APPROVED by
Order No ____ of the Minister of Education and Science and the Minister of Economy of the Republic of Lithuania of
__ _____ 2014

ACTION PLAN OF THE PRIORITY "MODERN EDUCATIONAL TECHNOLOGIES AND PROCESSES" OF THE PRIORITY AREA OF RESEARCH AND EXPERIMENTAL (SOCIO-CULTURAL) DEVELOPMENT AND INNOVATION (SMART SPECIALIZATION) "INCLUSIVE AND CREATIVE SOCIETY"

CHAPTER I
GENERAL PROVISIONS

1. The action plan of the priority "Modern Educational Technologies and Processes" of the priority area of research and experimental (socio-cultural) development and innovation (smart specialization) (hereinafter - the Priority R&D Area) "Inclusive and Creative Society" (hereinafter - the Action Plan) was drawn up in the implementation of the *Implementation Programme of Priority Areas of Research and Experimental (Socio-cultural) Development and Innovation (Smart Specialization) and their Priorities* approved by Order No. 411 of the Government of the Republic of Lithuania of 30 April 2014 *On the Approval of the Programme for the Implementation of Priority Areas of Research and Experimental (Socio-Cultural) Development and Innovation (Smart Specialization) and their Priorities* (hereinafter - the Programme).

2. The Action Plan was drawn up for establishing the provisions of the implementation of the Priority "Modern Educational Technologies and Processes" (hereinafter - the Priority) of the Priority R&D Area "Inclusive and Creative Society".

3. The Action Plan shall be implemented in 2015–2020.

4. Concepts used in the Action Plan include:

4.1. **Interactive learning methods** shall mean personalized and involving methods of learning providing feedback to learners using modern information and communication technologies often applied in changing environment.

4.2. **Blended learning methods** are also known as hybrid or mixed-mode learning. Blended learning and training method provides the possibility to satisfy a variety of training needs. In the case of blended training the main thing is the possibility to select the most convenient and effective methods according to the identified needs of the training – e-learning, workplace learning, experiential learning, etc.

4.3. **Self-education** shall mean a planning process of learning, development and application of learning strategies, and appropriate use of learning resources. Learners must be able to raise the learning goals, identify the necessary things to learn, plan and select the learning strategies, and evaluate their own learning. Self-education is characterized by the fact that the learner himself, but not an institution controls the learning objectives and learning tools.

4.4. **Experiential learning methods** shall mean methods of learning when learners learn through personal experience.

4.4. **Pre-commercial procurement** shall mean the purchase of research and experimental (socio-cultural) development (hereinafter - R & D) services, which promotes the marketing of innovative products or services. Purchase of R & D services shall not be considered the pre-commercial procurement the benefits of which are used only to meet the needs of the contracting authority and for which the contracting authority shall pay, or which are considered state aid, and acquisition.

5. Other concepts used in the Action Plan shall correspond to concepts used in the Programme.

CHAPTER II
DESCRIPTION OF THE CURRENT SITUATION

6. For reasons of efficiency of investment in human capital, the compliance of competencies acquired by the population with the demand of the labour market is very important. However, systemic conditions have not been provided for this purpose and the forecasting system of the supply and demand of competencies remains fragmented. Underdeveloped vocational and educational guidance and counselling system does not allow young people and adults to determine properly where to study or pursue a career in the light of the available capacity and long-term labour market demand. Increasing technological, economic and social change, the changing environment of human activity and the growing amount of information means that the ability to acquire new knowledge and adapt it to new conditions will become more and more significant. The quality of education and access is highly dependent on modern infrastructure and learning environment in a broad sense, and on the competence of the teaching staff, learning and educational content.

7. Creative personality is a condition of creative, inclusive, open, and advanced society in which productive business based on creativity, able to offer innovative products and services on the market can be born and develop. In such a society, business culture favourable to innovation is formed, the scale of the development and use of technology grows, and the potential human resource is getting stronger. These components are reflected in the index of creativity the indicators whereof have a direct interface with GDP, competitiveness and entrepreneurship (the higher the index, the higher the country's GDP, the extent of entrepreneurship, competitiveness index, the greater the change in human resources and expectations index). One of the components of the criteria in the Global Innovation Index is a creative production / outputs the value whereof during 2011-2014 reveals a lack of public education on creativity in Lithuania limiting faster development of innovation (in 2013, Lithuania ranked 40th, in 2014 - 56th. According to another source that calculate the Global Innovation Index, i.e. World Intellectual Property Organisation, in 2011, Lithuania by creative production / outputs ranked 49th, in 2012 – 42nd, in 2013 – 55th, and in 2014 – 56th).

8. Private business and non-governmental organizations participate actively in the development and delivery of proposals for essentially new or improved human resources and organizational learning products, and the development of provision of services. Especially great potential is accumulated in such sectors as information and communication technologies, consulting services, creative industries and other sectors receptive to knowledge and changes in technologies.

9. In 2007-2013, the volume of investment of business enterprises in the R & D projects amounted to about EUR 160.9 million. However, not all of these funds have been directly related to the intended Priority. The development and implementation of innovation is closely associated with changes in a certain field of R & D, knowledge and technologies of the industrial sector, so it is very difficult to distinguish clearly between the purposes of investment.

10. The potential of Lithuanian science and education institutions of social sciences, humanities (especially of organizational psychology, educational science and so on) and arts are not sufficiently exploited in order to contribute to the development of innovation. Knowledge management and organizational learning, scanning, evaluation and definition of opportunities, value creation, the relationship with customers and users, organization of operations and business, market formation and development, economic structural changes, etc. are the object of these sciences.

11. In 2004-2013, large investments were made in the development of competencies of the teaching staff, the improvement of learning and educational content. These areas will be also developed in 2014-2020 using the funds of the state budget of the Republic of Lithuania and the European Union Structural Funds. Considerable attention was also given to the competence supply and demand forecasting system in the previous European Union Structural Funds periods. Such an area important to the state and welfare of the public as the introduction of modern educational technologies and processes in education and other sectors shall not be abandoned in the future. Significant attention has been paid to this area in the National Progress Program for 2014-2020

approved by Resolution No. 1482 of the Government of the Republic of Lithuania *On the Approval of the National Progress Programme for 2014-2020* of 28 November 2012. The importance of this area also confirms the *National Education Strategy for 2013-2022* approved by the Resolution of the Seimas of the Republic of Lithuania.

During the 2007-2013 EU Structural Funds period, systematic support to the development of creative industries and cultural infrastructure was started. The greatest potential in this area is concentrated in the Lithuanian Academy of Music and the Vilnius Academy of Fine Arts.

During the 2014-2020 EU Structural Funds period close attention is scheduled to the development of biomedical, physical and technological sciences in the general education system, as well as to the provision of measures to develop and update specialized research and experimental activities infrastructure tailored for students.

The new EU Framework Programme for Research and Innovation *Horizon 2020* provides for a public task "Inclusive, innovative and secure society" in the solution whereof active involvement of Lithuanian researchers and other specialists is expected.

Despite the fact that systematic support for R & D activities and other activities relevant to the implementation of the Priority began in the 2004, science and innovation capabilities which are the basis for the more efficient development of modern educational technologies and processes, and application in the development of comprehensive and creative personalities, and shaping business culture, has not been invoked before. Thus, successful implementation of the Priority providing the possibilities to disseminate these technologies and techniques outside of Lithuania is expected to fill this gap.

12. In order to implement the Priority, the R & D resources should be consolidated and concentrated in such areas of R & D, as adult education, didactics of interactive, virtual, experiential and problem learning, open educational systems and open educational resources, digital pedagogy, public relations, information technology, design and audio-visual media, and other related social sciences and humanities, and arts disciplines as well. Collaboration with business and industrial sectors is especially important in the implementation of the Priority so that technologies, processes and products developed in this Priority strengthen their competitiveness. Interaction of projects in different areas and directions is also encouraged. In order to enhance human resource skills in these areas, highly skilled professionals capable of working in the fields of adult education, peer review of the development of open educational resources and quality, copyright, marketing and public relations, and new media should be prepared. Creation of international cooperation networks with leading academic and business institutions of other countries must be pursued and encouraged.

CHAPTER III
CONFORMITY OF THE ACTION PLAN TO THE PROGRAMME AND OTHER STRATEGIC LEGISLATION

13. The Action Plan contributes to the implementation of the strategic goal and goals provided for in subparagraphs 19.1 and 19.2 of the Programme, as well as to the implementation of the task established in subparagraph 20.6, namely to promote R & D innovation activities, which will enable to improve the demographic situation by gradually developing regions, poverty reduction and illegal employment, increase social cohesion, increase interaction skills and the needs of the labor market, and to reduce the gap, develop talents and creative potential, efficient use of resources and creative culture industries, non-technological innovation to promote the progress of society and the economy, increase innovation in the public sector and government efficiency.

14. Actions of the Action Plan:

14.1. to create and introduce new technologies, products, processes and methods into the market;

14.2. to promote the creation of knowledge-intensive business, the development of enterprises with huge potential;

14.3. to encourage clusterization, integration into international value creation networks and investments into RDI;

14.4. to promote cooperation between research and business, transmission of knowledge and technologies with the aim to commercialize R&D results;

14.5. to enhance the potential of scientific and education institutions and their abilities in the creation and commercialization of knowledge, also, to prepare specialists.

15. In the implementation of the Action Plan, the intension is to contribute to changes, which are expected in the implementation of the National Progress Strategy *Lithuania 2030* approved by Resolution No. XI-2015 of the Seimas of the Republic of Lithuania *On the Approval of the National Progress Strategy Lithuania 2030* of 15 May 2012. Results achieved during the implementation of the Priority will mostly contribute to the implementation of the smart economy creation vision, i.e. to the formation of the productive, loyal, and learning society, as well as to the provision of conditions for business, educational, scientific and cultural integration. High impact on the implementation of the *National Education Strategy for 2013-2022* approved by Resolution No. XII-745 of the Seimas of the Republic of Lithuania of 23 December 2013 *On the Approval of National Education Strategy for 2013-2022* with the aim to make Lithuanian education a sustainable basis for raising public welfare, develop an aggressive and independent person, responsibly and severally generating the future of Lithuania, of the world and his own, is also expected.

CHAPTER IV
PRIORITY IMPLEMENTATION STAGES

16. Measures used for the implementation of the Priority have been selected in accordance with the Innovation Development Programme of Lithuania approved by Resolution No. 1281 of the Government of the Republic of Lithuania of 18 December 2013, the National Programme for the Development of Studies, Research and Experimental (Socio-Cultural) Development for 2013 - 2020 approved by Resolution No. 1494 of the Government of the Republic of Lithuania of 5 December 2012 and its implementing legislation.

17. A set of education, and RDI policy measures necessary for the implementation of the Priority has been determined in light of the report presented by international working group of independent experts of 21 February 2014 *Priority Implementation Signposts*. Pursuant to this report, the following Priority implementation stages can be distinguished:

17.1. the stage of generation of scientific potential critical mass includes activities related to the creation of appropriate environment for the search of new ideas and solutions, development of technologies and prototypes, and the readiness to carry out these activities;

17.2. the search for new ideas and solutions include fundamental scientific research of general and targeted nature necessary for the implementation of the Priority;

17.3. the stage of the creation of technologies and their prototypes includes industrial scientific research and experimental development activities necessary for the implementation of the Priority;

17.4. the stage of introduction into the market includes activities related to introducing new products into the market;

17.5. the stage of generating critical mass of business potential includes activities related to the transmission and dissemination of knowledge and innovation, and the use thereof at large.

18. Actions established in subparagraphs 14.1–14.5 are implemented by executing the measures set forth in Annex 1 to the Action Plan.

19. Annex 2 to the Action Plan provides for a set of education and RDI policy measures relevant in each Priority implementation stage.

20. Annex 1 to the Action Plan establishes actions and measures implemented given the set of education and RDI policy measures presented in Annex 2.

CHAPTER V
THEMATIC SPECIFICS OF THE PRIORITY

21. The implementation of the Action Plan is aimed at:

21.1. development and introduction of new or substantially improved blended or hybrid competence development technologies, which include:

21.1.1. traditional and new media technologies to ensure the accessibility of learning, flexibility, efficiency and attractiveness;

21.1.2. self-learning technologies that will increase the quality of learning;

21.1.3. curriculum technologies integrating a variety of teaching-learning methods and processes for efficiency of learning and optimal impact on learning and the acquisition of skills.

Hybrid competency development technologies seek to ensure the timely and efficient development of competencies and skills required for a business or public sector, to contribute to the organization of creative business, management of solutions, processes or resources, and flexible response to changing needs of the market.

21.2. development and introduction of new or substantially improved didactics technology of formal and non-formal education to ensure interactivity of the teaching-learning tools (e.g. e-learning tools, simulation programs, educational e-games, etc.), visual aspects and experiential learning (e.g. 3D printing, virtual environment, etc.) oriented towards the development of creative personality open to changes and innovations.

22. Successful implementation of activities mentioned in subparagraphs 21.1and 21.2 is inseparable from RDI activities carried out by public and private institutions.

23. Important role in the implementation of the Priority is played by joint initiatives for educational, research and experimental (socio-cultural) development and innovation initiatives (hereinafter - joint initiatives) on the basis whereof problems relevant to sectors of economy are planned to be solved by conducting R&D activities on topics relevant to the sectors of economy and hoping for the inclusion of private sector entities in the realization of R&D activity results. The implementation of the joint initiatives considering the activities provided for in subparagraphs 21.1-21.2 of the Action Plan and the actions set out in subparagraphs 14.1-14.5 of the Action Plan, R & D activities are carried out in order:

23.1. to analyze hybrid competence development technologies and their effectiveness and impact on learning and the functioning of business and public sector institutions, adaptation to constantly changing environmental conditions;

23.1. to create hybrid competence development technologies to ensure the relevance of the content, availability, attractiveness and assertiveness, and the flexibility and efficiency of learning media;

23.2. to develop a prototype of hybrid competence development technologies and services to enable the timely and effective development of the required competences and skills by adapting to the constantly changing business and public sector environment.

24. The implementation of the joint initiatives aims that activities provided for in subparagraphs 23.1-23.3 of the Action Plan enable:

24.1. introduction of hybrid competence development technologies;

24.2. introduction of methodologies for forecasting of the need for hybrid competence development technologies and their impact monitoring systems, and to provide and develop research services related thereof;

24.3. introduction and development of an inclusive, coherent system for the management of hybrid competence development technologies associated with relevant international systems.

25. Pre-commercial procurement is used to develop technologies provided in paragraph 21.2 of the Action Plan. During pre-commercial procurement, the buyer of the R & D services shares with the supplier (e.g. Academic and Research Institution) the risks and benefits arising from the development of innovative solutions, i.e. pre-commercial procurement does not include the procurement of R & D services according to which the buyer of the service fully pays the cost of service and acquires an exclusive right to the intellectual property generated used only for his needs. The organization of pre-commercial procurement aims:

25.1. to analyze interactive teaching-learning methods in higher education, vocational training, general education and non-formal education, learning from the experience, based on problematic learning, and their impact on the development of creative personality, open to changes and innovations;

25.2. to develop models for the peer review of interactive educational systems for learning from experience based on problematic learning, and their efficiency, and technological solutions for the subsystems of higher education, vocational training, general education and non-formal education;

25.3. to create prototypes of interactive teaching-learning methods, learning from experience based on problematic learning allowing holistically and systematically develop a creative personality open to changes and innovations.

26. Currently, the Agency for Science, Innovation and Technology is implementing the project "Creation of legal environment for pre-commercial procurement" (IPTAS) the aim whereof is to create a legal administrative model for organization of pre-commercial procurement in Lithuania and documents related to its implementation. Technologies provided for in paragraph 21.2 of the Action Plan will be developed after the establishment of a legal framework necessary to carry out pre-commercial procurement.

27. The organization of pre-commercial procurement aims that the activities listed in subparagraphs 25.1-25.3 of the Action Plan provide the conditions:

27.1. to deploy didactic methods of interactive, experiential and problem learning and educational systems;

27.2. to introduce and develop a platform for planning, monitoring and evaluation of innovative educational solutions connecting business, science and the public sector, and to develop supporting technologies and E-Systems;

27.3. to develop and deploy virtual teaching-learning laboratories controlled remotely for formal education (general education, for vocational and higher education institutions);

27.4. to organize massive open online courses, develop competencies required for its efficient use, helping to learn and acquire the necessary skills to young people in formal and non-formal education and during studies, as well as to help professionals working in the knowledge-intensive business to retrain or acquire additional knowledge, and by reaching the critical mass needed for changing of habits of society and a breakthrough in use of new knowledge, technology and skills;

27.5. to create and develop infrastructure and platforms (including e-platforms) for the development of competencies required to update the content of education and to develop, deploy, adapt, and apply new educational systems in formal and non-formal education.

28. On a proposal from a research and experimental (socio-cultural) development and innovation priority implementation coordination group formed by Order No.V-576/4-409 of the Minister of Education and Science, and the Minister of Economy of 20 June 2014 (hereinafter - the Coordination Group), subparagraphs 23 and 25 of the Action Plan may be amended by deleting or supplementing the activities provided considering data collected during facilitation, regular analysis and evaluation, or other reasonable data and suggestions.

CHAPTER VI
IMPLEMENTATION OF THE ACTION PLAN

29. Possible sources of the implementation of the Action Plan are:

29.1. state budget funds of the Republic of Lithuania:

29.1.1. funds for measures of the 1st priority "Promoting Research, Experimental Development and Innovation" of the European Union structural funds for the 2014-20120 (European Union structural fund action programme 2014-2020 (hereinafter - the Action Programme), 3rd priority of the Action Programme "Promoting Competitiveness of Small and Medium Enterprises" and 9th priority of the Action Programme "Public Education and Increase of Human Resource Potential";

29.1.2. Lithuanian state budget funds (excluding the European Union structural funds);

29.2. funds of scientific and education institutions;

29.3. funds of private legal entities;

29.4. funds of the European Union Research and Innovation Programme *Horizon 2020* and other international programmes.

30. Part of funds for measures of priority 1 and priority 9 of the Action Programme are intended for direct support of activities necessary for the implementation of the Priority, thus table presented in Annex 1 provides for preliminary amount, which is planned for the implementation of the Priority depending on need.

31. Part of the funds for measures of priority 1 of the Action Programme unattributed to any specific priorities of priority areas of research and experimental (socio-cultural) development and innovation (smart specialization) (hereinafter - RDI priorities), the results of the implementation thereof can contribute to the implementation of all or the majority of RDI priorities. These measures are marked in the table presented in Annex 1 to the Action Plan with an asterisk.

32. Part of priority 9 of the Action Programme and measures implemented using the Lithuanian state budget funds are relevant to the entire education and RDI system, and are not attributed to any specific RDI priorities; however, their implementation results can contribute to the implementation of the Priority. These measures are marked in the table presented in Annex 1 to the Action Plan with two asterisks.

33. Measures of priority 3 of the Action Programme though are relevant to the entire system to improve the business environment and to provide support for business shall indirectly contribute to the implementation of the Action Plan, mainly by allowing the private sector to present new products on the market and generating a critical mass of business potential.

By implementing the measures of priority 3 of the Action Programme, the support for activities relevant to the implementation of the Priority, such as the creation of the design of products, deployment of enabling technologies in traditional industries, participation and products presentation in international exhibitions (or) fairs, certification of products and services planned to be exported, raising new manufacturing and service capacities, development of infrastructure of business incubators, membership in international networks (platforms), raising awareness of new products and services, and business start-up advice, is planned.

34. The plan is to have funds of science and education institutions attracted by supporting activities related to the creation and renewal of education and RDI infrastructure necessary for the implementation of the Priority (by implementing infrastructure projects, partial contribution of science and research institutions using their own funds is expected). These funds are included in the graph “State budget funds and other funds” in the table presented in Annex 1 to the Action Plan.

35. The plan is to have funds of private legal entities attracted by implementing measures, projects executed on the basis whereof planned to be co-funded by the state - business companies will have to cover a part of the project value using their own funds. These funds are included in the graph “Private sector funds” in the table presented in Annex 1 to the Action Plan.

36. The Priority may be partially implemented by participating in the European Union Research and Innovation Programme *Horizon 2020* and other international programmes. Funds attracted participating in international programmes are not indicated in the table presented in Annex 1 to the Action Plan.

37. The implementation of the Action Plan seeks for quantitative and qualitative results in line with the evaluation criteria set in Annex 1.

38. Deadlines for publishing calls for applications for measures implementing the actions of the Action Plan or for concluding project lists will be planned for in accordance with the plans for publishing calls for applications and concluding project lists prepared by ministries, as provided for in administration rules of 2014-2020 EU fund investment action programmes approved by Resolution No. 1090 of the Government of the Republic of Lithuania of 3 October 2014 *On the Approval of Administration Rules of 2014-2020 EU Fund Investment Action Programmes*.

39. The Coordination Group coordinates the development of the priority areas of research, experimental (socio-cultural) development, innovation (smart specialization), and the implementation of priorities thereof.

40. The Programme and action plans of RDI priorities are implemented by promoting and supporting the interaction and cooperation between businesses, and research and academic institutions. The Agency for Science, Innovation and Technology, in the procedure laid down by the Government, carries out the promotion of cooperation between business entities and academic and research institutions. The implementation of the Programme is monitored by continuously analysing and assessing the implementation of action plans of RDI priorities. The implementation of the Programme is monitored and assessed in the procedure laid down by the Government by Research and Higher Education Monitoring and Analysis Centre.

41. Infrastructure created and equipment purchased during projects planned to be funded from EU funds or other sources and executed on the basis of education and RDI policy measures set in Annex 1 of the Action Plan shall not duplicate equipment currently possessed by science and education institutions or other public sector entities, except for cases when the capacity of the existing equipment is not enough for ensuring the implementation of the Priority.

42. A list of measures presented in Annex 1 to the Action Plan may be amended in light of the results of the interim evaluation of the Priority implementation planned in 2018, also having assessed the needs of potential executors of the measures.

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Annex 1 to Action Plan of the Priority "Modern Educational Technologies and Processes" of the Priority Area of Research and Experimental (Socio-Cultural) Development and Innovation (Smart Specialization) "Inclusive and Creative Society"

ACTIONS, MEASURES, PRELIMINARY NEED FOR FUNDS FOR THE IMPLEMENTATION THEREOF AND EVALUATION CRITERIA

Actions and measures	Preliminary funds, thousand EUR			Institution in charge	Preliminary funds, thousand EUR	Institution in charge	
	European Union structural funds	State budget and other funds	European Union structural funds	State budget and other funds		Year 2018	Year 2023
Action 1. To create and introduce new technologies, products, processes and methods into the market:					**Created prototypes (concepts) of products, services or processes within 3 years after the implementation of the project (pcs.)**	**8**	**17**
Measure 1.1. Joint science and business projects contributing to the implementation of smart specialization	580			Ministry of Education and Science	Number of projects jointly executed by business, science and education institutions (pcs.)	8	15
	536		485	Ministry of Economy	Number of certified products (pcs.)	2	5
Measure 1.2. Support for the creation or development of the company's RDI infrastructure and implementation of RDI activities ("Intelektas")	4 999		4 548				
Measure 1.3. Support for company RDI providing innovation vouchers ("Inovaciniai čekiai")							
Measure 1.4. Support for patenting inventions and design ("InoPatent LT")							
Measure 1.5. Support for precertification of new products and technologies and for conducting tests in laboratories under actual conditions ("Inosertifikavimas")							
Action 2. To encourage the creation of knowledge-intensive business and development of companies having large potential:	1 303		145		**New companies having received investments within 3 years after the implementation of the project (pcs.)**	**1**	**2**
Measure 2.1. Support for the provision of innovation consulting services ("Inogeb LT")						1	3

Measure 2.2. Support to companies engaged in RDI by financial tools (“Technostartas LT”, “Koinvest LT”)					Number of companies receiving financial support in some other form than a subsidy (pcs.)		
Action 3. To promote clusterization, integration into international value creation networks and investments in RDI and innovation:					**Attracted foreign investments into RDI area according to the areas of smart specialization within 3 years after the implementation of the project (thousand EUR)**	**10,4**	**23,5**
	2 868		2 105		Number of legally binding agreements with international partners (pcs.)	4	10
Measure 3.1. Support for cluster operation (“InoKlaster LT”)							
Measure 3.2. Support for participating in international RDI initiatives (“InoConect LT”)							
Measure 3.3. Support to common use RDI infrastructure (“Technologinių centrų infrastruktūra”)							
Measure 3.5. Support for attracting direct foreign investments in RDI area (“Smartinvest LT”)	5 792*		-				
Measure 3.6. Support for direct foreign investments in RDI area (“SmartInvest LT+”)	28 962*		32 011*				
Action 4. To promote science and business cooperation, transfer of knowledge and technologies in order to commercialize RDI results:				Ministry of Education and Science	**Business RDI orders executed by science and education institutions (thousand EUR)**	**100**	**300**
					Revenues of science and education institutions from intellectual activity results (thousand EUR)	**150**	**420**
Measure 4.1. Creation of the material base intended for the implementation of joint science and business projects and the development thereof in science and education institutions (creation and development of infrastructure of centres of excellence)	8 690*				Patent applications (pcs.) Doctoral studies conducted together with business entities (number of doctoral students)	4 6	12 16
Measure 4.2. Support for the implementation of RDI activities executed by centres of excellence	11 580*						
Measure 4.3. Implementation of market-oriented science and business projects through cross-border network	93						
Measure 4.4. Promoting of the commercialization of results of R & D activities in science and education institutions	190	504**	-				
Action 5. To enhance the potential of science and education institutions and their abilities to create and commercialize knowledge and to prepare science and innovation management specialists:					**External users from foreign science and education institutions, Lithuanian and foreign business companies having used the renewed open access research infrastructure (funds received from these users (thousand EUR))**	**120**	**310**

					Number of publications in frequently cited periodicals (pcs.)	**35**	**88**
Measure 5.1. Renewal of RDI and education infrastructure in the areas of smart specialization	52 132*	-	-		Number of researchers working in improved research infrastructure base (full-time equivalents)	30	70
Measure 5.2. Creation and development of European research infrastructures as well as integration of Lithuania into the European research infrastructures pursuant to the Lithuanian research infrastructure signpost and ESFRI**	26 066*	1008**	-		Number of spin-offs created in science and education institutions (units)	5	12
Measure 5.3. Renewal of equipment used in open-access centres by smart specialization areas	26 066*	-	-				
Measure 5.4. R & D activities carried out by Lithuanian science and education institutions	553	-	-				
Measure 5.5. Subscription of databases necessary for RDI activities	28 960*	-	-				
Measure 5.6. Creation of infrastructure of centres of excellence and parallel laboratories	26 640*	504**	-				
Measure 5.7. Development of information infrastructure for science and education (LITNET)	4 340*	-	-				
Measure 5.8. Attraction of foreign scientists and R&D activities	14 481*	-	-				
Measure 5.9. Promoting activities of innovation and technology transmission centres of science and education institutions	14 480*	-	-				
Measure 5.10.Assurance of the doctoral study process; doctoral studies, trips, scholarship, R&D, transfer, funds for visits (including foreign doctoral students)	644	62 154**	-				
Measure 5.11. Employment of scientists and other researchers in knowledge-intensive enterprises	2 896*	-	-				
Measure 5.12. Attracting and reintegrating scholars	5 792*	-	-				
Measure 5.13. Student R&D activities	2 317*	-	-				
Measure 5.14. Promotion of post-doctoral internships	7 240*	-	-				
Measure 5.15. Preparation of specialists in smart specialization priority-related study programmes	140	-	-				
Measure 5.16. Development of science popularization system	12 000**						
Measure 5.17. Funding of undergraduate, graduate, integrated and non-degree studies	-	220 032**	-				
Measure 5.18. Support for mobility of Lithuanian and foreign students and teachers	-	3 438**	-				
Measure 5.19. Practical trainings for scientists and other researchers, participation of scientists and other researchers in targeted events of international programmes, participation	4 503**	258**	-				

of Lithuanian researchers in targeted meetings for the preparation of project applications, participation of representatives from Lithuania in the European Union and other international working groups, committees, commissions, related to research and experimental (socio-cultural) development. / Encouragement of participation in H2020							
Measure 5.20. To ensure funding for R&D activities relevant for the solution of top-level problems strategically important to the public and the state as well as economic development	-	94 314**	-				
Measure 5.21. To support cross-sectorial cooperation in R&D area	-	2 364**	-				
Measure 5.22. To allow researchers to use digital scientific data resources	-	450**	-				

* Funds unattributed to specific priority area of research and experimental (socio-cultural) development and innovation (smart specialization), their implementation results can contribute to the implementation of all or the majority of RDI priorities.

** Funds for measures relevant to the entire RDI system and are unattributed to specific RDI priorities, their implementation results will also contribute to the implementation of the Priority.

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Annex 2 to Action Plan of the Priority "Modern Educational Technologies and Processes" of the Priority Area of Research and Experimental (Socio-Cultural) Development and Innovation (Smart Specialization) "Inclusive and Creative Society"

SET OF EDUCATION AND RDI POLICY

<table>
<tr><th>Generation of science potential critical mass</th><th>Search for new ideas and their solutions</th><th>Creation of technologies and their prototypes</th><th>Introduction into the market</th><th>Generation of business potential critical mass</th></tr>
<tr><td>Measure 5.1. Renewal of RDI and education infrastructure in the areas of smart specialization</td><td colspan="3">Measure 1.1. Joint science and business projects contributing to the implementation of smart specialization</td><td rowspan="2">Measure 3.1. Support for cluster operation ("InoKlaster LT")</td></tr>
<tr><td>Measure 5.2. Creation and development of the European research infrastructures and Lithuania's integration into the European research infrastructures pursuant to Lithuanian research infrastructure signpost and ESFRI</td><td colspan="2">Measure 1.2. Support for the creation or development of the company's RDI infrastructure and implementation of RDI activities ("Intelektas LT")</td><td rowspan="2"></td><td>Measure 3.2. Support for participating in international RDI initiatives ("InoConect LT")</td></tr>
<tr><td>Measure 5.3. Renewal of equipment used in open-access centres by areas of smart specialization</td><td>Measure 5.4. R & D activities carried out in Lithuanian scientific and educational institutions</td><td colspan="2">Measure 1.5. Support for precertification of new products and technologies and for conducting tests in laboratories under actual conditions ("Inosertifikavimas")</td><td>Measure 3.3. Support for investments into cluster ("InoKlaster LT+")</td></tr>
<tr><td>Measure 5.5. Subscription of databases necessary for RDI activities</td><td colspan="4">Measure 2.1. Support for the provision of innovation consulting services ("Inogeb LT")</td></tr>
<tr><td>Measure 5.6. Creation of infrastructure of centres of excellence and parallel laboratories</td><td colspan="4">Measure 2.2. Support to companies engaged in RDI by financial tools ("Technostartas LT", "Koinvest LT")</td></tr>
<tr><td>Measure 5.7. Development of information infrastructure for science and education (LITNET)</td><td colspan="4">Measure 3.4. Support to common use RDI infrastructure ("Technologinių centrų infrastruktūra")</td></tr>
<tr><td>Measure 5.9. Promoting activities of innovation and technology transmission centres of science and education institutions</td><td colspan="4">Measure 3.4. Support for attracting direct foreign investments in RDI area ("Smartinvest LT")</td></tr>
<tr><td>Measure 5.10. Assurance of the doctoral study process; doctoral studies, trips, scholarship, R&D, transfer, funds for visits (including foreign doctoral students)</td><td colspan="4">Measure 3.5. Support for direct foreign investments in RDI area ("SmartInvest LT+")</td></tr>
<tr><td>Measure 5.12. Attracting and reintegrating scholars</td><td colspan="4">Measure 4.4. Encouragement of commercialization of R&D activity results in science and education institutions</td></tr>
</table>

Measure 5.14. Promotion of internships after doctoral studies	Measure 5.20. To ensure funding for R&D activities relevant for the solution of top-level problems strategically important to the public and the state as well as economic development	Measure 1.3. Support for company RDI providing innovation vouchers (“Inovaciniai čekiai”)	-	Measure 5.11. Employment of scientists and other researchers in knowledge-intensive enterprises
Measure 5.15. Preparation of specialists in smart specialization priority-related study programmes	Measure 3.2. Support for participating in international RDI initiatives (“InoConect LT”)			-
Measure 5.16. Development of science popularization system	Measure 5.13. Student R&D activities			
Measure 5.8. Attraction of foreign scientists and R&D activities		Measure 1.4. Support for patenting inventions and design (“InoPatentas LT”)		
Measure 5.17. Funding of undergraduate, graduate, integrated and non-degree studies	-	Measure 4.3. Implementation of market-oriented science and business projects through cross-border network		
Measure 5.18. Support for mobility of Lithuanian and foreign students and teachers		-		
Measure 5.19. Practical trainings for scientists and other researchers, participation of scientists and other researchers in targeted events of international programmes, participation of Lithuanian researchers in targeted meetings for the preparation of project applications, participation of representatives from Lithuania in the European Union and other international working groups, committees, commissions, related to research and experimental (socio-cultural) development. / Encouragement of participation in *H2020*				
Measure 5.21: To support cross-sectorial cooperation in R&D area				
Measure 5.22. To allow researchers to use digital scientific data resources				
Measure 4.1. Creation of the material base intended for the implementation of joint science and business projects and the development thereof in science and education institutions (creation and development of infrastructure of centres of excellence)				

Measure 4.2. Support for the implementation of RDI activities executed by centres of excellence				