sciences and the Faculty of Medicine of Vilnius University	101.315				101.315	
7.	Coordination of the Valley's development, ensuring of cooperation between science and business	3.000		3.000			
	Total	485.460	200.000	3.000	65.000	123.260	94.200

*Competitive funding
**Private investment.

VI. PRELIMINARY SCHEDULE OF PROGRAMME IMPLEMENTATION

14. The implementing bodies of the Programme's measures and Association Santaros Slėnis shall evaluate the preliminary schedule of Programme implementation (Table 3) within a year of the start of Programme implementation.

Table 3. Preliminary Schedule of Programme Implementation

Project no	Programme projects and stages	2009				2010				2011				2012				2013			
		quarter																			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
CREATION AND DEVELOPMENT OF THE VALLEY'S R&D INFRASTRUCTURE																					
1.	Establishment of the Centre for Life Sciences																				
1.1.	Design and construction of the building of the Joint Centre for Life Sciences*																				
1.2.	Acquisition of laboratory equipment for the Joint Centre for Life Sciences																				
2.	Establishment of a Joint Innovative Medicine Centre																				
2.1.	Design and construction of the building of the Joint Innovative Medicine Centre (except the Visualization and Nuclear Medicine Research Centre)																				
2.2.	Acquisition of open access laboratory equipment for the Joint Innovative Medicine Centre (except for the Visualization and Nuclear Medicine Research Centre)																				
2.3.	Design and construction of the Open Access Visualization and Nuclear Medicine Research Centre and acquisition of equipment																				
2.4.	Reconstruction and fitting out of the Biological Resources centre and the premises of the Biomodel and Pre-clinical Research Centre																				
3.	Establishment of a Joint Nature Research Centre																				

Project no	Programme projects and stages	2009				2010				2011				2012				2013			
		quarter																			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
3.1.	Construction of the scientific laboratory section of the Nature Research Centre (on the existing foundation in the building of Vilnius University Institute of Ecology)																				
3.2.	Reconstruction of the building of the Experimental Aquarium Facilities of the Nature Research Centre (Verkių str. 98, Vilnius)																				
3.3.	Reconstruction of the Division of Geology and Geography of the Nature Research Centre																				
3.4.	Acquisition of laboratory equipment for the Joint Centre for Life Sciences																				
4.	To acquire modern research equipment for the IT Open Access Centre																				
4.1.	Acquisition of research equipment of the IT Open Access Centre																				
5.	Creation of the infrastructure of cooperation between businesses and institutions of science and studies																				
5.1.	Installation of the engineering networks and communications in the ICT and BIO technology parks and in the territory of the green field investments by companies																				
5.2.	Construction and fitting out of the ICT business incubator and technology centre																				
5.3.	Construction and fitting out of the R&D and Training Centre of the ICT Cluster (with a data centre)*																				
5.4.	Construction and installation of sections 1 and 2 of the BIO Technology Park business incubator																				
6.	Development of the studies infrastructure																				
6.1.	Construction of the training division and dormitories of the																				

Project no	Programme projects and stages	2009				2010				2011				2012				2013			
		quarter																			
		I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
	Faculty of Natural Sciences and the Faculty of Medicine of Vilnius University																				
7.	Coordination of the Valley's development, ensuring of cooperation between science and business																				

*Including a feasibility study (investment project)

VII. THE MAIN INDICATORS OF MONITORING OF THE PROJECTS MATCHING THE PROGRAMME'S MEASURES

15. The indicators of monitoring of the measures matching the Programme's tasks (Table 4) shall be applicable in implementing the indicators of Priority 1 "Research and technological development for competitiveness and growth of the economy" and Priority 2 "Increasing business productivity and improving business environment" of the Operational Programme for Economic Growth and Priority 3 "Strengthening the capacities of researchers" of the Operational Programme for Human Resources Development. Project operators of individual projects matching the Programme's measures shall supply information on the indicators of individual projects to the Association Santaros Slėnis.

Table 4. The indicators of monitoring of the projects matching the Programme's measures

Indicator type (project no)	Indicator	Measuring units	Quantified indicators for 2015 (Programme part)
(1.1.2.)	Construction of the building of the Joint Centre for Life Sciences		
Product	R&D facilities development projects	number	1
Result	Total area of laboratories established	sq. m	8.000
Result	Total area of R&D premises	sq. m	21.500
(2.1.1.)	Construction of the building of the Joint Innovative Medicine Centre		
Product	R&D facilities development projects	number	1
Result	Total area of open access premises	sq. m	4.375
(2.3.1.)	Construction of the building of the Institute of the Innovative Medicine Centre		
Product	R&D facilities development projects	number	1
Result	Area of created premises	sq. m	4.210
(2.4.1.)	Design and construction of the Open Access Visualization and Nuclear Medicine Research Centre		
Product	R&D facilities development projects	number	1
Result	Area of created premises	sq. m	405
(2.5.1.)	Related units of the Innovative Medicine Centre		
Product	R&D facilities development projects	number	3
Result	Total area of R&D premises	sq. m	3.870
Result	Scientific laboratories provided with equipment	number	5
(3.2.1.–3.2.3. / 4.2.1.)	Renovation the premises of the Nature Research Centre and IT Cluster		
Product	R&D facilities development projects	number	2

Indicator type (project no)	Indicator	Measuring units	Quantified indicators for 2015 (Programme part)
Result	The total area of renovated premises	sq. m	8.000
(1.2.1.–1.2.10. / 2.2.1.–2.2.9. / 3.1.1.–3.1.4. / 4.1.1.)	Acquisition of the equipment of the laboratories of Open Access Centres		
Product	R&D facilities development projects	number	23
	Scientific laboratories provided with equipment	number	23
Result	Established and operating research centres (renovation)	number	3
	Total research jobs	number	600
	Cooperation agreements signed by research institutions and research as well as business companies (during 6 months after project completion).	number	23
(6.1.1.)	Creation of the infrastructure of studies		
Product	Projects of the infrastructure of studies	number	1
Result	Established or upgraded training laboratories	number	40
	Established or renovated places for students at dormitories	places	800
(4.3.1., 5.1.1., 5.2.1., 5.3.1.)	Improvement of the medium for the dissemination of knowledge technologies		
Product	Projects aimed at the improvement of the R&D and innovation environment	number	4
	The area of the investment-ready Valley territory	ha	14
	Organized international events and fairs	number	3
Result	Private investment attracted to the infrastructure of research and technology transfer	million LTL	100
	Scientific technology parks or business incubators established or developed	number	2
	Small and medium-sized businesses established in the financially supported infrastructural objects of the technology park over the three years following the completion of the project	number	25

VIII. ORGANIZATIONAL PLAN OF THE PROGRAMME

16. The Programme's organization measures are aimed at cooperation among the Valley's initiators and participants, coordination of their interests, as well as at ensuring public access to the infrastructure created in the Valley.

Table 5. Organizational measures of Programme implementation

Organisational measures	Objectives, tasks and functions
Activities of Association Santaros Slėnis	Activities of Association Santaros Slėnis: implementation of the Valley's objectives; coordination of the interests of the Valley's partners; representation of the interests of the Valley's partners; approval of the Valley development documentation by the Valley's partners; coordination of Valley development; implementation of the Valley development programme; prioritization of the activities and projects; ensuring of added-value generation: benefits to science, studies, business and society; ensuring of the Valley management efficacy; measuring, monitoring and assessment of the achieved Valley performance indicators; publicizing of the Valley activities and results; ensuring openness of activities; ensuring of horizontal cooperation among the valleys in order to use the available property, scientific findings and resources effectively; ensuring of effective cooperation of science and business; ensuring and effective use of open access to the created research infrastructure.
Valley contract	The contract envisages the roles, obligations and responsibilities of the Valley participants. The essential provisions of the contract: the Valley's initiators and participants shall establish their interests and needs within the infrastructure through contracts, assuming the respective obligations regarding the maintenance of the infrastructure; scientific and business entities shall participate in the specific projects of the Valley's activities on the basis of short-term contracts; jobs shall be established to promote exchange of scientists and to attract scientists of the highest qualification.

IX. MANAGEMENT SCHEME OF THE PROGRAMME

17. Association Santaros Slėnis shall be established for the coordination of the Valley's development as well as of the interests of science, studies and business. The Association's founders and members may be institutions of science and studies, their associations, public administration institutions, public non-profit institutions, businesses, business support organizations, business associations and other types of associations and other legal and natural persons desiring to participate in the creation and development of the Valley. The structure of the Association Santaros Slėnis is presented in figure 2.

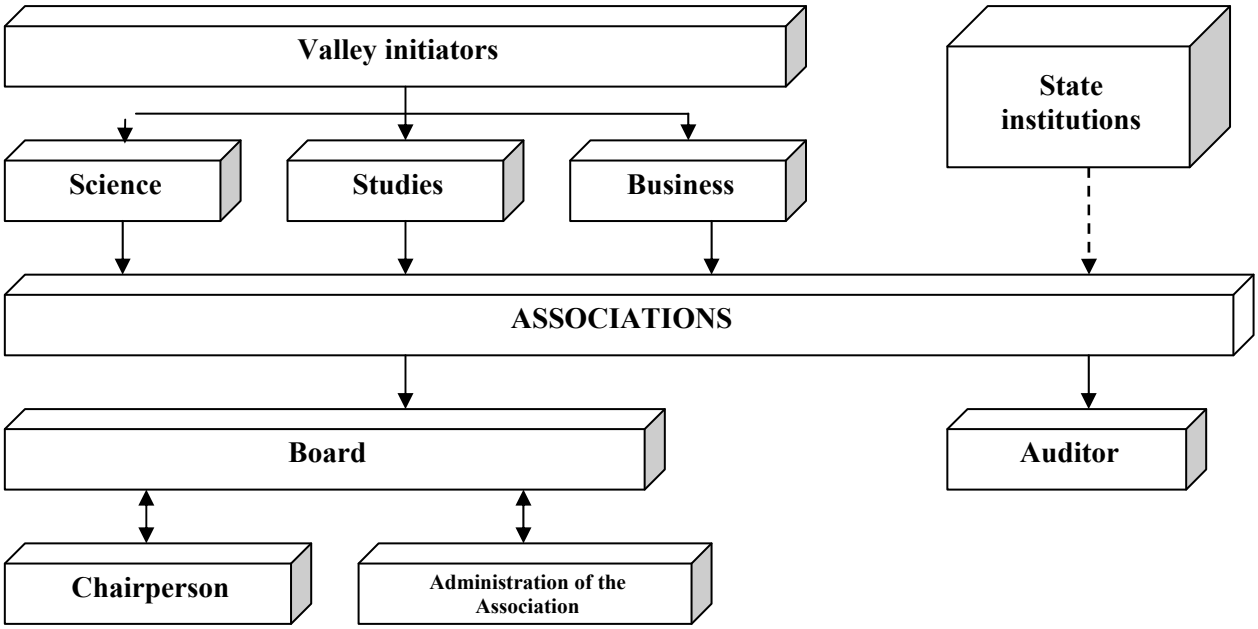

Fig. 2 **The structure of Association Santaros Slėnis**

18. Association Santaros Slėnis shall implement the Valley's objectives, coordinate the interests of the Valley's partners and represent them, obtain approval to the documentation of Valley development from the Valley's partners, coordinate the activities of the Valley, set the priorities of the activities and projects, ensure generation of the added-value that will benefit science, studies, business and society, ensure effective management of the Valley, measure, monitor and assess the indicators achieved by the Valley, publicize the activities and results of the Valley, ensure open activities, horizontal cooperation among the integrated centres (valleys) of science, studies and business so that the available property, research findings and resources are used effectively, also productive cooperation between science and business as well as open access to the R&D infrastructure in accordance with the rules approved by the Ministry of Education and Science. Implementation of the separate measures under the Programme shall be the responsibility of the implementing bodies of those measures (or projects constituting them). To ensure effective management of the Association Santaros Slėnis, a board shall be formed, where universities, research institutes, public non-profit institutions and business entities will be represented based on the principle of parity. In addition, the Board will include representatives of public authorities (Ministry of Education and Science and/or Ministry of Economy).

X. MANAGEMENT OF INDIVIDUAL PROJECTS

19. A project management group and/or project administration shall be formed for the administration of every major investment project undertaken in the Valley.

20. The projects carried out in the Valley will be governed by partnership agreements specifying the functions of the applicant and partners (if any) and defining the project activities and role in using project results.

21. Monitoring of individual projects implementing the Programme shall be carried out, in accordance with the indicators laid down in this description, by the Central Project Management Agency, the public institution Lithuanian Business Support Agency, the Ministry of Education and Science, the Ministry of Economy and the Ministry of Health.

22. Applicants in the projects related to construction and reconstruction of buildings shall be legal persons holding, with the right of loan-for-use, the state land located in the Valley's territory. Other eligible applicants may be legal persons holding buildings under reconstruction with the right of trust or ownership.

XI. SUPERVISION OF PROGRAMME IMPLEMENTATION

23. An order of the Minister of Education and Science and the Minister of Economy shall form the Council of the Valley, which will perform the functions of coordination of Programme implementation (Figure 3):

23.1. examination of Programme implementation, and drafting of reports to the Ministry of Education and Science and the Ministry of Economy;

23.2. assessment of the progress achieved in Programme implementation;

23.3. when necessary, evaluation of the necessity of Programme amendments and submission of proposals to the Ministry of Education and Science and the Ministry of Economy.

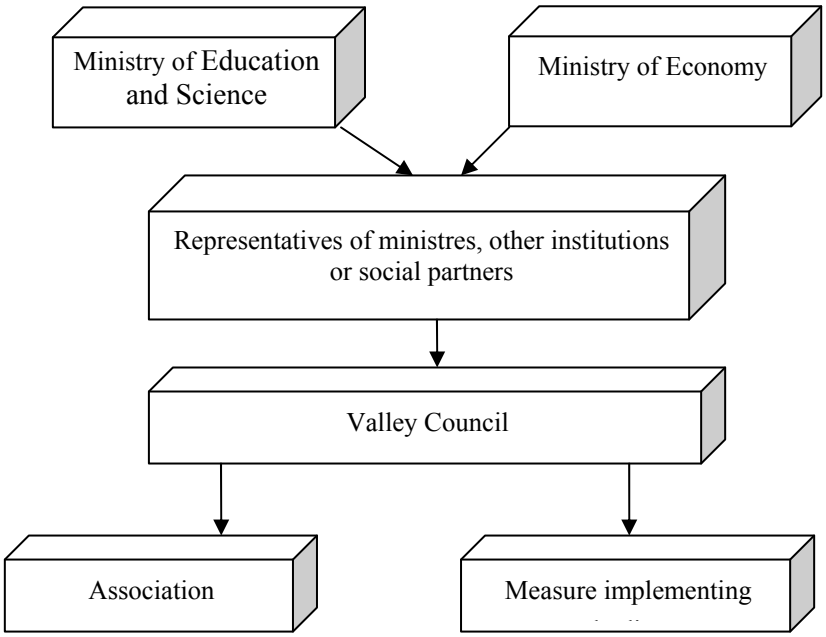

Fig. 3 **Scheme of Programme implementation**

XII. PROGRAMME COMMUNICATION (PUBLICITY) PLAN

24. Publicizing of Programme implementation and of the Valley's activities shall be a responsibility, on different levels, of Association Santaros Slėnis, Ministry of Education and Science and Ministry of Economy (presentation of the Valley's activities on the national level). Implementation of separate measures of the Programme shall be a responsibility of the bodies implementing the measures (the projects it comprises) (public announcements on the activities of the Valley, a website, information publications, press releases, visual information materials, presentation of activities at conferences etc). The main publicity measures envisaged:

24.1. preparation of informational material;

24.2. organization of online publication of information;

24.3. information provision and publicity activities on TV;

24.4. information provision and publicity activities on the radio;

24.5. information provision and publicity activities in the press;

24.6. publishing and distribution;

24.7. conferences;

24.8. other events.

XIII. THE PROGRAMME RISK MANAGEMENT PLAN

25. The measure implementing bodies and Association Santaros Slėnis shall make a thorough assessment of the risk of individual projects comprising the Programme measures (Table 6) annually from the start of Programme implementation.

Table 6. Assessment of the risk of Programme implementation

No	Risk type	Risk description	Measures of risk reduction
1.	Risk associated with investments and funding them		
1.1.	Increase in investment value	investment value in implementing the project may not exceed the one planned according to the estimates	a survey of potential suppliers and contractors; analysis of their commercial proposals
1.2.	Financial benefits of the project fail to meet the expectations	the investments made may bring financial benefits that are smaller than the ones envisaged in the project assumptions and results	analysis of experience in similar projects, detailed economic and financial justification of the project
2.	Economic risk – inaccuracy of economic assumptions and results	estimation of project benefits may produce inaccurate assumptions distorting the project results	justification of the selected methods; evaluation of the quality of assumption justification; analysis of scenarios based on different

No	Risk type	Risk description	Measures of risk reduction
			economic assumptions
3.	Technical/technological risk		
3.1.	Investment quality	suppliers may supply poor-quality equipment	selection of reliable suppliers, guarantee requirement in supply contracts, insurance of contracts and equipment
3.2.	Delays	the activities envisaged in the project implementation plan may be delayed for different reasons	sanction clauses in the contracts; a real and reasonable work schedule (with a reserve for emergencies)
4.	Other risk – organizational	change of the manager responsible for Programme implementation or illness of another member of the team	allocation of tasks among members of the implementation team so that a member could be replaced by another

XIV. THE PLAN FOR THE USE OF PROGRAMME FUNDS

26. The plan for the use of the funds of individual projects matching the Programme measures (Table7) was drafted on the basis of preliminary estimates, project proposals and expert evaluations.

Table 7. The plan for the use of Programme funds

Measures	Preliminary requirement of funds (LTL thou.)				
	2009	2010	2011	2012	2013
1.1. To design and construct the building of the scientific laboratories of the Joint Centre for Life Sciences	3.500	35.620	35.920	32.460	
1.2. To acquire laboratory equipment for the Joint Centre for Life Sciences	9.000	11.335	10.000	1.465	
2.1. To design and construct the building of the Joint Innovative Medicine Centre (except the Visualization and Nuclear Medicine Research Centre)	7.455	15.180	11.318	3.592	
2.2. To acquire open access laboratory equipment for the Joint Innovative Medicine Centre (except for the Visualization and Nuclear Medicine Research Centre)	2.723	6.166	8.158	2.353	
2.3. To construct, to build and to fit out the Open Access Visualization and Nuclear Medicine Research Centre	1.000	11.900	1.000		
2.4. To reconstruct and fit out the premises of the Biological Resources Centre and the Centre of Biomodels and Pre-clinical Research Centre	4.000	400	400	500	

Measures	Preliminary requirement of funds (LTL thou.)				
	2009	2010	2011	2012	2013
3.1. To construct the scientific laboratory section of the Nature Research Centre (on the existing foundation in the building of Vilnius University Institute of Ecology)			6.000		
3.2. To reconstruct the building of the Experimental Aquarium Facilities of the Nature Research Centre (Verkių str. 98, Vilnius)		5.000			
3.3. To reconstruct the premises of the Division of Geology and Geography of the Nature Research Centre				3.000	
3.4. To acquire laboratory equipment for the Joint Nature Research Centre		4.075	3.075	2.275	1 275
4.1. To acquire research equipment for the IT Open Access Centre			4.000	2.000	
5.1. To install the engineering networks and communications in the ICT and BIO technology parks and in the territory of the green field investments by companies.	6.000	6.000			
5.2. To build and fit out an ICT business incubator and technology centre		9.000	14.000	22.000	
5.3. To build and fit out the R&D and Training Centre of the ICT Cluster (with a data centre)		8.000	21.000	31.000	
5.4. To construct and fit out sections 1 and 2 of the BIO Technology Park's business incubator		7.000	7.000	4.000	
6.1. To move Vilnius University Faculty of Medicine and Faculty of Natural Sciences as well as the respective dormitories to the Valley.		5.000	28.000	30.000	38,315
7. To coordinate the Valley development and to ensure cooperation between science and business.	759	900	731	610	
Total	34.437	125.576	150.602	135.255	39,590

Note: The numbers of the measures enumerated in this table correspond to the numbers of projects specified in Table 3.

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