



2019 ANNUAL ACTIVITY REPORT OF THE RESEARCH COUNCIL OF LITHUANIA

Vilnius 2020

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Acronyms and abbreviations

ASU – Aleksandras Stulginskis University	LKI – Institute of the Lithuanian Language
CA WoS – Clarivate Analytics Web of Science database	LKTI – Lithuanian Culture Research Institute
CIM – Centre for Innovative Medicine	LLTI – The Institute of Lithuanian Literature and Folklore
CLARIN ERIC – European Research Consortium for Language Resources and Technology	LMTA – Lithuanian Academy of Music and Theatre
Commission – Evaluation Commission of science (art) doctoral degrees awarded abroad	LRHE – RL Law on Research and Higher Education
Commission of Ethics – Commission of Research Ethics of the Research Council of Lithuania	LSMU – Lithuanian University of Health Sciences
Controller – RL Controller of Academic Ethics and Procedure	LSTC – Lithuanian Social Research Centre
COST – European Cooperation on Science and Technology	LSU – Lithuanian Sports University
Council – the Research Council of Lithuania	LTI – the Law Institute of Lithuania
CPTS – Centre of Physical and Technological Sciences	Minister – the Minister of Education, Science and Sport of the RL
EEA – the European Economic Area	Ministry – the Ministry of Education, Science and Sport of the RL
EC – the European Commission	Report – the activity report of the Research Council of Lithuania for 2019
EJP - European Joint Programme	Research Foundation – Research Foundation of the Research Council of Lithuania
EMBL – the European Molecular Biology Laboratory	MRU – Mykolas Romeris University
EOP – R&D commissioning's by economic operators	NCP – EC National Contact Points
ESS ERIC - The European Social Survey of the European RI consortium	NRC – Nature Research Centre
EU – the European Union	NRP – National Research Programme
EU SF – European Union Structural Funds	NTMA – Natural, Technological, Medical and Health and Agricultural Sciences
GDP – Gross Domestic Product	NTS – Natural and Technical Sciences
H – Humanities	NVI – National Cancer Institute
H2020 – EU joint research and innovation programme 'Horizon 2020'	OECD – Organisation for Economic Cooperation and Development
HSS – Humanities and Social Sciences	PRP – competitive priority research programme
JPI – European Joint Programme Initiatives	R&D – research and experimental development
JSPS - Japan Society for the Promotion of Science	RI – research infrastructure
KTU – Kaunas University of Technology	RIP – Researcher Initiated Projects
KU – University of Klaipėda	RHEs – Research and Higher Education Institutions
LAEI – Lithuanian Institute of Agrarian Economics	RL – the Republic of Lithuania
LDB – 'Lituanistika' database	Scopus – Elsevier Scopus database
LEI – Lithuanian Energy Institute	SRI – State Research Institute
LEU – Lithuanian University of Educology	SS – Social Sciences
LII – The Lithuanian Institute of History	ŠU – University of Šiauliai
	VAA – Vilnius Academy of Arts
	VGTU – Vilnius Gediminas Technical University
	VMU – Vytautas Magnus University
	VU – Vilnius University

The mission of the Research Council of Lithuania (hereinafter referred to as the 'Council') is to actively participate in the development of the policies for research, experimental, social and cultural development, in addition to ensuring that the Lithuanian Research and Development system (hereinafter referred to as the 'R&D') was efficient, met the needs of the Lithuanian society and was in conformity with the science policy of the European Union (hereinafter referred to as the 'EU'). The Council aims to base its activities and funding for R&D on the best international experience and practice and undoubtedly considers high-quality research of great value.

The functions and tasks of the Council are established by the Republic of Lithuania (hereinafter referred to as the 'RL') Law on Higher Education and Research (hereinafter referred to as the 'LRHE'), in addition to and by the Regulations of the Council. The Council consists of the Chairperson and their deputies, Scientific Secretary, a member of the Board, members of two expert committees, namely, the Committee of Humanities and Social Sciences (hereinafter referred to as the 'HSS') and the Committee of Natural and Technical Sciences (hereinafter referred to as the 'NTS'), in addition to the Research Foundation of the Council. Due to the resignation of the Chairman of the Council in February 2019, a new Chairman, Dr. Romas Baronas, was appointed in November.

Upon the implementation of its mission and by exercising its expert function in the consideration of matters in the research policy of the State, in 2019 the Council submitted over 50 proposals and conclusions regarding various strategic documents, laws regulating the R&D area and other legal acts. The Council has pointed out the flawed R&D being developed in legal acts and the exclusion of innovations, in addition to the possible long-term consequences. The Council also emphasised the importance of fundamental research and the particular role of different fields of research, such as humanities and social sciences, in the system of Lithuanian R&D and innovation. The importance of research continues to grow in the rapidly changing world, however, the part of the gross domestic product (hereinafter referred to as the 'GDP') of the State budgeted funds allocated for funding of the competitive research activities administered by the Council, was decreasing in 2017-2019: only 15.1 million EUR or 0.031 percent of the GDP of the State were allocated from the State budget for the said activities in 2019. The Council expressed its concerns regarding the insufficient funding for research and invited the authorities to take action in order to ensure sustainable development of fundamental research.

Upon implementation of the R&D policy according to its competence, the Council has drawn up a new 'Description of the Minimum Qualification Requirements for Positions of Research Staff Members of the State Research and Higher Education Institutions' (the approval of the document is expected in 2020). The Council has also analysed the procedure of competitive research funding, carried out by the Council, and amended the legal acts regulating the said procedure in order to alleviate the administrative burden for project implementers. In order to achieve the quality and efficiency of the competitive research funding, the Council has carried out an *ex-post* assessment of the competitive programmes; in order to achieve high quality integration of the artistic research into the R&D competitive funding, the Council has drawn up the 'Illustrative List of Eligible Output under Artistic Research and Dissemination Projects in the Area of Art'; the Council has also submitted proposals to update the descriptions of the conditions for funding of projects managed by the Council, which are funded from the EU structural funds.

During the annual assessment of the research (art) activities of the Lithuanian research and higher education institutions (hereinafter referred to as the 'RHEs'), carried out in 2018, over 10.3 thousand units of assessment (works of research and art, in addition to R&D and social and cultural development commissioning's by economic operators and international projects), were submitted by 32 RHEs and 3 university hospital clinics. In order to ensure the quality of annual evaluation, in 2019

the Council has formed the Board of Appeal for the purpose of hearing the appellations of RHEs regarding the results of annual evaluation.

The Council has assessed the result reports of the long-term institutional R&D programmes implemented by State research institutes for 2018 (51 in total) and submitted the recommendations to the Ministry of Education, Science and Sport (hereinafter referred to as the 'Ministry') the on the continuation thereof.

Upon implementation of the supervision of quality, in 2019 the Council submitted proposals to the Ministry on the improvement of the quality of doctoral studies, in addition to evaluating and providing recommendations regarding 3 applications for the right to award doctoral degrees and conclusions on the compliance of 20 doctoral committees with the applicable requirements. The Council has also carried out the academic recognition of 20 doctoral degrees in sciences (arts) awarded abroad.

The Council has assessed the infrastructures proposed for inclusion into the updated Roadmap of Lithuanian research infrastructures (hereinafter referred to as 'RIs'). The Council proposed 17 infrastructures to be included in the RI Roadmap out of 36 submitted infrastructure applications.

Upon implementation of competitive funding of works under R&D programmes, the Council provides funding from the State budget and EU SF funds to the research projects commissioned by the State (State Lithuanian Studies and Dissemination Programme for 2016-2024, national research programmes, competitive priority research programmes and research based on the topics proposed by the State institutions or on-demand research; high-level R&D projects in priority areas of smart specialisation, Parallel Laboratories, Projects on Attraction and Reintegration of Brains (State Professors), in addition to researcher initiated projects (measure of researcher group projects, researcher initiated projects funded from the EU Structural Funds (hereinafter referred to as the 'EU SF')). In 2019, researchers implemented over 470 research and dissemination projects in all research fields managed by the Council, which encouraged the qualitative growth of Lithuanian R&D, international cooperation of researchers and took part in the resolution of issues relevant to the State. Urgent applied research based on the needs of the State of Lithuania was funded under the measure of on-demand research.

Bilateral and tripartite international cooperation programmes managed by the Council in cooperation with Belarus, Japan, Latvia, Poland, Ukraine, France, China (Taiwan), in addition to the European Space Agency enabled implementation of joint researcher projects by two or three countries and maintenance of close cooperation. In 2019, preparations for implementation took place for the Baltic Research Programme funded from the financial mechanisms for 2014-2021 of the European Economic Area (hereinafter referred to as the 'EEA') States (Iceland and Liechtenstein) and Norway. In 2019, over 100 ongoing international projects were managed in total.

Pursuant to Article 3 of the LRHE, **the Council persistently focuses on the implementation of the priority of Lithuanian studies**. In 2019, 94 new research and dissemination projects under the State Lithuanian Studies and Dissemination Programme for 2016–2024 were launched and over 1 million EUR were allocated for this purpose. The research implementing the priority of Lithuanian studies are also conducted under other activities funded by the Council, such as the priority research programme 'Welfare Society' and the national research programme, 'Modernity in Lithuania'. In 2019, almost 200 projects on Lithuanian studies were under implementation on the basis of various measures funded by the Council, which were allocated over 4 million EUR from the State budget.

The implementation of the project 'Development of the Database Lituanistika' (hereinafter referred to as the 'LDB') was extended until 2021. In application of international protocols, standards and formats for transferring bibliographic information (*eLABa*, *ROAR* and *OpenDOAR*, *OpenAIRE*), a contemporary open-access database was developed, which enables the research and dissemination of publications of Lithuanian studies to reach the national and international academic area. The indexing of LDB publications in the *Google* common search engine was started.

The Council provides financial support to doctoral students for their academic achievements, in addition to financing their research trips, encourages the activities of academic associations, finances international and national research events and the dissemination of research output. In 2019, more than 1.3 million EUR were allocated for this purpose as 554 projects were funded from the State budget and around 1.5 thousand EUR were allocated from the EU SF.

In 2019, the Council continued the implementation of the project 'Development of Doctoral Studies' funded from the EU SF. 68 students were admitted to doctoral studies after a 2-stage competition. At the end of 2019, the competition for postdoctoral internships was announced.

In its role of encouraging the integration of Lithuanian researchers and research and higher education institutions into the international research area, the Council carries out the coordination of COST activities (intergovernmental cooperation of the European countries in the field of research and technology) and represents Lithuania in committees of high-level officials and research of the COST association. The Council manages and ensures the representation of Lithuania in various areas of the EU research and the innovation programme Horizon 2020 (hereinafter referred to as the 'H2020') and participates in the initiatives of 10 ERA-NET programmes and 2 European joint programmes (hereinafter referred to as the 'JPI'), implemented under the schemes of the H2020 'ERA-NET Cofund' and European joint programmes COFUND and JPI.

The Council participates in the activities of the network of National Contact Points for H2020 (hereinafter referred to as the 'NCP'), established and funded by the European Commission: in 2019, the Council carried out the NCP functions of 11 thematic areas for H2020.

The Council is one of the most active institutions within the Lithuanian public sector participating in the H2020 programme. According to the EC data as of November 2019, the Council was participating in 17 programmes and initiatives and the EC allocated 1.056 million EUR for this purpose.

In 2019, the Council continued the implementation of the project 'The Internationalisation of Lithuanian Research – the Development of RDI Links (LINO LT)', which is intended for encouraging Lithuanian researchers to improve or acquire scientific and professional skills by participating in the EU research and innovation programmes and initiatives. Over 190 researcher and research administrator trips were organised, during which the new contacts were established and the relations with foreign research and higher education institutions were strengthened. The **LINO office** has chaired the Informal Group of RTD Liaison Offices in Brussels – IGLO until July, 2019.

In 2019, the Council majorly focused on the events in order to communicate and cooperate with scientists and researchers. 26 information days and other events were organised in order to introduce the applicants and project implementers with the provisions and requirements for competitions, in addition to discuss various aspects of research policy. Worth mentioning is the conference 'European Horizon: New Opportunities for Lithuanian Researchers 2021-2027', organised by the Council, the Ministry and the LINO Office, where the preparation, opportunities and perspectives of participation in the upcoming programme 'European Horizon' were presented to Lithuanian institutions, researchers and society.

1. Results of activity of the Research Council of Lithuania for 2019

1.1. Implementation of the research policy in Lithuania and European Research Area

1.1.1. Proposals to the Seimas, the Government, the Ministry and the Ministry of Economy and Innovation regarding training of researchers and research policy

In 2019, in its role of formulating the R&D, innovation and social and cultural development policy, the Council submitted proposals to the Seimas, the Government and Ministries on legal acts and their drafts related to the said areas.

The most important proposals submitted were on the objectives and tasks of the draft National Progress Programme 2021–2030, on the concept of national research and technology programmes, on the implementation of proposals by the Organisation for Economic Co-operation and Development, on draft amendments to the LRHE, on the draft Republic of Lithuania Law on the Fund for Promotion of Innovation, on the amendment of the RL Law on Technology and Innovation, on the draft RL Law on Strategic Governance and draft amendments of the laws in relation thereto, on regulations of doctoral studies in the fields of sciences and art.

The Council advocated that research, experimental development and innovation activities should not be separated, so that the R&D system would be efficient, meet the needs of Lithuanian society and be consistent with the EU research policy. The Council has pointed out that attempts by legislators in the fields of technology and innovation to separate research, experimental development and innovation activities without taking into account the peculiarities of R&D in case of Social Sciences and Humanities and the arts are defective and harmful.

In response to the ongoing debate on the state of research and higher education in Lithuania, the Council expressed its concerns about the lack of funding and development of research and called on the highest State authorities to take action to ensure sustainable qualitative growth in fundamental research and the inclusion of the academic community to the decision-making process and consideration of strategic documents of the Lithuanian State. For more details on the proposals submitted by the Council to the Seimas and the Government, see [Annex 1](#) to the Report.

1.1.1.1. Updating of the minimum qualification requirements for research staff members

The Council has drawn up a new (draft) Description of the Minimum Qualification Requirements for Positions of Research Staff Members of the State Research and Higher Education Institutions, which establishes the minimum qualification requirements applicable for researchers applying for positions of research staff members of RHEs through public competition. The new description: 1) renounces the requirements in relation to the scientific achievements of the researchers for the past 5 years, by creating an opportunity to apply for positions of research staff members for those researchers, who have been carrying out not only research, but also administrative, business development or similar activities for the past few years; 2) the quantitative indicators were supplemented with the qualitative indicators in order to encourage the researchers to publish the research results in the monographs and scientific journals published by internationally recognised publishing houses, which based on their quotation indicators fall under the first and second quartiles of the same group of journals (Q1/Q2); 3) provides the possibility for RHEs to establish their own procedures for recognition of works of applied research as equivalent to international scientific publications. This would encourage applied research, which is important to Lithuania.

1.1.1.2. Update of the Roadmap for Lithuanian Research Infrastructures

The evaluation of infrastructures eligible for inclusion into the updated Lithuanian RI Roadmap (the update is planned every 4 years) was completed. The Roadmap is a strategic document for the long-term IR policy, based on the analysis of Lithuanian and international RIs, in addition to the assessment of current and possible interactions between Lithuanian and international RIs and priorities of Lithuanian and European research. After the evaluation (36 proposals were evaluated), 17 infrastructures were proposed to include to the Lithuanian Roadmap of RIs. The RIs that best gather Lithuanian research potential in order for Lithuania to join the international RIs, were recognised as eligible for inclusion. The experts proposed to classify RIs into 3 groups based on the level of maturity: landmark (RI, in activities of which Lithuania has participated for several years), mature (with a clear plan for integration into international RI or already integrating thereto) and promising (the RI is at its preparatory stage and is included to the Roadmap by putting an emphasis on its potential). For more detailed information, see Annex 2 of the Report. The Roadmap is approved by the Minister, having taken into account recommendations of the RI commission of the Ministry. During the meeting on January 30, 2020, the RI commission decided to ‘postpone the approval of the list of research infrastructures proposed for inclusion in the Roadmap until the new strategic documents of the state are approved and assessed, which will allow to evaluate the list of RIs proposed for inclusion to the Roadmap’.

In 2019, Lithuania participated in three international RIs: The European Social Survey of the European RI consortium (hereinafter referred to as the ‘ESS ERIC’), the European Research Infrastructure for Language Resources and Technology (hereinafter referred to as the ‘CLARIN ERIC’) and the European Molecular Biology Laboratory (hereinafter referred to as the ‘EMBL’).

1.1.2. Expert activities, quality assurance of research

1.1.2.1. Annual evaluation of activities of the Lithuanian research and higher education institutions

The Council has carried out the annual evaluation of research and art activities of the Lithuanian RHEs and university hospitals. Activities of the year 2018 were subject to evaluation. R&D and art projects, agreements and works were declared by 32 RHEs and 3 university hospital clinics. 10.3 thousand projects, agreements and scientific (Artistic) works were evaluated in total. For more information on the evaluation, see in the Annex 3 of the Report.

Results of the annual evaluation carried out in 2019 will be used in allocating the funds from the budget of 2020, 2021 and 2022 for the development of R&D and art activities (the funds will be allocated to institutions for R&D and art activities based on the annual formal evaluation of their R&D and artistic activities for the last three years and the results of comparative expert evaluation of R&D activities in universities and in institutes carried out every five years).

For more detailed information on the evaluation of works and projects of research (art) and the R&D art agreements of Lithuanian RHEs for 2017 and 2018, see Annex 4 of the Report.

On basis of the evaluation results, it can be concluded that the highest potential in the field of Humanities is shown by VU, LKTI, LII and VMU, in the field of Social Sciences – by VU, VMU, MRU and VGTU, in the field of Natural Sciences – by VU, FTMC, KTU and GTC, in the field of Technological Sciences – by VGTU, KTU, VU and LEI, in the field of Medical and Health Sciences – by LSMU and VU, and in the field of Agricultural Sciences – by VMU, LAMMC and LSMU.

1.1.2.2. Quality assurance of doctoral studies

■ *Assessment of applications by institutions regarding the authorisation to award doctoral degrees*

At the end of 2019, in Lithuania, doctoral studies were available in 14 universities (12 public, 1 private and 1 foreign university operating abroad) and in 11 state research institutes. 85 doctoral study programmes in science and 4 doctoral study programmes in art were carried out with overall, 2741 doctoral students, 230 of whom were foreign students. For more detailed information on doctoral studies and doctoral students, see Annex 5 of the Report.

The Council has assessed 2 applications for authorisation to award doctoral degree in the field of Educology and 1 application for authorisation to award doctoral degrees in Art in the field of Architecture. The applications for authorisation to carry out doctoral studies in the field of Educology were submitted by the new RHE consortia, namely VMU with KTU, KU, LSU and VU with MRU, ŠU. After the expert evaluation, the Council has found that the research level in Educology of the institutions applying for authorisation to award doctoral studies is insufficient and provided recommendations to the Ministry not to authorise the doctoral degrees applied for. Based on evaluation of the VDA application for authorisation to award doctoral degrees in Art in the field of Architecture, the Council has also recommended that the Ministry did not authorise the said doctoral studies.

■ *Monitoring the quality of delivered doctoral studies*

In 2019, the Council has evaluated, whether the doctoral committees in research comply with the necessary requirements (the composition of 20 doctoral committees was evaluated), the Council has also evaluated the applications by 7 institutions regarding the changes in composition of doctoral committees, as laid down by the regulations of doctoral studies in research or art. For more detailed information on the changes in composition of doctoral committees in research and art, see Annex 6 and Annex 7 of the Report.

1.1.2.3. Recognition of doctoral degrees in research (art) awarded abroad

The Council continued academic recognition of doctoral degrees in research (art) awarded abroad. Received applications to award the qualifications awarded abroad, were evaluated by the Commission on Evaluation of Doctoral Degrees in Research (Art) Awarded Abroad, consisting of 7 members. In 2019, 33 applications were evaluated, 32 of which were evaluated positively. For more detailed information on recognition of qualifications awarded abroad, see Annex 8 of the Report.

1.1.2.4. Assessment of implementation results for 2018 of the long-term institutional R&D programmes for 2017-2021 carried out by State research institutes

The Council has assessed the reports for 2018 of State research institutes on the implementation of long-term institutional R&D programmes for 2019-2021. Reports on 51 R&D programmes were assessed in total, 15 of which were in the field of Humanities, 7 in the field of Social Sciences, 28 in the fields of Natural, Technological, Medical and Health and Agricultural Sciences. A proposal to continue all R&D programmes was submitted to the Ministry. For more detailed information of the long-term institutional R&D programmes carried out by State research institutes, see Annex 9 of the Report.

1.2. Activities of the Council in enhancing the R&D potential

By means of competition, the Council selects the strongest R&D projects, encourages internationalisation activities of research, supports young researchers in training for researcher activities and pursuit of the researcher career, and encourages participation of Lithuanian researchers in projects of the EU national research coordination initiatives. On the basis of practices of international advisory councils in research and research funding bodies, the Council manages and/or coordinates four groups of R&D competitive measures:

- Research commissioned by State (*top down*);
- Researcher initiated research (*bottom up*);
- Programmes and initiatives of international cooperation and coordination;
- Support for career, mobility and dissemination.

For more detailed information on groups of R&D competitive measures, see

[Annex 10](#) of the Report.

1.2.1. Research commissioned by State

Research necessary for resolution of tasks, strategically important for the State, society and development of economy is funded by means of competitions. Such research is related to the nationally approved programmes in various topics. Various sources of funding are involved in such research.

The Council manages several research measures funded from the State budget, such as the implementation of the priority of Lithuanian studies in R&D activities, national research (hereinafter referred to as the 'NRP') and competitive priority research programmes (hereinafter referred to as the 'PRP'), in addition to the on-demand research on topics suggested by State institutions. Part of the research is funded from the EU SF. Approximately one third of the budgetary appropriations allocated to the Council (around 5 million EUR) every year is distributed for measures of research commissioned by the State. For more information on the measures of research commissioned by State, funded from the State budget, see [Annex 11](#) of the Report.

1.2.1.1. Implementation of the priority of Lithuanian studies in R&D activities

■ *State Lithuanian Studies and Dissemination Programme for 2016–2024*

The State Lithuanian Studies and Dissemination Programme for 2016–2024 is the main tool to coordinate and integrate the principal Lithuanian studies and their dissemination in Lithuania and abroad. The programme implements the priority of the Lithuanian studies, strengthening the contribution of the Lithuanian studies to the development of the national humanities, and thus creating a scientific basis for the civil and cultural self-consciousness in Lithuania, in addition to the preservation of the Lithuanian heritage, development and strengthening of dissemination of Lithuanian studies in national and international academic communities and to promote outputs of research in Lithuanian studies to society. In 2019, 30 research projects under the said programme were carried out on the basis of agreements signed in previous years. Over 0.24 million EUR were allocated for this purpose. Two new calls for proposals were announced. The funding of 58 dissemination projects under the V call for proposals, 17 research projects under the VI call for proposals and 20 more dissemination projects under VII call for proposals was started. Over 1 million EUR were allocated in total for the project under the said programme, implementation of which began in 2019. Interim and final reports of 86 projects were evaluated.

In the process of implementation of projects under the said programme, 2 software programs and 2 new technologies with the implementation acts, 35 monographs, 4 studies, 2 collections of scientific papers, 1 collection of scientific works, 6 chapters (parts) of the book, 18 scientific sources and 1 documentary source publication and 1 scientific source catalogue were prepared and published. Funds under the programme were used for preparation and publishing of 16 periodic scientific publications. In addition, 2 volumes of continuous scientific publications and a publication of culture and art were published. Over 70 papers were published in peer-reviewed publications, of which 2 interdisciplinary papers were published in the *Clarivate Analytics Web of Science* database (hereinafter referred to as the 'CA WoS'), 5 introductory and 6 review papers were also prepared. 1 electronic research database was maintained and 1 subject of research was digitised. Project implementers actively participated in research conferences. 6 international and national research events and 14 international, regional and national research seminars were organised. Participation in 26 local and 17 research trips abroad took place. Popular scientific papers presenting outputs of the programme were prepared.

■ *Development of the database 'Lituanistika'*

In 2019, the period for implementation and funding of the project 'Development of the database 'Lituanistika'' (09.3.3-ESFA-V-711-01-0002) was extended for two years. The project is implemented on the basis of the measure for the implementation of the priority axis 9 of the Operational Programme for the EU Funds' Investments in 2014-2020 'Strengthening the skills and capacities of scientists and other researchers'.

LDB is an international research database providing bibliographic records, abstracts and full-text documents about the internationally conducted research in the field of Lithuanistics, the subject of which is the past and present of the Lithuanian state, society, culture, nation and language. LDB is a valuable resource for the institutions that conduct research in the field of Lithuanistics, in addition for academic society, academic libraries, archives, museums, and the society interested in research in the field Lithuanistics.

Content of the LDB includes over 65 thousand metadata records, in addition to around 38 thousand full-text documents. For more detailed information on the LDB, see [Annex 12](#) of the Report.

In 2019, the LDB website <https://lituanistika.lt> was designed, focusing towards the search of information, and the structure of the website was designed taking into account further integration of the website with the system of indexation and search engines. The study 'Database 'Lituanistika': Object and Genres' was prepared, summarising interpretations and views on the object and genres of Lithuanian studies from the perspective of study disciplines and providing proposals and recommendations on clarification of the object of Lithuanian studies and updating the classification of genres.

In 2019, the entries of the LDB with references to open-access texts of Lithuanian studies, stored in the LDB (around 33.4 thousand in total), were indexed and became searchable by means of two global areas of search of academic information, namely H2020 '[OpenAIRE](#)' and '[Google Scholar](#)'. In 2019, more than 157 thousand searches were carried out in the LDB search system (twice as many as in 2018), the users downloaded full-text publications almost 300 thousand times.

1.2.1.2. National research programmes and competitive priority research programmes

The goal of NRP and PRP is to initiate scientific research necessary for resolution of definite issues strategically significant to the State and society by gathering the national research potential and financial resources. Each programme is a sum of research, methodologies and measures all tailored to a specific theme, providing most optimal conditions for a country to solve strategically important problems. New scientific knowledge and outputs obtained through the implementation of

the said programmes are presented to the national authorities and the society in order to help adopt decisions based on scientific knowledge in resolution of matters relevant to Lithuania.

Pursuant to the November 20, 2018 amendment of the RL LRHE, 'the competitive research and experimental development programmes and the national research and experimental development programmes funded from the State budget appropriations, the funding of which was approved and allocated before the day the present law entered into force, shall be implemented pursuant to the legal acts, which were applicable on the day of approval thereof'.

Due to the defective formulation of periods for the implementation of NRP, which were established by orders of the Ministry, without leaving a transitional period for drawing up, evaluation and alignment of interim scientific reports and announcing a new call for proposals, in addition due to the aforementioned amendment to the LRHE, upon which the Ministry loses the right to amend the implementation period of NRP, the year 2019 became 'critical' in terms of NRP, as no new projects were started to be implemented.

■ *PRP 'Welfare Society'*

The purpose of the PRP 'Welfare Society', the implementation of which began in 2019, is to carry out integrated research of the preconditions for a welfare society and its development in Lithuania, namely to analyse the preconditions, factors, tendencies, capacities and obstacles for the development of the welfare society, by connecting the welfare indicators with the systems of tax, social and healthcare, education and culture of Lithuania. The programme is a continuation of research on the topics of NRP 'Welfare Society', which, due to the amendment of legal acts of the Republic of Lithuania, was implemented only for a half of the expected implementation period (2015-2018).

The first call for proposals for the PRP 'Welfare Society' was announced in 2019. 50 proposals were received and 47 proposals were submitted for expert evaluation. 0.9 million EUR is intended for the implementation of projects in 2020-2021.

■ *NRP 'Sustainability of Agro-, Forest and Water Ecosystems'*

The objective of the NRP 'Sustainability of Agro-, Forest and Water Ecosystems' is to obtain, analyse and generalise, through integrated scientific research, new scientific knowledge about the impact of climate change and the use of ecosystem resources on the ecosystems of Lithuania, their adaptability to the changing climate and environmental conditions, and, having acquired new fundamental and empiric knowledge about the overall consequences of the use of ecosystem resources, to propose measures to avoid threats related to such consequences and draw up new guidelines for controlling and restoring the sustainability of ecosystems.

Implementation of the programme began in 2015. Upon implementation of projects under the programme, 93 papers were published in publications of the CA WoS database or otherwise provided, 187 presentations were delivered at research conferences, 23 research conferences and seminars were organised. Research output was published by various means for promotion of research. All the projects implemented in 2015-2018 under the programme (11 in total) were completed in 2018. 3.5 million EUR were allocated for the implementation.

At the research conference 'National research programme, Sustainability of Agro-, Forest and Water Ecosystems: 4-year research results', where the results of projects, implementation of which was completed, were presented and discussed and the report summarising the 1st stage of the programme was drawn up and submitted to the Ministry. Having assessed the report, the Minister allocated funds for further implementation of the programme in 2020-2021. The II call for proposals under the programme was announced. 17 proposals were received. 15 proposals in compliance with the administrative check were submitted for expert evaluation (evaluation by foreign experts). 1 million EUR is intended for the implementation of projects in 2020-2021.

■ *NRP 'Towards Future Technologies'*

The goal of NRP 'Towards Future Technologies' is to create a favourable international context and the conditions for research to build up a basis for developing future technologies, promoting innovations and enhancing Lithuania's competitiveness and security. Implementation of the programme began in 2016. All 15 projects under the 1st stage of the programme, which were allocated almost 4 million EUR were completed in 2018. Upon implementation of the projects under the programme, 103 papers were published in the 'CA WoS' database, 66 of which were published in the publications of the first quartile (Q1), 25 in publications of the second quartile (Q2) and 13 in publications of the third quartile (Q3) of the database. 31 peer-reviewed papers and summaries of conferences were published, 32 poster and 36 oral presentations in research conferences were carried out, 8 new technologies were developed, implemented and tested in production, 3 new materials were developed and examined, models of 5 new devices or software were developed and tested, 3 new methods of measurement or database analysis were developed and applied, 4 patent applications were registered.

An interim report of the programme was drawn up in 2019, providing a summary on the state of implementation of objectives and tasks of the programme, in addition to results, conclusions and recommendations. The report was submitted for consideration by experts and society. After the results of the 1st stage of the programme were assessed, it was decided that the programme should be revised.

■ *NRP 'Modernity in Lithuania'*

The purpose of NRP 'Modernity in Lithuania' is to facilitate addressing the problem of a relatively slow modernisation of Lithuania, and comparatively limited international competitiveness of humanities by bringing together the best Lithuanian and foreign researchers able to carry out innovative integrated studies of the modernisation processes on-going in Lithuania, in addition to the manifestation of modernity in Lithuania, and to ensure a proper dissemination of their results in the public. Implementation of the programme began in 2016. In 2019, the programme implementation group organised a discussion - 'Facing modernity: research, foresights, prognoses', where the research conducted through implementation of projects under the programme was discussed. Four project implementers presented research results in the discussion; other project implementers also participated.

For the implementation of projects, proposals selected for funding under the 1st call for proposals (21 projects in total, were allocated 2.2 million EUR for implementation) were completed in 2019. In 2019, experts evaluated the final reports of four research projects. Evaluation of two project reports are pending evaluation and the rest of reports will be submitted for evaluation at the beginning of 2020.

An interim report of the NRP 'Modernity in Lithuania' will be drawn up in 2020.

■ *NRP 'Healthy Ageing'*

The objective of NRP 'Healthy Ageing' is an integrated analysis of and determination of solutions regarding issues in healthy ageing biomedicine and social medicine for Lithuanian society through the development of science and technologies, in addition to the results of fundamental and applied research. Implementation of the programme began in 2015. Upon implementation of projects under the programme, 82 papers were published in publications of the CA WoS database or otherwise provided, 9 innovative monitoring methods of ageing and diagnostic, prognostic and treatment measures of chronic degenerative illnesses were developed, project implementers delivered 131 presentations in international research conferences, 6 patent applications were registered, one monograph was published. At the end of 2018, the implementation of all 27 projects under the

programme, implemented in 2015-2018 was completed (over 5.9 million EUR were allocated for the implementation) and in 2019 the experts evaluated final research reports for 22 projects. In 2019, the summary report for the 1st stage of the programme was drawn up and submitted to the Ministry. Having assessed the report, the Minister allocated funding for further implementation of the programme in 2019-2021. 3rd call for proposals under the programme was announced. 39 proposals were received. 36 proposals in compliance with the administrative checks were submitted for expert evaluation (evaluation by foreign experts). Up to 2 million EUR is anticipated for the implementation of projects in 2020-2021.

1.2.1.3. On-demand research projects

On-demand research is the research on strategically significant and urgent issues under the topics of research and experimental (social, cultural) development programmes, proposed by the President, the Seimas, the Government or the Ministries of the Republic of Lithuania.

In 2019 experts evaluated final research reports of five on-demand research projects, recognising that the results of these projects, such as recommendations for decision-makers, studies on research and opportunities, methodical measures and research papers, were submitted to the relevant authorities, should help the policy-makers to adopt research-based decisions and take part in the specialist training and education of society in the field of State safety and public security.

The evaluation of projects under the call for proposals for on-demand projects based on eight topics submitted by the ministries and other authorities began at the end of 2019. 11 projects were submitted for expert evaluation. 0.5 million EUR is intended for the implementation of projects in 2020–2021. During the reference year, authorities informed the Council of the successful use of results of four on-demand projects implemented in 2016–2017 in their regulatory areas.

1.2.1.4. Research commissioned by State funded from the EU SF

In 2017–2019, over 39 million EUR from the EU SF were allocated for funding of research commissioned by the State (60 project agreements were signed). In 2019, the Council, having taken into account the experience of calls for proposals in 2017-2018, and intending to consider the specific nature of different research areas as much as possible, initiated the amendment of evaluation criteria for projects funded from the EU SF. Upon occurrence of the situation, where the Ministry of Economy and Innovation has amended the Programme on the Implementation of the Priority Areas of Research and (Social and Cultural) Development and Innovation (Smart Specialisation) and their Priorities in 2019, the calls for proposals under this programme were announced only in December 2019.

■ *Implementation of the world-class R&D (Smart Specialisation)*

This call for proposals is intended for research conducted by world-class researcher groups and is aimed at developing results in line with R&D topics relevant to the economic sectors, which could then be commercialised. Anticipated allocations are based on the areas of Smart Specialisation, by allocating 1/7 of all funds allocated for the call to each of them. In 2019, preparations for the second call for proposals for projects funded under these activities took place: committees of the Council sought to clarify the aspects of evaluation of projects, however, the amendments were not adopted based on the reasoning that the period for funding from structural funds for 2014-2020 was nearing the end. Priorities of Smart Specialisation were also amended in 2019 (7 priorities were approved instead of the previous 6). The second call for proposals was announced at the end of 2019. Funds allocated for this call were 12.5 million EUR. 104 proposals were received.

■ *Parallel laboratories (in Smart Specialisation areas)*

This call for proposals is aimed at developing results in line with R&D topics relevant to the economic sectors, which could then be commercialised. The funding of parallel laboratories is aimed at projects implementing the Smart Specialisation priority 'Health technologies and Biotechnology' topics 'Molecular Technologies for Medicine and Biopharmacy' and 'Advanced Medical Engineering for Early Diagnosis and Treatment'. The total amount of allocations for the implementation of projects is 1.4 million EUR. 2019 was a preparatory year: due to the amended priorities of Smart Specialisation, in addition, due to the Council's efforts to adjust the criteria for project evaluation, the call for proposals was announced only at the end of 2019.

■ *Brain Gain and Reintegration (SMART)*

The call for proposals is aimed at attracting high-level foreign researchers, to consolidate researchers' groups, additionally, to initiate and conduct internationally recognised research, which contributes to raising the profile of RHEs on an international level, to the enhancement of research potential of RHEs, also for the training of young researchers, improving the skills and capacities of researchers and development of research areas and topics of the host institution. 5.7 million EUR were allocated to the call in 2019, the maximum budget of one project is up to 1 million EUR. 29 proposals were received, the total value of which was 26.3 million EUR. In the 1st quarter of 2020, the expert evaluation of the proposals is pending.

1.2.2. Researcher initiated projects

1.2.2.1. *Researcher initiated projects funded from the State budget*

The group of measures for funding the research is aimed at the development of research potential, the enhancement of researcher expertise and promotion of internationalism. This measure is the largest in terms of both allocated funds and the number of funded projects (See [Annex 13](#) of the Report). Projects funded under this measure compete in two groups. One group consists of projects in the fields of Humanities and Social Sciences, and the other group consists of the projects in the fields of Natural, Technological, Medical and Health and Agricultural Sciences. Each year approximately 7 million EUR are allocated for funding of researcher-initiated projects (hereinafter referred to as the 'RIP') from the State budget appropriations to the Council. For more detailed information on this measure, see the review of the 'Ex post evaluation of researcher group projects under the I-VII calls for proposals' carried out in 2019 (Section 2.5 of the Report).

In 2019, the Council was a manager of 202 RIP projects (70 of which were in the fields of Humanities and Social Sciences and 132 were in the fields of Natural, Technological, Medical and Health and Agricultural Sciences). In 2019, over 7 million EUR were allocated for their implementation (respectively over 2 million EUR for the projects in HS sciences, and almost 5 million EUR for projects in NTMA Sciences).

In 2019, 88 interim and 22 final research reports were evaluated, in addition to the missing output of 5 projects, submitted during the additional period. The majority of RIP accounted for the received funding properly, the projects were recognised as successfully implemented or the further continuation of projects was proposed.

Results of the research projects completed in 2019 were summarised in presentations in conferences (34 in total), papers published in peer-reviewed publications within the CA WoS database (8) and other peer-reviewed publications (39), additionally, in popular scientific publications (4), one new product was developed.

IX call for proposals for implementation of RIP was announced in the middle of 2019.

1.2.2.2. Researcher-initiated projects funded from the EU SF

In 2017–2019, over 43 million EUR were allocated from EU SF for funding of RIP (world-class R&D). Upon implementation of such projects in 2019, RHEs carried out international cooperation, participated in research events abroad, organised international research conferences in Lithuania, and invited foreign colleagues of high expertise to their laboratories.

1.2.2.3. Promotion of participation in the EU research and innovation programme 'Horizon 2020'

The programme is aimed at the funding of those projects for which proposals were submitted under the call by the European Research Council and have scored highly, but were not selected for funding due to strong competition. A possibility to receive funding for such projects encourages capable Lithuanian researchers to participate in international competitions without leaving the country. With the allocated funding they can successfully conduct their research in Lithuania. Overall, 4.9 million EUR are allocated for the call, 4 projects were funded in 2019 (overall 9 projects with total value of 1.2 million EUR).

1.2.3. Projects under international cooperation programmes and the EU research and innovation programme 'Horizon 2020'

1.2.3.1. International cooperation programmes

In its role as the research policy-maker and implementer, established by the Regulations, the Council aims to expand international relations, so that the participation in the international research community enables the collective resolution of issues relevant to Lithuania, Europe and the world.

■ *Bilateral and tripartite programmes*

On the basis of international treaties and agreements, the Council has continued the implementation of four programmes of cooperation in the field of R&D, aimed at the funding of projects in joint researcher mobility, publications and events:

1. Lithuanian–Belarus Partnership Programme for Bilateral Cooperation in the Field of Science and Technologies (Lithuanian–Belarus programme);
2. Lithuanian–Ukrainian Cooperation Programme in the Fields of Research and Technologies;
3. Lithuanian–French Integrated Activity Programme 'Gilibert' for Bilateral Cooperation in the Field of R&D (Lithuanian-French programme, 'Gilibert');
4. Joint Lithuanian–Latvian–Chinese (Taiwanese) Tripartite Cooperation Programme in the Fields of Science and Technologies, (Lithuanian–Latvian–Chinese (Taiwanese) programme).

In 2019, the Council was the manager of 8 projects under the Lithuanian-Belarus programme, 13 projects under the Lithuanian-Ukrainian programme and 6 projects of the Lithuanian-French programme, 'Gilibert'. In 2019, 153,327 EUR were allocated for their implementation. In 2019, the Council has funded 12 projects under the Lithuanian-Latvian-Chinese (Taiwanese) programme. In 2019, 193,194 EUR were allocated for their implementation.

Taking place in 2019 were calls for proposals under the Lithuanian-Ukrainian programme (78 proposals submitted, 12 were selected for funding with 164,329 EUR allocated) and for the Lithuanian-Latvian-Chinese (Taiwanese) programme (16 proposals submitted, 4 selected for funding, 193,000 EUR allocated).

Representatives of the Council participated in the meeting of the Lithuanian-Latvian-Chinese (Taiwanese) tripartite committee, where the aspects regarding the revision of the content of the programme were discussed.

■ *Lithuanian-Japanese cooperation*

Since 2017, the Council has provided funding for joint Lithuanian-Japanese research and dissemination projects on the basis of the Memorandum of Understanding between the Japan Society for the Promotion of Science (hereinafter referred to as the 'JSPS') and the Council, concluded on September 13, 2016. Bilateral calls for proposals are announced on an annual basis.

At the beginning of 2019, the Council has provided funding for three joint projects under the 2018 call. In 2019, the Council has funded a total of 8 Lithuanian-Japanese research projects (175,040 EUR were allocated for their implementation). 12 proposals were submitted under the call for proposals announced in 2019 (3 projects were selected for funding by allocating 178,091 EUR).

■ *Lithuanian-Polish cooperation*

In continuation of the cooperation with the National Research Centre of Poland (*Narodowe Centrum Nauki*) and upon the implementation of provisions of the cooperation memorandum signed in 2016, 2019 was the year of preparations for the call for proposals for 2020. A meeting took place between Prof. R. Rotomskis, the Deputy Chairman of the Council, the Interim Chairman, and Prof. Z. Blocki, Director of the National Research Centre of Poland. A decision was adopted during the meeting regarding the procedure for expert evaluation, which will be applicable to the call for proposals 'Daina 2' in 2020. The call for proposals is expected to be announced on June 15, 2020. In 2019, the Council was the manager of 16 joint Lithuanian-Polish projects, which were allocated the total amount of 594,196 EUR.

■ *Baltic Research Programme*

The Baltic Research Programme (hereinafter referred to as the 'Baltic Programme') is a joint research programme of three Baltic States: Lithuania, Latvia and Estonia, funded from funds of the financial mechanism of the European Economic Area (EEA) States (Iceland and Liechtenstein) and Norway 2014-2021 for strengthening the research potential of Baltic States.

Upon implementation of the Baltic Programme, three calls for proposals, each organised by a different Baltic State, are expected to be announced. In October, 2018, the first call for proposals was announced in Estonia (130 proposals were submitted, 7 of which were selected for funding, by allocating 6 million EUR with a success indicator of 5.38%).

The concept of a Lithuanian call for proposals was approved in June, 2019 and the priority topics and documents were approved in October, 2019. It is expected that the Lithuanian call for proposals will be announced in February, 2020. The anticipated budget of the call is 10 million EUR.

■ *Open partnership projects*

In 2019, the Council continued the funding of 4 projects selected for funding in 2015 under the measure of funding 'Open partnership research projects'. 25,280 EUR were allocated for their implementation. Competitive funding under this measure was granted for the implementation of joint research projects with a duration of 2-3 years, implemented together with foreign researchers.

1.2.3.2. EU research and innovation programme 'Horizon 2020'

The EU programme 'H2020' (2014–2020) began in 2014. Almost 80 billion EUR were anticipated for its implementation. The Council manages the participation of Lithuania in 10 areas of 'H2020'.

Lithuanian institutions took part in submitting 2342 proposals for 'H2020', where 2930 applicants were from Lithuania, 765 of which submitted proposals as coordinators (25.9%)¹. 429 participants from Lithuania were the parties in 348 grant agreements signed with the EC, 69 of which were project coordinators. The budget of Lithuanian participants in projects concluded 75.59 million EUR, 64.30 million EUR of which were granted by the EC. The average amount of the EC grant per participant was 149.9 thousand EUR. The success indicator based on the number of participations was 13.83%.

Most of the partnerships in the 'H2020' projects for Lithuania have been with Germany (813), France (765), Italy (709), Spain (614) and Great Britain (487). The most Lithuanian partnerships with neighbouring countries are with Poland (219), significantly less with Latvia (102) and Estonia (97). For more statistical information on the participation in 'H2020', see Annex 14 of the Report.

■ ERA-NET, European joint programmes and European Joint Programming Initiatives

In 2019, the Council continued its participation in 10 ERA-NET programmes and 2 JPIs, which were implemented on the basis of the schemes of 'ERA-NET Cofund', European Joint Programme (hereinafter referred to as the 'EJP') COFUND and JPI:

- Network for information and communication research and technologies and future and emerging technologies 'CHIST-ERA';
- Network for supporting biodiversity and ecosystems 'BiodiveERsA';
- Network for nanotechnologies in medicine and healthcare 'EuroNanoMed';
- EJP COFUND 'Rare Diseases' (EJP RD);
- Interdisciplinary network of material sciences and engineering 'M-era.Net';
- Network for sustainable forestry and European forest policy 'SUMFOREST';
- Programmes of the Humanities network 'HERA';
- Network for Social Sciences 'NORFACE';
- Network for quantum research 'QUANT-ERA' and 'FLAG-ERA' (research and innovation of model initiatives 'Graphene' and 'Human Brain' are funded in this network);
- Network for research and innovation in the field of Urban Science 'ENSUF' (part of the initiative JPI Urban Europe); and
- JPI initiative for cultural heritage ('Cultural Heritage and Global Change: a New Challenge for Europe').

The main goal of 'ERA-NET' and 'EJP COFUND' programmes is joint coordination of national research programmes, by organising international calls for proposals in various fields of research. Participating in such coordination initiatives, the Council provides conditions for Lithuanian researchers to become involved in international projects and networks, to develop international relations and cooperation of Lithuanian RHEs and researchers in this manner encouraging better engagement of Lithuania in other 'H2020' activities and new projects.

Experts or employees proposed by the Council participated in evaluation and selection procedures of such initiatives in 2019.

In 2019, the Council has funded 12 projects under the 'ERA-NET' programmes, which were allocated 367,434 EUR. The Council has also announced and/or participated in the management of 9 calls for proposals under the following 'ERA-NET' and 'EJP COFUND' programmes: 'BiodiveERsA', 'EuroNanoMed', 'NORFACE Governance', 'CHIST-ERA', 'FLAG-ERA II', 'QUANTERA', 'M-era.Net' and 'EJP RD'.

¹ Data from the EC as of November 8, 2019 <https://webgate.ec.europa.eu/dashboard>.

Information on proposals submitted and/or selected for funding in 2019 with participation of Lithuanian researchers is provided in [Annex 15](#) of the Report.

■ *Joint Baltic Sea Research and Development Programme BONUS*

In 2019, the Council together with its international partners continued the implementation of the 'BONUS' programme pursuant to Article 185 of the Treaty on the European Union. In 2019, the funding of one project was continued with participants from Lithuania selected for funding under the 2016 call for proposals for the 'BONUS' programme.

In 2019, the Council participated in the coordination and funding project 'BANOS CSA' launched in 2018 under the 'H2020' programme. The project is aimed at the assessment of the possibilities of geographic expansion of the 'BONUS' programme by involving the countries of the North Sea region, in addition to preparing for a new stage of the programme in the 9th EU research and innovation programme 'European Horizon'. The project is implemented by the consortium of 11 institutions from 8 countries: Finland, Belgium, Denmark, France, Germany, the Netherlands, Sweden and Great Britain. The Council, together with institutions from Latvia, Estonia and Poland, is an associated partner of the coordinator.

1.2.3.3. COST activities

COST is an intergovernmental cooperation between European countries in the fields of science and technology (*European Cooperation in Science and Technology*, hereinafter referred to as the 'COST programme'), and is aimed at the coordination of scientific research supported by national funds. 38 European countries are members of the COST association; Israel participates as a cooperating country.

The foundation of the COST programme is COST activities i.e. cooperation networks in science and technology initiated by European researchers. COST funds only cooperation activities, such as meetings, seminars, conferences, young researcher schools, researcher mobility and dissemination.

Lithuanian representatives participate in a large proportion of COST activities, therefore the funds allocated by COST is consistently growing.

In 2019, the Council implemented a continuous call for proposals for participation in activities under the COST programme. 4 sessions of collection and expert evaluation of proposals were organised. The Council received 101 proposals for participation in the COST programme from 17 Lithuanian institutions and organisations. 72 Lithuanian representatives from 17 Lithuanian institutions were nominated to the committees for the management of COST programme activities, 55 COST activities were joined in 2019. In 2019, 61 representatives from Lithuania joined the committees for management of new COST programme activities ([Annex 16](#) to the Report).

The Council is an institution coordinating the COST programme in Lithuania and is a Lithuanian representative on the committees of high-level officials and science committees of the COST association.

1.2.4. Support for career, mobility and dissemination

1.2.4.1. Support for career, mobility and dissemination: State budget funds

This is a group measure for funding, aimed at training a new generation of qualified researchers, the promotion of research output exchange, dissemination of research and encouraging the mobility of researchers, doctoral students and scientists. Financial support is funded for academic associations, in addition to support for doctoral students (for their study results or academic achievements, and financial support for their academic visits) and is allocated in compliance with the

LRHE and under the provisions of the regulations. Other funding (funding for publishing the research results or funding for research events) and is carried out under the initiative of the Council as measures for raising the global profile of Lithuanian science.

Approximately 1.5 million EUR of State budget appropriations allocated to the Council is distributed among various measures of financial support on an annual basis ([Annex 17](#) to the report).

- *Financial support for doctoral students for their achievements, financial support for research visits of the doctoral students*

Acting under the July 26, 2017 Regulation of the Government of RL No. 604, the Council provides two types of financial support for doctoral students, namely, for their academic achievements and for their academic trips. It is aimed to support the best doctoral students and to help them enhance their scientific excellence by participation in foreign research events, increasing international mobility and encouraging international dissemination of the Lithuanian research results.

In 2019, financial support for academic achievements was granted for 344 doctoral students (over 0.8 million EUR). Almost 79 thousand EUR were granted for academic trips of 81 doctoral students.

- *Financial support for research events*

The objective of financial support for research events is to promote the development of Lithuanian research and international scientific relations. The Council provided funding for research events focused on consideration of relevant scientific problems, promotion of new scientific ideas and encouragement of their application in practice, in addition to social and cultural development.

In 2019, over 0.3 million EUR were allocated for the funding of 55 research events (34 international, 10 regional, 11 national).

- *Financial support for publication of research papers or books*

The Council provides financial support for Lithuanian researchers who want to publish research papers in high-level research journals and to publish books at globally recognised publishing houses. This is aimed at promoting the development of Lithuanian research, raising the global profile thereof, and providing equal conditions for all Lithuanian researchers to disseminate their achieved research results.

Applications for support for publishing research papers or books are accepted continually. In 2019, 90 applications were considered. The support (over 75 thousand EUR) was granted for 42 applications (support was granted for the publication of 39 research papers, 2 books and 1 section of a book).

- *Financial support for academic associations*

The Council provides financial support for the activities of student unions, research societies and organisations, organisations of lecturers and other researchers, in addition to other associations (hereinafter referred to as the 'academic associations'), related with the objectives of the system of research and higher education. The financial support for academic associations is aimed at promotion of their activities and active participation in raising and solving important problems in research and higher education, looking for their rational solutions.

In 2019, 40 applications for support to academic associations were submitted. Support was granted for 32 academic associations. In 2019, over 56 thousand EUR were used for this support. The funds were allocated for the activities of international academic associations, organisation of

research and research promotion events and the publicity of activities of academic associations on the internet.

■ *Financial support for applicants of the EU research and innovation programme ‘Horizon 2020’*

In order to encourage Lithuanian RHEs to participate in ‘H2020’, every year the Council invites applicants for ‘H2020’ to submit applications for financial support to proposals, which were recognised as eligible for funding by the EC. In 2019, RHEs submitted 43 such applications for the total support of 199 thousand EUR. Almost 164 thousand EUR were granted for those applications, which were recognised as eligible after their evaluation.

Financial support for internships in the European Space Agency

In 2015, the European Space Agency and the Council signed the 5-year agreement on internships for postgraduates in the fields of Physical and Technological Sciences in the European Space Agency. On the basis of the agreement, one call for applications was announced per year. In 2019, the Council granted funding (60,506 EUR) for two internships on the basis of calls in 2018 and 2019.

1.2.4.2. Support for career, mobility and dissemination: EU Structural Funds

■ *Post-doctoral internships*

The 2nd call for proposals for projects for post-doctoral internships under the activity ‘Promotion of Post-doctoral Internships’ was announced on December 20, 2019. The call is aimed at funding the internship projects implemented by Doctors of Science, who were awarded the said degree at least 5 years ago, at RHEs and companies carrying out R&D activities. The expected launch of projects is July, 2020.

■ *Project ‘Development of doctoral studies’*

2019 was the last year when the Council announced the call for applications to places for doctoral studies and RHEs were able to admit doctoral students, whose doctoral studies are funded from project funds; subsequent years of implementation of the project are intended for the completion of studies of already admitted doctoral students.

The competition for places of doctoral studies² in 2019 was organised in two stages: the first stage was aimed at selection of topics for doctoral studies; the second stage was aimed at the distribution of places among RHEs carrying out doctoral studies. The Council selected 27 topics for doctoral studies out of 63 proposed and selected 70 applications (5 places of which were assigned for general doctoral studies in business companies) for places of doctoral studies out of 256 received. 68 doctoral students were admitted to selected places for doctoral studies in 2019. The distribution of selected places of doctoral studies based on the fields of research is provided in [Annex 18](#) to the Report.

In 2019, the term for activities under the project was extended until the end of September, 2023 and the Ministry allocated additional 7,142,797.11 EUR for the funding. These funds enabled the Council to announce an additional call for applications for 70 places for doctoral studies in 2019

² On January 27, 2016, the Council launched the project ‘Development of Doctoral Studies’ (project No. 09.3.3-ESFA-V-711-01-0001) under the measure ‘Enhancing skills and capacities of scientists and other researchers’ of the priority axis 9 ‘Educating the Society and Strengthening the Potential of Human Resources’ of the Operational Programme for the European Union Funds’ Investments 2014–2020.

and to compensate the fellowships for doctoral students, which were increased at the beginning of the year, in addition to the cost of doctoral studies.

The Council implements the project together with 22 RHEs as project partners. Activities under the project are aimed at the training of young researchers (doctoral students), whose knowledge acquired during the doctoral studies, will contribute to the assurance of further industrial development, productivity of companies and enhancement of international competitiveness.

■ *Support for research trips*

In October, 2018, the 2nd call for applications was announced under the activity 'Development of skills and capacities of scientists and researchers and development of cooperation by implementing the exchange of scientific ideas and research visits to and from Lithuania', 724 applications were received, which were evaluated from January until March. 384 agreements worth 1.075 million EUR were signed.

■ *Students' research practice*

In 2019, a call for applications was announced under the activity 'Capacity building of students to implement R&D activities'. 611 applications were received, 329 agreements for students' research practice in summer and the conduction of research were concluded during the semester; the total worth of which was 727 thousand EUR. In June, 2019 the Council organised a student research conference, during which the students delivered visual and oral presentations, summaries of which were published in the publication 'Student research 2018/2019'.

■ *Project 'The internationalisation of Lithuanian research – the development of RDI links (LINO LT)'*

In 2019, three calls for proposals for funding were organised for three types of LINO LT visits, aimed at researchers and scientific managers. The objective of visits was to develop international relations and to strengthen capacities of researchers to participate in calls under international R&D and innovation programmes.

1. 46 applications for the funding of research visits by foreign partners were received (35 of which were considered as eligible for funding, 4 are still pending evaluation), the purpose of which was to promote scientific cooperation with Lithuanian researchers by focusing on joint participation of Lithuanian and foreign partners in the EU research and innovation programmes;

2. 7 applications for the funding of visits of research managers were received (3 of which were considered as eligible for funding), the purpose was for familiarisation with the R&D initiatives, news and realities of the EU and 'H2020' associated countries;

3. 172 applications were made for the funding of researcher visits (158 of which were considered as eligible for funding), the purpose was to consult the coordinators of fields in international R&D initiatives regarding cooperation, implementation, drawing up, and submission of proposals for international projects, participation in information days, match-making events and meetings with potential foreign partners.

Based on the data of the LINO office:

- A researcher or a research manager established at least 4 new contacts with foreign colleagues during their every trip to an international event;
- After 6 such visits, on average, the new partners were ready to co-implement a project: they drew up a proposal and participated in international calls for proposals;
- After 15 meetings, on average, an agreement on institutional cooperation and involvement in new international networks was reached.

■ *Project ‘Enhancing capacities of researchers through project proposals’*

The period for implementation of the project is 2018-2021. The project is aimed at enhancing capacities and skills of scientists and other researchers through proposals for research projects and financial support for academic achievements.

In 2019, three workshops were organised for the enhancement of the project implementation and proposal preparation skills by researchers. The workshops (60 participants) provided applied knowledge on how to manage a project effectively, how to reveal the originality, the relevancy of the idea, in addition to the international nature of the project in the proposal, how to effectively plan the activities in order for the project to strengthen interinstitutional relations, to serve the interests of the State and to become known not only to colleagues, but also to society. According to researchers, who participated in the workshops, such workshops were very effective and beneficial; therefore this activity will be further continued in 2020.

1.3. Activities of the Council encouraging the openness of State research and international cooperation

The Council actively participates in the activities of the EU institutions and other international institutions forming the research and higher education policy, additionally, it aligns its programmes and funding procedures with other countries, organises joint calls for proposals, thus providing better conditions for Lithuanian researchers to conduct joint research with the researchers of other countries.

In development of the relations between Baltic States in 2019, the representatives of the Council participated in the meeting of research councils of Baltic States ‘BalticHORC’ (in Latvia), in addition to the parliamentary assembly of the Baltic States in Lithuania, where the states exchanged their knowledge and discussed the possibilities for cooperation.

In 2019, upon invitation of the informal group of representatives of research councils and institutions interested in matters of communication of the North States, a representative of the Council participated in the first meeting of representatives on research communication between Baltic and the North States, where the representative presented the research communication in Lithuania. During the meeting, good practices of the research communicators were exchanged in developing research communications and solving the issues arising within this area. Possibilities to formalise the activities of research communicators were discussed.

1.3.1. Representation in the EU and other international working groups and the funding thereof

The Council continued the funding of activities of representatives and experts delegated to various EU and other international working groups, committees and commissions in relation to R&D. Participation in international structures helps to obtain primary information on international processes and to draw the attention in respective project management structures to the interests of Lithuania and its researchers.

In 2019, 18 agreements were concluded with representatives, on the basis of which 10,689 EUR were paid, 2,411 EUR of which were granted for compensation of expenses from activities of Lithuanian representatives and experts in ‘H2020’ committees. Representatives participated in 18 meetings of working groups, 6 of which were meetings of ‘H2020’ working programme committees. In 2019, 8 staff members of the Council were appointed as experts and participated in 7 meetings of the ‘H2020’ working programme committees, where working programmes of ‘H2020’ and the implementation thereof are discussed and approved.

In preparation for the future programme 'European Horizon', in 2019, staff members of the Council were appointed as representatives and participated in discussions in 5 meetings of the Shadow Strategic Configuration Committee of the said programme, which were organised by the EC, where strategic aspects of the upcoming programme were discussed. The appointed representatives also participated in 2 meetings of the Legal and Financial Expert Group, which drafts the model grant agreement for the said programme (the representatives submitted explanations to the EC on project grant agreement for the 'European Horizon' and collected remarks of the Member States).

1.3.1.1. Science Europe

The association 'Science Europe' was established in 2011, which unites 37 institutions (including the Council) from 28 European countries, which conduct research and provide funding.

In 2019, the deputy chairman of the Council participated in the meeting of the Science Europe General Assembly in Brussels (the Kingdom of Belgium), where the matters of the 'Science Europe' activities were discussed.

Representatives of the Council participated in activities of the following 'Science Europe' working groups:

1. Working group on the 'European Horizon';
2. Working group on the open access of research papers;
3. Working group on research data.

In 2019, a representative of the Council participated in the event hosted by 'Science Europe' and the EC, where the matters of national programmes oriented towards the missions and challenges were discussed.

1.3.1.2. EURAXESS

In 2019, the Council continued its activities in the Network of National European Researcher Mobility Centres, EURAXESS: provided consultations and information on matters related to mobility in Lithuania and foreign countries relevant to scientists and other researchers, and additionally acted as an administrator of the website www.euraxess.lt. The Council joined the project 'EURAXESS Top IV', which is implemented under the H2020 scheme of coordination and funding activities. The project is aimed at improving the functioning of EURAXESS network by developing new and strengthening current network services, such as provision of relevant information to researchers and their family members through the website, in addition to the provision of free advice.

1.3.2. Functions of the EC National Contact Points

In improving the participation of countries in the EU research and innovation programme, the significant role is played by the network of EC National Contact Points (NCP). National contact points inform the applicants and project implementers on the news, provide information from the EC on calls for proposals and their conditions, provide advice on matters in relation to drawing up the proposals, searching for partners, administrative procedures and requirements in the implementation of projects and on other matters in relation to the programme. National contact points contribute to the success of the participation of Lithuania in the H2020 programme (for more detailed information and statistical data on the H2020 success rate, see [Annex 14](#) of the report).

The Council carries out the NCP functions in the following H2020 areas:

1. European Research Council grants ;
2. Inclusive, Innovative and Reflective Society;

3. Joint Research Centre;
4. Climate Action, Resource Efficiency and Raw Materials;
5. Food Security, Sustainable Agriculture and the Bioeconomy;
6. Marie Skłodowska-Curie actions;
7. Science with and for Society;
8. RIs;
9. Spreading Excellence and Widening Participation;
10. Health, Demographic Changes and Wellbeing;
11. Legal and Financial Aspects of the Programme.

In the role of the NCP, 23 events for target groups were organised in 2019, 12 presentations were delivered, 29 informative articles or newsletters dedicated for the activities under H2020 programme were drawn up, more than three hundred general consultations were given and 6 advanced reviews of H2020 proposals were carried out.

In January 2019, the Council hosted an international seminar with participants from the EC, Austrian Research Promotion Agency, FFG, and Enterprise Ireland. Activities of the NCP network in the upcoming programme 'European Horizon' (2021-2027) were discussed in the seminar, good practice in organising the activity of NCP national structures operating in Austria and Ireland were also discussed. NCP Colleagues from Baltic States, Poland and Belarus also participated in the seminar.

In 2019, the NCP of the Council participated in the annual meeting of Baltic States' NCP in Tartu, where activity experiences were exchanged and discussion on the activities of NCP in the 'European Horizon' was organised. The Council's NCP representative participated in the session of EU Research and Innovation days in Brussels on the topic 'Better services for applicants', delivered a presentation, and initiated a discussion among NCP representatives from various countries.

1.3.3. Lithuanian RDI Liaison Office in Brussels 'LINO'

The year-long chairmanship of the Lithuanian Science Liaison Office in Brussels LINO to the informal network of national science liaison offices in Brussels - IGLO (<http://www.iglortd.org>) ended in July, 2019. During this period, 6 meetings of network leaders and 4 meetings of the secretariat were organised, 2 information events '*IGLO Open*' were contributed to, where realities of EU research and innovation were discussed.

The LINO office was responsible for organising the IGLO annual event in Brussels with over 180 participants. Signe Ratso, representative of the EC research and innovation directorate, was the main rapporteur at the event.

From January, 2019, alongside the Netherlands House for Innovation and Research '*Neth-ER*', the LINO office chairs the '*IGLO Health*' working group. 8 meetings of the '*IGLO Health*' working group took place in 2019, where the initiatives were discussed on the topics of health of the EU and the policy on research and innovation in this area.

In dissemination of knowledge on research potential of the State and news in the EC research and innovation policy and financial measures, in 2019, the LINO office established itself as a platform helping to strengthen relations of the Lithuanian-European research and innovation community.

In 2019, the LINO office with partners organised 10 events in Brussels intended for presentation of Lithuanian research and innovation potential and discussion of the main aspects of the EC research and innovation policy. Working together with Lithuanian embassies in Belgium and Ireland, two bilateral researcher matchmaking events were organised in Brussels and Dublin.

Dissemination of information on the international cooperation possibilities is one of the priorities of the LINO office. Social media was actively used for this purpose:

- *Facebook* account (<https://www.facebook.com/LINObiuras/>) presents the most relevant information on EU research and innovation policy and events to Lithuanian scientists and researchers (on average, 4 news items/week);
 - *Twitter* account (https://twitter.com/Lino_OfficeLT) presents the most relevant news on EU research and innovation policy, in addition to information on Lithuanian research achievements and potential to an international audience (on average, 2 news items/week);
 - *LinkedIn* account (www.linkedin.com/company/lithuanian-rdi-liaison-office-lino) publishes the most relevant news on EU research and innovation policy, in addition to information on Lithuanian research achievements and potential to an international audience (the news is published as appropriate, on average, once a week);
- The news on the LINO office website (<http://lino.lmt.lt/>) is published in Lithuanian and English. The event calendar is also updated.

2. Institutional management and improvement of the activities thereof

2.1. Structure and management

The Council consists of the Board, two expert committees – the Committee of Humanities and Social Sciences and the Committee of Natural and Technical Sciences, and the Research Foundation. The Council is managed by the Chairperson. After the resignation of the Chairman, Valdemaras Razumas, in February 2019, the Council was temporarily managed by Deputy Chairpersons, Ričardas Rotomskis and Justina Poškienė. A newly appointed Chairman, Romas Baronas, began his work at the Council on November 20, 2019. The Board is a collegial managing body. Based on research fields, the Committees of the Council implement their functions and rights under the Regulations. The function of the Research Foundation of the Council is to implement Decisions of the Council on R&D competitive funding and to carry out administrative, organisational and informational work. The staff of the Research Foundation in 2019 consisted of 28 civil servants and 31 employees. Six projects of the Council, funded from the EU SF, are managed by 9 employees.

The Research Foundation consists of nine units (structure approved by the December 2018 Order of the Chairman of the Council No. V/2018-707). In order to accelerate the activities between the units, on January 1, 2019 the internal structure was changed and a new unit, the Secretariat, was formed, which is directly subordinate to the Scientific Secretary of the Council.

2.2. Informing the public

The Council hosts information days and weeks of individual consultations in order to acquaint applicants and project implementers with the Regulations and the Terms and Conditions on calls for proposals for ongoing projects. The Council also organises events, where various aspects of research policy are discussed, and where the academic community, social partners, participants of the research policy, representatives of the interested State and business institutions, politics and foreign partners are invited for discussion.

The main tool for disseminating and finding information on the activities of the Council, relevant news, calls for proposals and events is the website www.lmt.lt. More than 2,100 subscribers are subscribed to the news published on the website. Media releases are also drawn up and disseminated, information is provided based on the questions submitted by journalists. In 2019, a total of 202 new entries were published (34 of which were the Council's calls for proposals).

The most important news published on the Council's website in 2019:

- Address of the Chairman of the Council and the Chairman of the Board to the President of the Republic of Lithuania, the Seimas and the Government regarding the funding of research;
- Changes in the management of the Council: resignation of the Chairman, selection of candidates, appointment of the new Chairman, new composition of the Board;
- Preparation for the new programme 'European Horizon', consideration of missions and setting up the councils thereof;
- Information on calls for proposals for H2020 thematic areas coordinated by the Council and on the opportunities for finding partners (NCP communication);
- Information on access to funding of LINO visits and activities of the LINO office;
- Distinguished professors programmes (EU SF measure) and presentation of the call for proposals in Lithuania and abroad;
- Possibilities to conduct research under NRP, PRP 'Welfare Society' and State Lithuanian Studies and Dissemination Programme for 2016-2024;
- Information on opportunities for participation in COST activities;
- Information on opportunities for participation in EJP 'Rare Diseases';
- Presentation of calls for applications for student research internships (EU SF measure);
- Information that the Council will provide funding for Lithuanian researcher projects, which were well-evaluated in prestigious European calls for proposals, ERC and MSCA.

The key event of 2019 was the conference 'European Horizon: new opportunities for Lithuanian researchers 2021-2027', organised by the Council, the Ministry and the LINO office. Preparation for 'European Horizon', opportunities for the participation of Lithuania in the project and the challenges were presented to Lithuanian institutions, companies, researchers, scientists and the society, participating in the conference (500 participants in total). The presentation was given by Jean-Eric Paquet, Director General of the EC Directorate General for Research and Innovation, the results of Lithuania's participation in H2020 and proposals for the future programme were presented.

In 2019, over 40 information events, training and seminars were organised for applicants. For more information on the NCP events, see Sub-section 1.3.2 of the Report, for more information on the events of the LINO office and related activities; see Sub-section 1.3.3 of the Report.

Other notable events:

- Seminar of the Council, the Ministry and the EC aimed at acquainting the Lithuanian participants with news on the implementation of 'European Horizon';
- International informative seminar of the Council 'Strengthening the role of research ethics', where experts on academic ethics participated from 14 European countries;
- The sixth annual Lithuanian-Japanese Symposium on Life Sciences was held in Japan, where Lithuanian and Japanese researchers presented their research;
- International conference 'INGSA 2019- Security Challenges in the Digital Era: the Role of Science Advice', organised by the Council, the Ministry of Foreign Affairs and the International Network for Government Science Advice (INGSA), aimed at discussing the role of science advice in building resilience to various threats and risks (cyber, hybrid and technological), and additionally raising the awareness of public in the context of modern media.

2.3. Improving the efficiency of the organisation of competitive funding

2.3.1. Improvement of the quality of expert activities

The Council is constantly striving to improve the quality, publicity and transparency of the work of experts. In 2019, the project for provision of services was launched for the modernisation of the Council's information system for research funding and monitoring of research quality. On the basis of Public Procurement agreement No. S-16, concluded on April 5, 2019 between the private limited

liability company UAB 'Algoritmy sistemas' and the Council, the works of planning, definition, analysis, design and the first stage of construction were carried out and the prototype of the information system was created.

For assurance of the quality of the expert work, the permanent Appeal Commission of the Council was formed, examining submitted appeals regarding the administrative check of proposals and expert evaluation of proposals or reports.

In 2019, the Appeal Commission examined 51 appeals: 22 appeals were submitted regarding the projects funded from the State budget, 29 appeals were submitted regarding the projects funded from the EU SF. 14 appeals (5 of them regarding the projects funded from the State budget and 9 of them regarding the projects funded from the EU SF) were upheld deciding to re-evaluate the proposals or reports in consideration.

The Appeal Commission also submitted proposals to the Chairman of the Council regarding the General Rules of the Council for the Competitive Funding of Research and Dissemination Projects in relation to the process of proposal evaluation.

In 2019, the Council approved the Procedure for submitting and examining the appeals regarding the annual evaluation of results of research (art) activities. Under the said procedure, the RHE may submit an appeal to the Council, if it disagrees with the decision of the Chairman of the Council regarding the works of research (art) or R&D (art) projects and agreements. For examining such appeals, the Appeal Commission, consisting of at least one expert in each field of research (art) with experience in research (art) evaluation activities, was formed as proposed by the Board of the Council. In 2019, appeals from 7 RHEs regarding 22 objects of evaluation were received.

In order for the research activities of the researchers to comply with the principles of ethics, the permanent Commission of Research Ethics (hereinafter referred to as the 'Commission of Ethics') operates within the Council. The Commission of Ethics reviews notifications related to the breaches of research ethics by researchers. In 2019, the Commission of Ethics examined the request of the Office of the Ombudsperson for Academic Ethics and Procedures of the Republic of Lithuania to submit comments on the draft guidelines for the recognition of false research events, and the request of a judge of the Constitutional Court of the Republic of Lithuania to submit an opinion in constitutional justice case No. 9/2019.

2.3.2. Reduction of the administrative burden

The Council seeks to ensure that project management is of high quality, efficient and best suited to the needs of researchers. The legal acts of the Council, which were drafted in 2019 and are currently in force, have systematically reduced the administrative burden to the applicants covering the entire cycle of the project (from submission of proposal until accounting for it):

1. Facilitated submission of proposals:

1.1. Proposals are submitted only in one language, either Lithuanian or English, depending on which experts (Lithuanian (including Lithuanians abroad) or foreign) are expected to evaluate the proposals. In order to ensure the compliance with the RL Law on the State Language, the proposal originally submitted in English must be submitted also in Lithuanian before signing the project grant agreement;

1.2. Principal investigators of projects, where data collection is planned, must submit the data management plan upon signature of the project grant agreement, instead of submission of such plan together with proposal;

1.3. In the case of some measures (e.g. on-demand projects), the two-stage (short and extensive proposals) submission was abandoned, leaving only the extensive application to be submitted, thus facilitating the preparation of applications and shortening the procedures before the decision on the funding is made;

2. The requirement that the estimate of costs for the current calendar year and the quarterly (annual) reports on the use of funds submitted to the Council must be signed by three representatives of the implementing institution has been waived. The said documents must be signed by one person authorised by the head of the institution;

3. The form of the estimate of costs was unified in the proposal, and the annex to the agreement and the report on the use of funds, thus accelerating the drawing up of the estimate of costs by planning and accounting for the funds of the project during each year of the implementation;

4. In the light of many years of experience, the use of indirect costs by the institutions has been facilitated by replacing the former 4 groups of costs with two and introducing a more favourable ratio between groups of costs;

5. The descriptions of financial support for doctoral students, academic organisations and the organisation of research events were amended determining that the material project reports shall be evaluated by the staff members of the Foundation and the experts shall be involved only in cases of difficulty, hoping that in such a way, the applicants will sooner receive the remaining project funds and information on proper accounting to the Council.

In 2019, the Council adopted decisions on the improvement of work organisation of experts:

1. The amendment of the form of the royalty agreement with experts provides that the experts must review their evaluations free of charge in order to verify that there have been no factual errors or procedural inconsistencies in the event of appeals or complaints regarding the evaluation;

2. A uniform period of three years was set for the preparation of the output planned in the proposal, but not included in the final report, provided that the principal investigator may report to the Council at any time during this period;

3. It was determined that the period of validity of the reserve list of projects must be clearly defined when the results of the calls are published and the list of reserve projects is drawn up, thus avoiding ambiguity and allowing applicants to plan their other proposals more realistically;

4. The minimum possible number of experts evaluating the project has been reduced, taking into account the size of the project budget; the savings from the expert work will lead to more funds for funding of competitive research;

5. The description of the procedure for initiating and implementing one of the measures, the on-demand research projects, was amended, reducing the number of procedures from the submission of topics to the decision on funding, in addition to clarifying the responsibilities for the use of the research output.

2.4. Assessment of efficiency of competitive funding

Data from the CA WoS database was used for the assessment (excluding the data on Humanities, which is not covered by this database). The Humanities account for 1/7 of all competitive funding, therefore reliance on the CA WoS database should not significantly distort the overall picture.

The proportion of research papers was analysed, prepared by implementing the projects funded by the Council, that were among the most cited articles of 2015-2019 in the CA WoS database between 2015 and 2019 in projects funded by the Council. For the most cited articles, the so-called TOP 10, for which according to the October 4 2017 Regulation of the Annual Assessment approved by the Order of the Minister, additional points are awarded. This indicator was compared with the total number of papers included in CA WoS in 2015-2019.

It is important to note that the CA WoS database does not reflect all the referenced papers, funded by the Council, as the database does not automatically recognise all information related to the funding of the Council's projects. An earlier analysis of the papers of Lithuanian researchers in the CA WoS database shows that about 30% of them are not automatically detected in this database. For

this reason, the number of publications funded by the Council was multiplied by the value of the coefficient ($k = 1.3$) in this manner increasing the number of research papers produced by implementing projects funded by the Council by 30%.

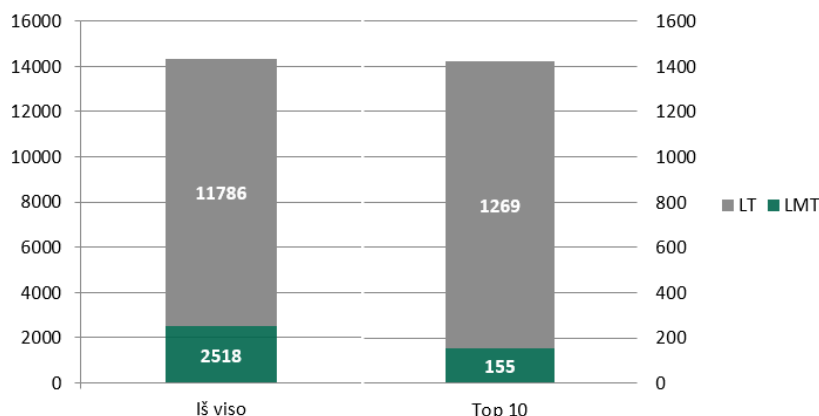


Figure 1. Number of papers published in the WoS by Lithuanian researchers in 2015–2019 (including those funded by the Council (LMT)); first column – all papers, second column – papers in the TOP10.

In 2015–2019 (data as of February 10, 2020) Lithuanian researchers published 14,304 research papers in publications referenced by the CA WoS database (Figure 1), of which 17.6% (2,518) were prepared by implementing activities funded by the Council. Out of the total number of papers by Lithuanian researchers published in the database (14,304), 1,424 papers were among the most quoted research papers. During the reference period, the Council provided financial support for 2,518 papers, 155 of which were among the most quoted research papers. This was 6.2% of the papers supported by the Council and 10.9% of all papers by Lithuanian researchers, which were among the most quoted research papers.

2.5. Assessment of the impact of I-VII calls for proposals of research group projects

In 2019, the Council carried out the impact assessment of the I-VII RIP calls. The expert commission was set up to carry out an impact assessment of I-VII RIP calls in accordance with tasks aligned with the Council committees, such as to provide the analysis of statistical and bibliometric data of I-VII RIP calls, to carry out a general and exemplary evaluation of RIP project results and to provide conclusions and recommendations for further development of the instrument.

The following conclusions were submitted after the evaluation:

- RIP is one of the most important and relatively stable measures of funding competitive research in Lithuania;
 - The RIP measure is worthwhile and necessary to continue, as it creates conditions for conducting research on relevant topics, not restricted by the programme, initiating innovative interdisciplinary research directions, and ensures the diversity of research;
 - The measure is effective in preparing for the wider integration of Lithuanian researchers into international research projects. Due to the high competition of projects for calls under this instrument, the applicants are gradually gaining the capacity to submit high-quality research proposals, and researchers from funded research groups receive financial support for start-ups to participate in scientifically successful and financially sound EU and non-EU projects;
 - The measure effectively contributes to the education of the younger generation of researchers, at the same time ensuring intergenerational balance in the research communities; RIP is attended by doctoral students, the young researchers, for whom RIP is becoming one of the tools for establishing themselves in research;

- Funding for this measure is too low. It is necessary to increase the number of funded projects without reducing the amount of funding for the measure, as many well-prepared and, most likely, successful projects do not receive funding;

The methodology, conclusions and recommendations of the evaluation will be set out in more detail in the evaluation report prepared by the expert commission, which is planned for publication on the Council's website by the beginning of the 2nd quarter of 2020.

2.6. Joint international research publications

In the European Scoreboard 2019, one of the 27 indicators that measure European countries is the number of international joint research publications per million residents.

According to the CA WoS database as of February 10, 2020, in 2019, Lithuanian researchers have published 2,214 international joint research publications, and according to the Elsevier Scopus (Scopus) database - 2,135 publications (or, respectively, 790.7 and 762.5 articles per million inhabitants of Lithuania).

In 2019, the majority of research publications by Lithuanian researchers were published in cooperation with researchers from the United Kingdom (610 and 458, according to CA WoS and Scopus databases, respectively), Germany (630 and 490) and the United States (588 and 462) (for more details, see [Annex 19](#) to the report). It is worth noting that Lithuanian researchers mostly publish joint publications with countries leading in research, in addition to a number of joint scientific publications with neighbouring countries, namely Poland, Latvia and Belarus (CA WoS and Scopus databases, 571 and 470, 364 and 234, 200 and 188 respectively).

2.7. Budgetary appropriations and the use of funds

The plan of appropriations in 2019 was 19,126.0 thousand EUR. For more details on budgetary appropriations and the use of funds, see [Annex 20](#) to the report.

The unspent funds of the measure 'Development of the State Research and Higher Education System' (State budget funds) (management of costs and funding of research) are 2407.3 thousand EUR. The majority of the unspent funds from the State budget (2,310.4 thousand EUR) consists of funds allocated for competitive funding of research and other activities under various programmes. The funds remained unused, as for objective reasons such as the amendments to the legislation, the second stage of the implementation of the NRP did not start. 107.7 thousand EUR were returned to the Council by project implementers due to specificities of the budgetary year and the requirement to return the unused project funds. State budget funds allocated for management equalled 96.9 thousand EUR; savings: 30.6 thousand EUR from the salary fund (due to changes of staff and sick leave of employees), 57.0 thousand EUR from goods and services (due to protracted works and management of documentation), 5.5 thousand EUR from the acquisition of services of experts and advisors (due to pending planned expert work), 3.8 thousand EUR from services provided after the end of the reference period (due to lower than planned procurement needs).

Development of State Research and Higher Education System (Technical Assistance 2014–2020, (EU SF funds): unused funds amounted to 160.6 thousand EUR, of which 26.7 thousand EUR were saved on salaries and social security contributions (due to sick leave of employees and changes of personnel) and 79.1 thousand EUR in the item of costs for the acquisition of services of experts and advisors (funds were not used due to the delay in announcing the calls for proposals in the 3rd and 4th quarters of 2019 due to untimely approval of project funding conditions by the Ministry). The funds necessary for expert evaluation will be used in the 1st-2nd quarters of 2020. The savings in goods and services items occurred due to lower-than-planned procurement prices (15.0 thousand EUR) and

the postponement of the cycle of publicity broadcasts planned for 2019 until 2020 (39.8 million EUR), as the activities due to the delayed call will be completed by February-March 2020.

Development of the State Research and Higher Education System (technical assistance funds of the European Economic Area / Norwegian financial mechanisms for 2014–2021): unused funds amounted to 10.4 thousand EUR. Salaries and social insurance contributions were saved due to the incomplete composition of the project staff (5.5 thousand EUR), goods and services items saved due to lower than planned procurement prices (4.9 thousand EUR).

Development of the State Research and Higher Education System (European Economic Area / Norwegian bilateral cooperation funds 2014–2021): unused funds amounted to 67.0 thousand EUR. The funds were unused due to the unused funds of the EEA / NOR bilateral cooperation, planned for compensation for the trips of Lithuanian researchers to the information event for the programme to be held in Latvia. The event was to take place in the 4th quarter of 2019 in Riga, however, due to protracted preparations it was postponed to the 1st quarter of 2020.

The use of Council's costs for 2019 (for more details see Annex 20): management costs accounted for 17% from the Council's planned appropriations. At the end of the reference period, the balance in the budget funds account was 0 EUR. At the end of the reporting period, the balance of EU and other international support funds allocated for the implementation of projects in the bank accounts amounted to 1,517.9 thousand EUR.

The Chairman

Romas Baronas

February 28, 2020

3. Annexes

Annex 1. Submitted proposals regarding training of researchers and R&D policy (including draft legislation)

To the Seimas of RL (committees and Chancellery thereof) regarding:

▪ **Draft amendments of the Articles 4, 8, 27, 28, 38, 39, 43, 44, 50, 52, 56, 67, 85, 87 of the Republic of Lithuania Law on Higher Education and Research No. XI-242 in addition to amendment of the title of Chapter VII and the addition of Article 25¹ thereof.** One of the proposed amendments was regarding the definition of experimental development. The Council has pointed out that the proposed amendment narrowed the definition of the term 'experimental development' by eliminating the reference to social and cultural spheres, which was established in the law. The Council has emphasised that the elimination of the reference that the experimental development covers the social and cultural spheres may become a pretext for the neglect of activities of experimental development in the said spheres. Such activities in Humanities and Social Sciences are oriented towards solutions of relevant Lithuanian cultural and social issues, rather than technologically applicable results. Addressed also to the Ministry (13/03/2019, No. 4S-334).

▪ **Draft National Progress Programme,** which contains planned principal strategic aims of the State for 10 years. The Council has expressed its concerns regarding the decision to renounce the strategic aim to 'Develop research, which encouraged sustainable development of the State, in addition to welfare of society and international competitiveness'. In the view of the Council, in order to implement aims established in the strategic document, 'Lithuania 2030', it is essential to ensure that creation, dissemination and use of scientific knowledge was encouraged not only in business, but also in the public sector, and served for purposes of sustainable development of the State in addition to the welfare of society and the State. Addressed to the Chancelleries of the President and Government of RL, forwarded to the Ministry (16/07/2019, No. 4S-710).

▪ **Funding of Lithuanian research.** As a response to ongoing debates regarding the state of higher education and research in Lithuania, the Council has expressed its concerns regarding insufficient funding and development of research. The Council has urged to take action, which ensured sustainable qualitative growth of fundamental scientific research. The Council has proposed to prepare specific plans in order to bring the share of national budget funds allocated to Lithuanian research closer to the EU average. Funds from the budget of the Council intended for competitive funding of research must increase consistently at least by one third every year from 2020 until 2022, so that by the end of the period of R&D funding from 2014-2020 EU funds, the issue of financial vacuum, which will take place in the sphere of competitive funding of research, could be solved at least partly. Upon consideration of strategic documents of the State of Lithuania, it is essential to highlight the importance of research in addition to involving the academic society in the discussion and decision-making process. Addressed to the President and Government of RL (02/12/2019, No. 4S-1031).

To the Government of RL (Chancellery thereof) regarding:

▪ **Draft Law on Republic of Lithuania Law on Strategic Governance and draft amendments of the laws in relation thereto.** The purpose of the draft is to adopt a new law, which regulated the strategic governance system oriented towards results, that is, which established principles of the strategic governance system, defined types of planning documents, the relationship between such documents and their impact on the planning of costs incurred by changes, in addition to establishing the provisions for drafting, approval, implementation, monitoring, evaluation of the determined planning documents and reporting the progress achieved. The Council has broadly agreed to the draft. (30/10/2019 No. 4S-925).

▪ **Draft National Progress Programme.** The Council has submitted proposed adjusted wordings of strategic aims of the draft, added proposed tasks and indicators or adjusted the current ones. The Council has also noted that scientific research, being a horizontal activity, must be included to all strategic aims of the National Progress Programme. Addressed also to the Ministry (17/07/2019, No. 4-S-725).

▪ **Draft Resolution of the Government of RL 'On the Amendment of the July 1, 2015 Resolution of the Government of the Republic of Lithuania No. 709 'On the Approval of Procedures for Pre-commercial Procurement'**, which is designed to resolve the issues arising in application of the pre-commercial procurement. The Council has proposed to supplement the draft with provisions for implementation of exceptions for R&D procurement laid down in the Republic of Lithuania Law on Public Procurement. Addressed to the Ministry, the Lithuanian University Rectors' Conference, Board of Directors of Lithuanian Science Institutes and Lithuanian Academy of Sciences (25/07/2019, No. 4S-767).

▪ **Draft Resolution of the Government of RL 'On the Amendment of the April 30, 2014 Resolution of the Government of the Republic of Lithuania No. 411', 'On the Approval of the Programme on the Implementation of the Priority Areas of Research and (Socio-Cultural) Development and Innovation (Smart Specialisation) and their Priorities' and draft resolution of the Government of RL, 'On Repealing the October 30, 2014 Resolution of the Government of the Republic of Lithuania No. 951', 'On the Approval of the Priority Areas of Research and (Socio-Cultural) Development and Innovation (Smart Specialisation)'**. The proposals were submitted regarding the wording of specific provisions of the draft, by emphasising that creation and implementation of innovations is impossible without an innovative, creative and critical society. The society not only creates an environment friendly to technological or business innovations, but also by itself it is a direct object of research and innovation. Addressed to the Ministry, the Ministry of Economy and Innovation of the RL, the Research and Higher Education Monitoring and Analysis Centre and the Smart Specialisation Coordination Group (17/06/2019, No. 4-S-610 and 17/06/2019, No. 4S-610).

▪ **Draft General Description of the Procedure for Procurement of Research and Experimental Development Services, which does not comply with the conditions laid down in the Article 15.1 of the Republic of Lithuania Law on Public Procurement.** The Council has approved the initiative of the Ministry to prepare one general description of the procedure for procurement of R&D services, which does not comply with the conditions laid down in the Article 15.1 of the Republic of Lithuania Law on Public Procurement, thereby including the provisions of the Description of Procedures of Pre-Commercial Procurement, approved on July 1, 2015 by the Resolution of the Government of RL No. 709, and the provisions of the Description of Procedure of Procurement of R&D Services, except for such R&D Services, where the received benefits are used only to meet the needs of the contracting authority and which are fully paid by the contracting authority, approved on June 22, 2011 by the Resolution of the Government of RL No. 772. The letter is also addressed to the Ministry (27/08/2019, No. 4-S-791).

▪ **Draft amendments to the Description of the Procedure for Allocation of Funds from the State Budget of the Republic of Lithuania to the Research and Higher Education Institutions for the Development of Scientific Research, Experimental Development and Artist Activities**, approved on March 1, 2017 by the Resolution of the Government of RL No. 149 'On Implementation of the Republic of Lithuania Law on Higher Education and Research'.

To the Ministry of Education, Science and Sport, regarding:

▪ **Draft Resolution of the Government of RL 'On the Amendment of the Articles 4, 8, 27, 38, 39, 43, 52, 56, 59, 67, 77, 85, 87 of the Republic of Lithuania Law on Higher Education and Research No. XI-242 and the addition of the Article 25¹ thereto, in addition to the submission of the draft**

Law on the Amendment of the Article 11 of the Republic of Lithuania Law on Education No. I-1489 to the Seimas (Parliament) of the Republic of Lithuania, which is intended for the implementation of provisions of the Government programme in relation to the restructuring of the higher education institutions network and improvement of the quality of higher education and research activities, in addition to the clearer regulation of provisions of the Republic of Lithuania Law on Higher Education and Research and the smooth practical application thereof. The Council has proposed to supplement the draft with the provision of the amendment of the law regarding the harmonisation of institutions approving descriptions of external evaluation of activities of the higher education institutions and state research institutes. The Council has also proposed the wordings of specific articles, in relation to the definition of experimental development and provisions for determining the number of state-funded places of the doctoral studies programmes and study grants (15/01/2019, No. 4S-37).

- **Draft Law on the Amendment of the Articles 9, 15, 74, 75, 77, 79, 82, 83 of the Republic of Lithuania Law on Higher Education and Research No. XI-242, the Addition of the Article 83¹ thereto and the Repealing of the Article 76 thereof**, indicating the reorganisation of the funding of higher education. The Council has provided its opinion on the provisions of the Article 15 (2) and the Article 77 (8) and 77 (9) of the draft, which regulate the admission to the state-funded student places in the programmes of the second cycle studies and the doctoral studies (upon request of the Ministry, the proposals were submitted by email on 20/08/2019).

- **Draft Resolution of the Government of RL ‘On the Amendment of the March 1, 2017 Resolution of the Government of the Republic of Lithuania No. 149’, ‘On the Implementation of the Republic of Lithuania Law on Higher Education and Research’**, which was being amended due to the updated classification of research fields. The Council has pointed out that due to the proposed amendments the situation arises, where the implementation of patent (patent application) licence agreements, R&D commissioning’s by entities, in addition to commissioning’s for art will potentially be encouraged at the cost of research (artistic) works, which then will relatively ‘depreciate’. The research in Lithuania is subject to high requirements of quality and internationality, therefore the decisions, which would provide conditions for understatement of research activities, necessary in order to successfully participate and compete in the international area of scientific research, cannot be adopted. The Council welcomed the encouragement of implementation of R&D commissioning’s at universities and research institutes, however, emphasising the need to allocate additional funds for this purpose (07/08/2019, No. 4S-778).

- **Draft amendment of the June 15, 2018 Order ‘On the Approval of the Regulations for Annual Evaluation of Research, Experimental Development and Artistic Activities in Colleges’**, by which it is intended to commission the evaluation of scientific works of colleges to the Council. The Council has agreed to carry out the evaluation and provided specific comment on the draft (02/05/2019, No. 4S-468).

- **Draft Order of the Minister of Education, Science and Sport of RL ‘On the Approval of the Description of the Procedure for External Evaluation and Accreditation of Studies and the Indicators for the Areas Subject to Evaluation’**, by which it is intended to regulate the procedure for external evaluation of higher education and research institutions established in the Republic of Lithuania and authorised to carry out study activities and the activities in relation thereto. The Council has provided specific proposals to the draft (16/04/2019, No. 4S-433).

- **Draft Resolution of the Government of RL ‘On Joining the Infrastructure of Integrated Structural Biology of the European Research Infrastructure Consortium, the Biobanking and Biomolecular Resources Infrastructure of the European Research Infrastructure Consortium and the Extreme Light Infrastructure of the European Research Infrastructure Consortium’**, by which it is proposed to approve the drafts on the international research infrastructure membership agreements. The Council has drawn attention to the conflicting provisions of legal acts regulating the admission to the international research infrastructures, in addition to the issues of funding, and has proposed to clearly define the roles of institutions related to the participation of Lithuania in the international

research infrastructures in drafting legal acts on the membership of Lithuania in other international research infrastructures, and to carry out the detailed analysis of finances, possible impact and financial and other needs (28/11/2019, No. 4S-1021).

- **Regulations of doctoral studies in the field of arts.** The Council has proposed to update the Regulations of Doctoral Studies in the Field of Arts, by following the idea that the principal provisions of doctoral studies in the fields of sciences and arts must be consistent. The Council has also provided specific proposals for the wording of regulations (25/04/2019, No. 4S-452).

- **Draft regulations of doctoral studies in the field of sciences.** The Council has provided specific proposals for the wording of draft (05/07/2019, No. 44S-699).

- **Improvement of the quality of doctoral studies.** Proposals were submitted by the Board of the Council. The proposals included avoiding scrupulous supervision of RHE, in addition to encourage processes of self-regulation thereof, to put more emphasis on the evaluation according to the quality criteria, to change funding of RHE in doctoral studies by introducing the scoring system (for achieved results and changes), to deepen and broaden the continuous analysis of the State science needs and the effectiveness of doctoral studies, by including monitoring of further careers of postgraduates of the doctoral studies, in addition to strengthen the relations between doctoral studies and relevant research in Lithuania by both allocating more funds and creating additional competitive places in doctoral studies, to encourage short-term visits of foreign researchers to Lithuania and their involvement in the doctoral studies (supervision, consultations, teaching, joint research and co-authorship of publications) (30/05/2019, No. 4S-557).

- **Concept of national research and technology programmes.** The proposals were drawn up together with the Lithuanian Academy of Sciences. Assumptions for a new instrument of R&D funding that took place after the Republic of Lithuania Law on Technology and Innovation entered into force. The proposals put an emphasis on the fact that not only economic, but also public sector operators should be enabled to participate in the implementation of the programmes (together with RHE). Selection of fields and topics should be related with the current Lithuanian research potential, however, in the fields, where the current research potential is insufficient and the issues arising to the State need to be dealt with immediately (i.e. research in the field of educology and issues arising to the State in the field of education), the programmes should provide favourable conditions to gather joint forces of Lithuanian and foreign researchers. It would only be reasonable to continue the drawing up of programmes on other topics after carrying out the interim evaluation, the results of which are positive. The proposals on the possible mechanism of selection and implementation of programmes were also submitted (05/04/2019, No. 4S-419).

- **Additional funding for projects of competitive research programmes.** Overall low funding of R&D projects has created the tendency, where only up to 10% of all projects evaluated as eligible for funding may be allocated funding. Such a low success rate of projects is significantly lower than the indicator of projects funded by EU and developed European countries and reveals an unsatisfactory state of competitive funding of research, as the abilities of Lithuanian researchers to perform the highest quality research are significantly higher than the abilities of the Council to ensure adequate funding thereof. The Council has addressed the Ministry with the request to increase the indicative appropriations from the State budget to the Council (08/05/2019, No. 4S-485).

- **Draft amendment of the implementation plan of measures for the priority axis 9 of the Operational Programme for the European Union Funds' Investments in 2014-2020 'Educating the Society and Strengthening the Potential of Human Resources'.** The Council has welcomed the draft and agreed on the relocation of part of the funds from the measure No. 09.3.3-LMT-K-712 'Development of Competences of Scientists, other Researchers and Students through Practical Research Activities' (from the activities of 'Qualification improvement of researchers through implementation of high-level international and national research and experimental (social and cultural) development projects') to the measure No. 09.3.3-ESFA-V-711 'Strengthening the skills and capacities

of scientists and other researchers' to the activities of 'Funding and development of places in doctoral studies (attracting the youth from abroad)'. (21/03/2019, No. 4S-377).

- **The conflicting legal regulation of the research infrastructures and the funding thereof.** The Council has drawn the attention of the Ministry to the existing conflicting legal regulation and issues arising from application of legislation regulating the participation in international research infrastructures (31/10/2019, No. 4S-926).

- **Adjustments to the classification of fields in sciences and arts.** The Council has submitted the draft classification of fields in sciences and arts, in which it was proposed to bring the classification of fields in sciences and arts towards the OECD classifications, however, by rationally taking into account the Lithuanian research capacities base in the fields of research. The classification should balance both research traditions in Lithuania and global tendencies in the development of research as much as possible (10/04/2019, No. 4S-428).

- **Alignment of the draft order of the Minister of Education, Science and Sport of RL 'On the Approval of the Description of the Procedure for External Evaluation and Accreditation of Studies, the Indicators and Areas Subject to Evaluation'.** The main proposal of the Council was to use the average of indicators of the annual evaluation in the relevant research area for the last three years in the accreditation of studies (16/04/2019, No. 4S-433).

To the Ministry of Economy and Innovation of RL regarding:

- **Draft Republic of Lithuania Law on the Fund for Promotion of Innovation and Draft Republic of Lithuania Law on the Amendment of Articles 14, 21 and 27 of the RL Law on Technology and Innovation No. XIII-1414,** by which it is intended to provide conditions to ensure the promotional funding of R&D and/or innovation activities and the development thereof by implementing the Republic of Lithuania Law on Technology and Innovation. The Council disagreed with the substantial narrowing of the list of entities eligible for funding for experimental development and/or innovation activities. State higher education institutions, State research institutes, non-State higher education institutions, associations and non-profit organisations were all eligible for funding for experimental development and/or innovation activities pursuant to current regulation. However, upon adoption of the adjustments, such a right is reserved only to economic operators and the groups thereof. The Council has emphasised that research, experimental development and innovation activities are being defectively differentiated with the aforementioned drafts. It is worth noting that change (reorganisation) of funding for experimental development and/or innovation activities should be carried out only after systemic assessment of relevant legislation. It was noted that innovation projects are implemented not only by businesses, but also by entities within the public sector. Cultural and social innovation is being completely ignored.

Addressed to the Lithuanian University Rectors' Conference, Board of Directors of Lithuanian Science Institutes and Lithuanian Academy of Sciences (20/11/2019, No. 4S-981).

- **Draft March 1, 2017 Resolution of the Government of RL No. 149 'On the Implementation of the Republic of Lithuania Law on Research and Higher Education and the Republic of Lithuania Law on Technology and Innovation',** by which it was proposed to clarify the procedure of allocating the State budget funds to RHE for development of R&D and artistic activities, in addition to the legal acts in relation thereto. The Council proposed not to consider the draft, as it is drawn up in breach of fundamental legislative principles and legal framework laid down by other legal acts. In the view of the Council, the draft contradicts the provisions of Article 54 (3) of the RL Law on Research and Higher Education and was drawn up without taking into account differences between legal frameworks of the Law on Research and Higher Education and the RL Law on Technology and Innovation. The draft was also drawn up in violation of the ministers' areas of governance and without assessing the effects of the legal framework. It was noted that in drafting the secondary legislation, it is important that the drafts resulted from discussions between the interested parties, rather than be a unilateral solution.

By artificially excluding R&D, the planned changes in the system of evaluation of R&D activities may lead to opposite results than expected (17/12/2019, No. 4S-1084).

▪ **Draft Resolution of the Government of RL ‘On the Amendment of the April 30, 2014 Resolution of the Government of the Republic of Lithuania No. 411’, ‘On the Approval of the Programme for the Implementation of Priorities of the Priority Research and Experimental (Social and Cultural) Development and the Development of Innovation (Smart Specialisation)’ and draft Resolution of the Government of RL ‘On Repealing the October 30, 2013 Resolution of the Government of RL No. 951’, ‘On the Approval of Areas of Priority Research and Experimental (Social and Cultural) Development and the Development of Innovation (Smart Specialisation)’**, by which it was sought to update the priorities and topics of the Smart Specialisation programme. The Council proposed that the draft was substantially revised in order to balance the elements of the programme activities, such as studies, research and innovation, as the element of research was hardly, if at all, discussed and the role of R&D in strengthening the relations between business and academic society, attracting private investments and reviving the dialogue on the search of business opportunities, by putting an emphasis on the importance of research and experimental development as a direct source of business and industrial innovation, was not further specified.

Addressed to the Chancellery of the Government, the Ministry and the working group for coordination of Smart Specialisation (07/06/2019, No. 4S-573).

▪ **Draft Resolution of the Government of RL ‘On the Approval of the Description of the Procedure for Implementation of Procurement of Research and Experimental Development Services’**, which was drawn up in order to implement the Article 15 (2) of the Republic of Lithuania Law on Public Procurement. Proposals for specific wordings of the draft were submitted. Addressed also to the Ministry (13/09/2019, No. 4S-829).

▪ **Draft measure plan for the implementation of Guidelines for the Development of the Lithuanian Life Sciences Industry**, which implements the Guidelines for the Development of the Lithuanian Life Sciences Industry. The Council proposed that the draft identified specific issues preventing the development of the life sciences industry, provided specific objectives and tasks raised for the measures of implementation in order to resolve the said issues and identified indicators for efficiency assessment of implementation of the measure, in addition to the funds, which allowed assessment of the funds expected to be allocated for the measure from the budget of the Republic of Lithuania, EU Structural Funds and businesses. The Council has also submitted proposals for specific clauses of the draft measure plan (05/02/2019, No. 4S-111).

▪ **Implementation of proposals by the Organisation for Economic Cooperation and Development (OECD)**. In the view of the Council, it is not appropriate to combine the long-term R&D programmes with the scheme of the on-demand research and to waive the possibility for the Ministry itself to initiate a long-term R&D programme. The Council disagreed with application of the public procurement scheme to the implementation of research. Only when there is competition between the researchers and the groups thereof, or upon the existence of respective procedures, where the experts evaluate and select the best programmes, is it possible to ensure a high-quality research-and-knowledge-based solution of the issues relevant to the State and society. Addressed also to the Ministry (20/05/2019, No. 4-S-513).

Other proposals to the Ministry:

On the appropriateness of changing the measurement of the research and higher education institutions and their units of assessment, in addition to the appropriateness of reviewing the distribution of funds allocated to the institutions for R&D and arts between the fields of research and art (19/12/2019, No. 4S-1099).

On the evaluated scientific doctoral committees (21/05/2019, No. 4S-516 and 07/11/2019, No. 4S-939).

Other proposals to the Ministry of Economy and Innovation of RL:

On the compliance of the Smart Specialisation for the period of 2021–2027 to the required conditions; On the Guidelines for drawing up the programme of the Smart Specialisation for the period of 2021–2027 (submitted to the *Coordination* group for implementation of the *Smart Specialisation* priorities).

Annex 2. List of infrastructures for the updated Lithuanian Roadmap of Research Infrastructures

The Roadmap is a strategic document for the long-term targeted research infrastructure policies. It is approved by the Minister. With the assistance of experts, the Council arranges an expert evaluation of the Roadmap proposals.

The main criteria for evaluating the appropriateness of including research infrastructure into the Roadmap were their scientific level, preparedness and perspectives to join the European Strategy Forum on Research Infrastructures (ESFRI) and/or other international infrastructures. Three equally important components are obligatory for all research infrastructures (RIs): researcher networks, material and information resources, in addition to services based on the researcher competence, which are provided to the academic community, social partners or general public. Only those research infrastructures, which meet all three components, are considered to be mature and may be a solid basis for research and dissemination. Maturity is yet another criterion, based on which the RI proposed for the inclusion to the Roadmap is submitted with one of the three possible designations, such as ‘promising’, ‘mature’ or ‘landmark’ infrastructures. Such classification is related to the notion of life cycle of the research infrastructure, according to which the infrastructure transitions through all phases from its origins and establishment, to the end of activities.

Serial No.	Name and acronym of the RI	Applicant	Partner(s)	Proposed group classification of the RI*
1.	Aerosols, Clouds, And Trace Gases Research Infrastructure (ACTRIS)	FTMC	–	mature
2.	Centre of Innovative Chemistry (INOCHEMAS) (INNOCHEM II)	FTMC	VU	mature
3.	Lithuanian Grid Infrastructure for High-performance Computing (Litgrid-HPC)	VU	–	mature
4.	Centre of Spectroscopic Characterisation of Materials and Electronic/molecular Processes (SPECTROVERSUM)	VU	FTMC	mature
5.	Micro-, Nanotechnology and Analysis Open Access Centre (MNAAPC)	KTU	–	mature
6.	High-intensity and Broad Spectral Range Ultrashort Pulse Laser Research Infrastructure of National and International Access (Laser RI)	VU	FTMC	mature
7.	Ultrasonic Non-destructive Testing, Measurement and Diagnostics centre (Ultratest),	KTU	–	mature
8.	Molėtai Astronomical Observatory (MAO)	VU	FTMC	mature
9.	Centre of Semiconductor Technologies (PTC)	VU	FTMC	promising
10.	Baltic Sea Division of the International Centre for Advanced Studies on River-Sea Systems (NEMUNIUS-RI)	KU	GTC, VU, LEI	promising
11.	Human Biomaterials Resource Centre (HBRC)	NVI	VU, IMC, VUL SK, LSMU, LSMUL KK	promising
12.	European Social Survey (EST (ESS LT))	VMU	–	landmark
13.	European Research Infrastructure for Language Resources and Technology (CLARIN ERIC)	VMU	–	landmark
14.	Survey of Health Ageing and Retirement in Europe (Lithuania) (SHARE–Lithuania)	VU	–	mature
15.	Generations and Gender Programme LT – International infrastructure of social sciences (GGP-LT)	VMU	LSTC	mature
16.	Heritage and History Research Infrastructure ‘Aruodai’ (ARUODAI)	VU	LLTI	promising
17.	Monitoring Electoral Democracy (MEDem LT)	VU	–	promising

* *Landmark* infrastructure means a mature research infrastructure already joined into the international RI and developed for a number of years;
Mature infrastructure means a research infrastructure with a clear plan and/or necessary documents on how it will integrate into an international RI or whether it is already integrating;

Promising infrastructure means a research infrastructure which is at its preparatory stage and is included into the Roadmap by putting an emphasis on its potential.

Annex 3. Coverage of the annual evaluation of the RHE research (art) activities for 2018

In 2019, the Council carried out the annual evaluation of the RHE research activities in the fields of natural sciences, technology, medical and health sciences, agricultural sciences, social sciences, humanities, in addition to artistic activities in the fields of art for the year 2018, in accordance with the provisions of the Regulation 'On the Annual Evaluation of Research and Experimental Development and the Arts in Universities and Research Institutes' (hereinafter referred to as the 'Regulation'), approved by the October 4, 2017 order of the Minister No. V-747, the May 9, 2019 letter of the Ministry No. SR-1790 '[On the Annual Evaluation of Research and Experimental Development and the Art Activities in Universities and Research Institutes for 2018](#)', the Guidelines on the Evaluation of Research and Experimental Development and the Art activities in RHE (hereinafter referred to as the 'Guidelines'), approved by the June 15, 2018 order of the Chairman of the Council No.V-307.

32 RHEs and 3 university hospital clinics declared R&D projects, agreements and works of research in 2019, (Figure 1).

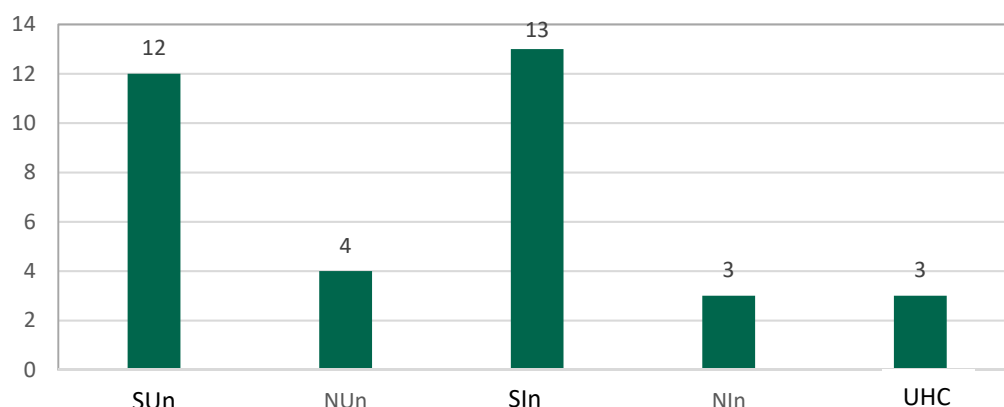


Figure 1. RHEs that declared R&D (artistic) works, projects and agreements for evaluation. The y-axis gives the number of R&D projects, agreements and works of research (units), the x-axis gives the number of RHEs (units): SUn – State Universities, NUn – Non-State Universities, SIn – State Research Institutes, NIn – Non-State Research Institutes, UHC – University Hospital Clinics.

The works of research in research fields, R&D projects and agreements were evaluated by four expert commissions formed by the Council. Works of art and art agreements were evaluated by two expert commissions formed by the Council (members for the said commissions were also proposed by the Lithuanian Culture and Art Council).

Experts, who evaluate publications in the fields of Natural Sciences (N), Technological Sciences (T), Medical and Health Sciences (M), Agricultural sciences (A) and Social Sciences (S) (NMTA and S) have concluded the list of journals, publications in which are deemed not suitable and thus are not included to the evaluation results.

International R&D projects, R&D (art) commissionings by economic operators, in addition to works of research (art) were submitted and evaluated through the system for evaluation of results of research (art) activities, 'Vieversys'.

In 2019, the Council has evaluated a total of 10.3 thousand works of research published in 2018 which were submitted by RHEs:

- 8966 works of research (art) (1892 of them were TOP 10 works);
- 274 international projects;
- 996 commissionings by economic operators;
- 21 patent (patent application) licence agreements.

After the evaluation of research works is completed, the lists of internationally acknowledged publishing houses are adjusted and updated based on the fields of research or the groups: NMTA, S

and humanities. When the initial evaluation results are announced on the Council’s evaluation system for research works of (art), ‘Vieversys’, pursuant to the Regulation, the RHEs can submit their comments regarding the technical errors in the evaluation results on the ‘Vieversys’ system.

In 2019, RHEs submitted 565 comments regarding the evaluation of research works, which was approximately 7 percent of all works. The most comments were submitted regarding works in the field of social sciences (14%) and the field of stage and screen arts (12%).

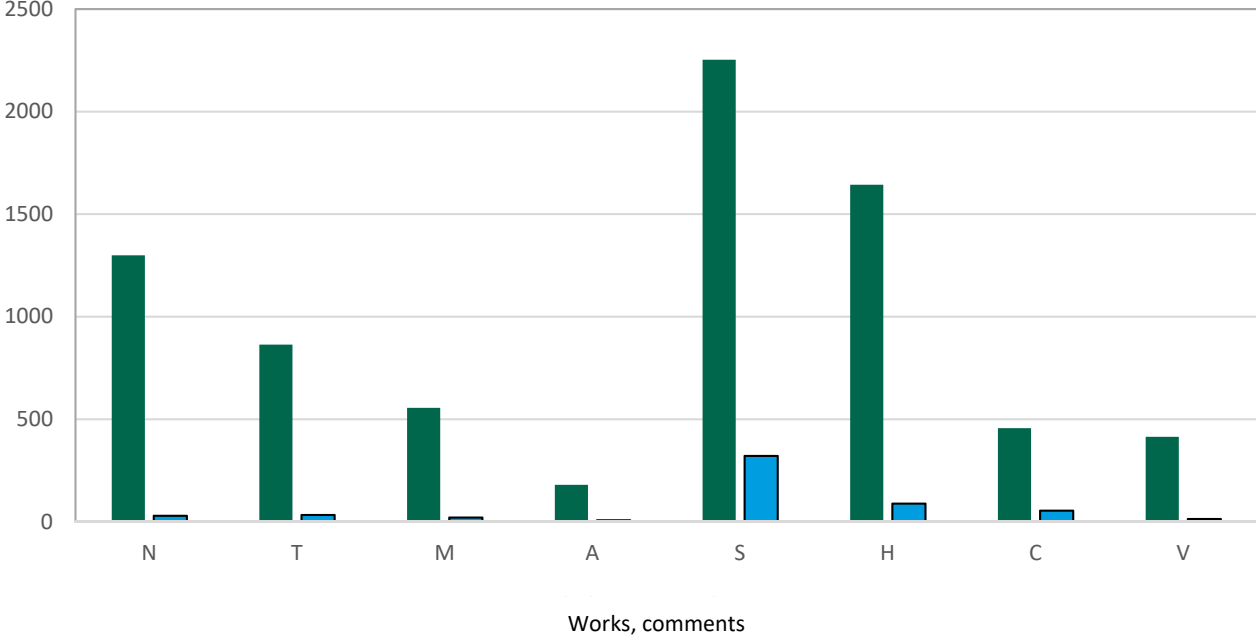


Figure 2. Works of research evaluated by the experts in the fields of research (art) and the comments submitted by RHEs regarding technical errors in the evaluation thereof. *Y-axis* gives the number of works of research and the number of comments submitted by the RHEs (units), *x-axis* gives the fields of research (art): N – Natural Sciences, T – Technological Sciences, M – Medical and Health Sciences, A – Agricultural Sciences, S – Social Sciences, H – Humanities, C – Stage and Screen Arts, V – Visual Arts.

The list of R&D projects under international programmes is updated after the evaluation. The list indicated, which international projects were considered as R&D, and to what extent the funds may be budgeted.

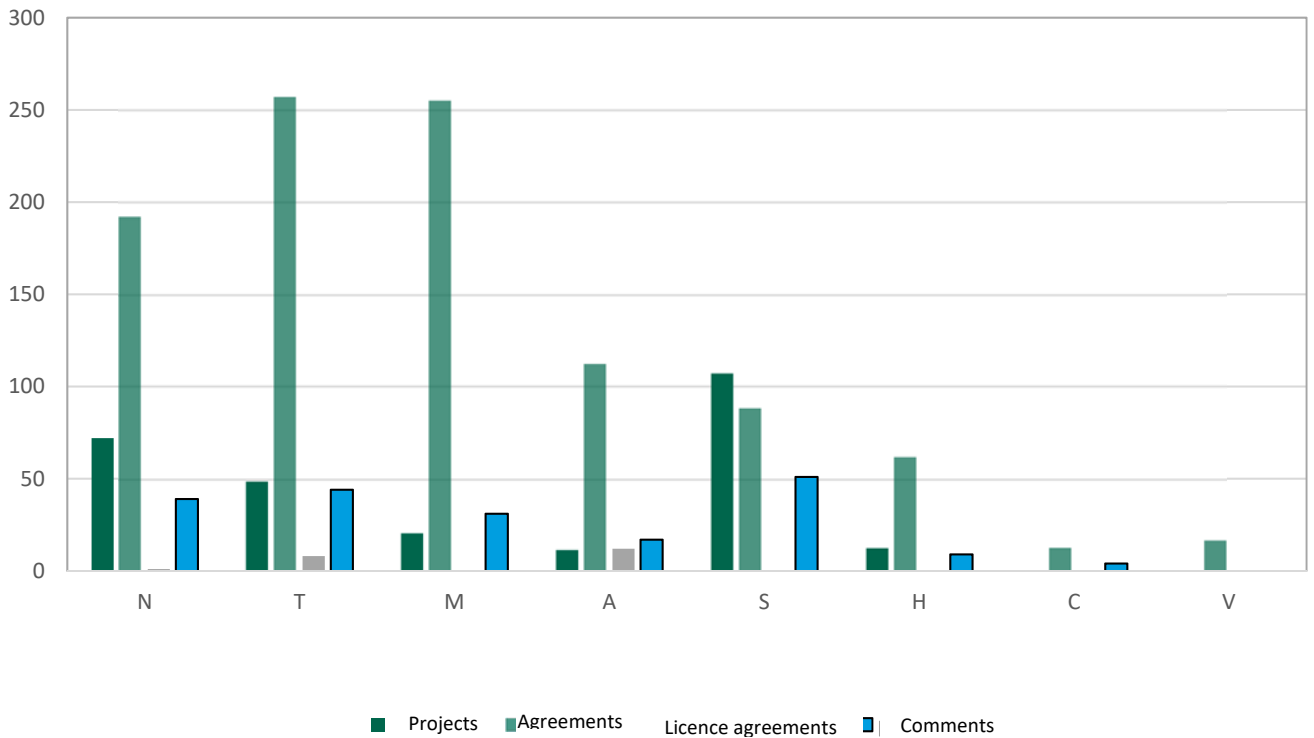


Figure 3. R&D projects and agreements, licence agreements and art agreements evaluated by experts in the fields of research (art) and the comments submitted by institutions regarding technical errors in the evaluation. *Y-axis* gives the number of R&D projects, R&D (art) agreements and the number of comments submitted by the RHEs (units), *x-axis* gives the fields of research (art): N – Natural Sciences, T – Technological Sciences, M – Medical and Health Sciences, A – Agricultural Sciences, S – Social Sciences, H – Humanities, C – Stage and Screen Arts, V – Visual Arts.

In 2019, RHEs submitted 195 comments regarding the evaluation of projects and agreements, which was approximately 15 percent of all works. The most comments were submitted regarding the works in the field of social sciences (26%) and the field of stage and screen arts (31%).

Annex 4. Comparative data of evaluation results of the works of research of Lithuanian RHEs for 2017 and 2018

The cross-section of the analysis below provides the possibility to assess the changes in the potential shown by the Lithuanian RHEs based on two criteria: 1) The ability of RHEs to generate funds by implementing R&D activities (evaluation of projects and agreements) and 2) the ability of RHEs to generate funds from research publications (evaluation of research output). The charts show RHEs, with the highest score for works of research in the relevant field, i.e. the RHEs showing the greatest potential in the field. RHEs are marked as circles, the area of which represents the score of RHE in the specific field. The colour grey represents the results of the 2017 annual evaluation; the colour green represents the results of the 2018 annual evaluation. The higher and the more to the right the RHE is, and the bigger the circle is, the higher probability that such a RHE is a potential centre of expertise in the relevant field.

In the field of Humanities (Figure 1) the highest potential is shown by four RHEs: VU, LKTI, LII and VMU. VU remained with the most stable achievements in the said field. Upon implementation of R&D activities, LII has generated a similar amount of funds as in 2017, and its efficiency has increased. Although the efficiency of LKTI was high in 2017, it decreased in 2018 with a significant decrease in score in the field of humanities.

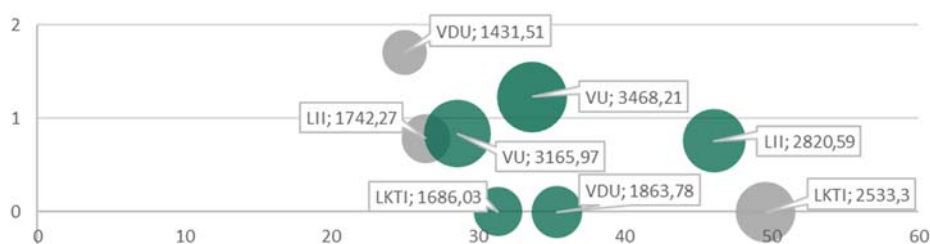


Figure 1. Results of the highest scoring RHEs in the field of Humanities in 2018 and 2017. *X-axis* represents the score by the RHE, expressed by the FTE (full-time equivalent) of RHE employees and the weighted score of the RHE in the relevant field (ΣAIV) ratio. *Y-axis* represents the amount of funds (thousands EUR) of the international R&D project funds and the amount of funds from R&D commissioning's by economic operators per one researcher of the RHE. Numbers show the value of works of research by the RHE, expressed in points.

In the field of Social Sciences (Figure 2) the highest potential in 2018 is shown by four RHEs: VU, VMU, MRU and VGTU. In comparison with the annual evaluation results for 2017, the greatest qualitative leap was made by VU and MRU. The said institutions have not only reached higher scores than the previous year, but they have also generated more funds by implementing R&D activities. Results of the VMU remained relatively similar.

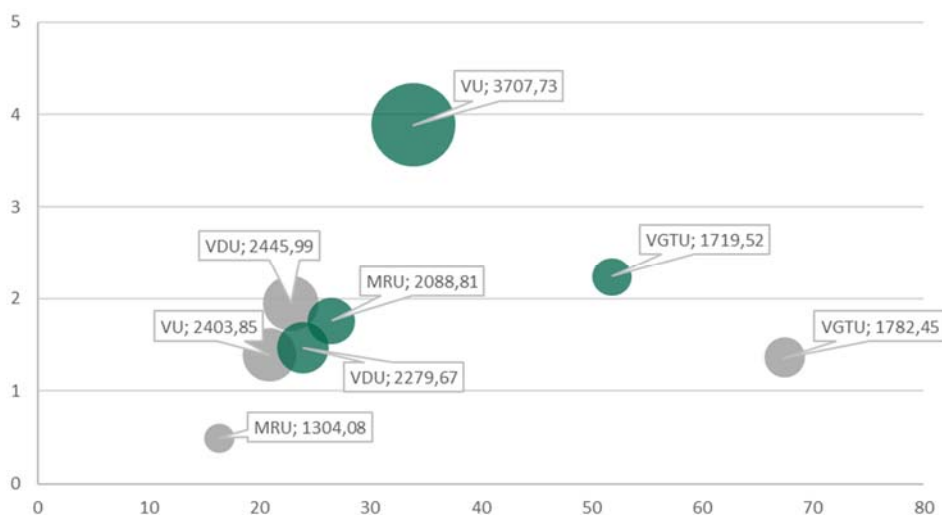


Figure 2. Results of the highest scoring RHEs in the field of Social Sciences in 2018 and 2017. *X-axis* represents the score by the RHE, expressed by the FTE of RHE employees and the weighted score of the RHE in the relevant field (ΣAIV) ratio. *Y-axis* represents the amount of funds (thousands EUR) of the international R&D project funds and the amount of funds from R&D commissioning's by economic operators per researcher of the RHE. Numbers show the value of works of research by the RHE, expressed in points.

In the field of Natural Sciences (Figure 3), the potential of GTC and KTU has increased, after some fields of Biomedical Sciences were included in the category of traditional fields of Physical Sciences. GTC and KTU have generated the highest amount of R&D funds per researcher. The potential of VU remained high, however, slightly lower than in 2017. The score by VU per researcher has relatively decreased; VU has also generated less R&D funds per researcher.

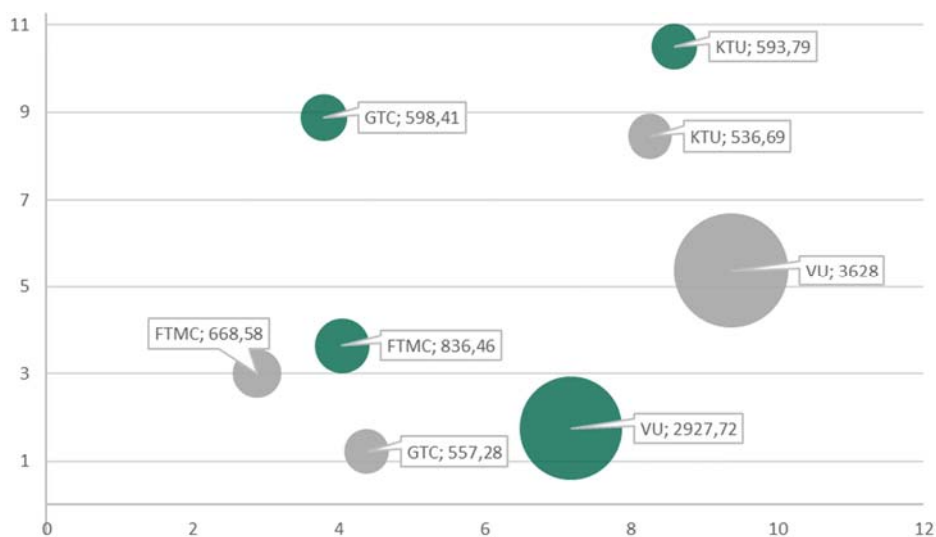


Figure 3. Results of the highest scoring RHEs in the field of Natural Sciences in 2018 and 2017. *X-axis* represents the score by the RHE, expressed by the FTE of RHE employees and the weighted score of the RHE in the relevant field (ΣAIV) ratio. *Y-axis* represents the amount of funds (thousands EUR) of the international R&D project funds and the amount of funds from R&D commissioning's by economic operators per researcher of the RHE. Numbers show the value of research works by the RHE, expressed in points. For illustration of the year 2017, the traditional fields of sciences were used, namely, all fields of Physical Sciences and 01B-05B fields of Biomedical Sciences (Biology, Biophysics, Ecology and Environmental Science, Botany, Zoology).

In the field of Technology (Figure 4) the greatest progress in 2018, in comparison with 2017, is seen in the VU results, as the potential and amount of R&D funds per researcher has increased. Results for other institutions with the highest potential in the field in 2018 remain similar in comparison with 2017.

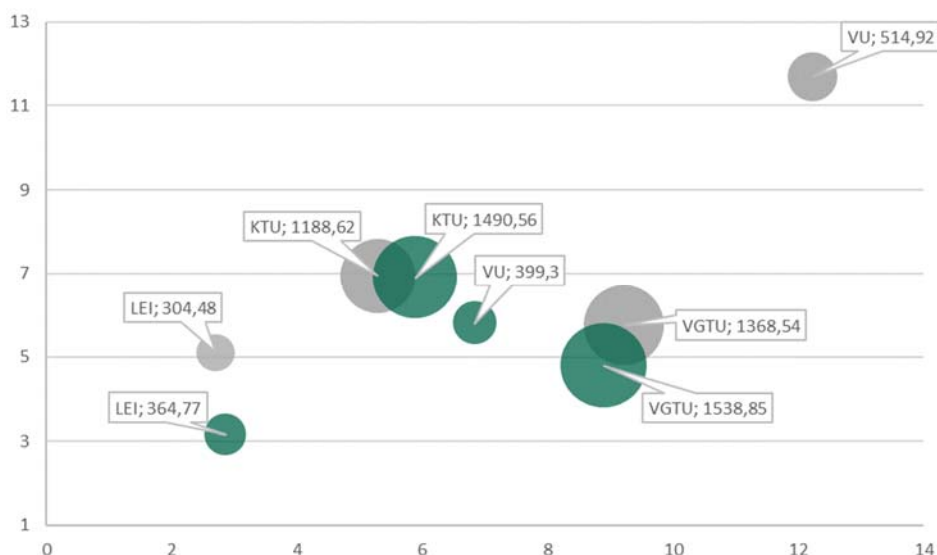


Figure 4. Results of the highest scoring RHEs in the field of Technology in 2018 and 2017. *X-axis* represents the score by the RHE, expressed by the FTE of RHE employees and the weighted score of the RHE in the relevant field (ΣAIV) ratio. *Y-axis* represents the amount of funds (thousands EUR) of the international R&D project funds and the amount of funds from R&D commissioning's by economic operators per RHE researcher. Numbers show the value of research works by the RHE, expressed in points.

In the field of Medical and Health Sciences (Figure 5) the highest potential is shown by LSMU and VU. LSMU is in the first place based on the earned score; it has also generated significantly more funds from the implementation of R&D activities, in comparison with 2017. The results of VU remain quite stable, though slightly better than in 2017.

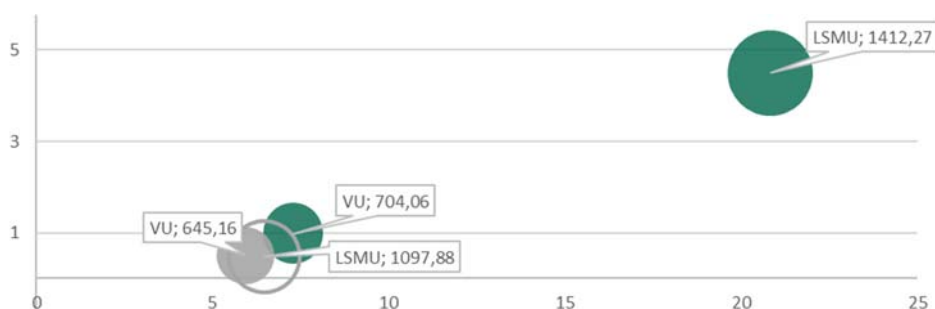


Figure 5. Results of the highest scoring RHEs in the field of Medical and Health Sciences in 2018 and 2017. *X-axis* represents the score by the RHE, expressed by the FTE of RHE employees and the weighted score of the RHE in the relevant field (ΣAIV) ratio. *Y-axis* represents the amount of funds (thousands EUR) of the international R&D project funds and the amount of funds from R&D commissioning's by economic operators per RHE researcher. Numbers show the value of works of research by the RHE, expressed in points. For illustration of the year 2017, the traditional fields of sciences were used, namely, 06B-10B fields of Biomedical Sciences (Medicine, Pharmacy, Public Health, Nursing).

In the field of Agricultural Sciences (Figure 6) the highest potential remained in the three RHEs, namely LAMMC, VMU and LSMU. VMU (results of 2017 are joint results of VMU and Aleksandras Stulginskis University) is a leading institution based on the efficiency and R&D funds per researcher, as the indicators of VMU have improved in 2018 in comparison with 2017. Achievements of LSMU have also improved significantly, however the results of LAMMC remain rather stable.

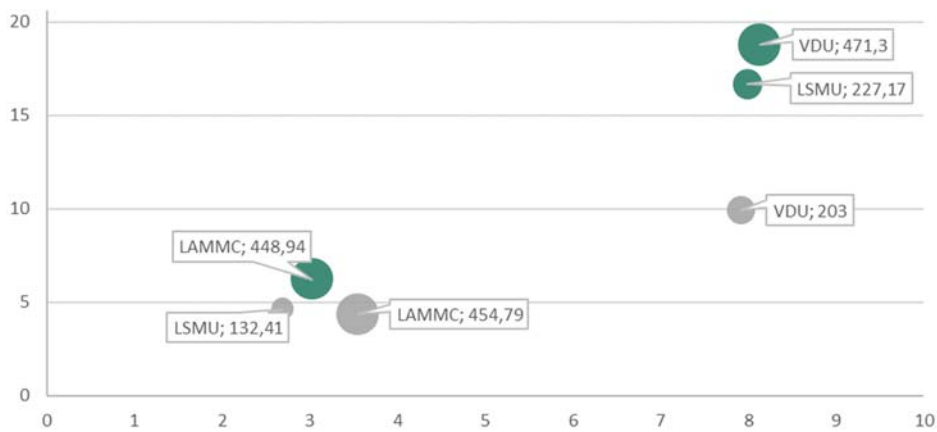


Figure 6. Results of the highest scoring RHEs in the field of Agricultural Sciences in 2018 and 2017. X-axis represents the score by the RHE, expressed by the FTE of RHE employees and the weighted score of the RHE in the relevant field (Σ AIV) ratio. Y-axis represents the amount of funds (thousands EUR) of the international R&D project funds and the amount of funds from R&D commissioning's by economic operators per RHE researcher. Numbers show the value of works of research by the RHE, expressed in points.

The evaluation results of R&D projects and agreements and art agreements by RHEs in 2018: the budgeted funds from R&D projects and agreements and art agreements by RHEs based on the fields of research (art) are illustrated in the Figure 7. Significantly higher amounts were budgeted from the implementation of R&D commissioning's by economic operators, rather than international projects in all fields of research, except for Social Sciences. The amount (thousands EUR) of budgeted funds from implementation of R&D commissioning's by economic operators (hereinafter referred to as 'EOP') in Natural Sciences was almost twice the amount (thousands EUR) of budgeted funds from the participation of RHEs in the projects of international research programmes; the same in Technology was exceeded by 1.4 times, in Medical and Health Sciences by 7.2 times and in Agricultural Sciences by 4 times. Only in Social Sciences did the amount of funds budgeted from the participation in the projects of international research programmes exceed the funds budgeted from the EOP activities by 4.9 times. In the field of Arts, only art commissioning's were submitted for evaluation. Significantly more funds were budgeted in the field of Visual Arts in comparison with the Stage and Screen Arts.

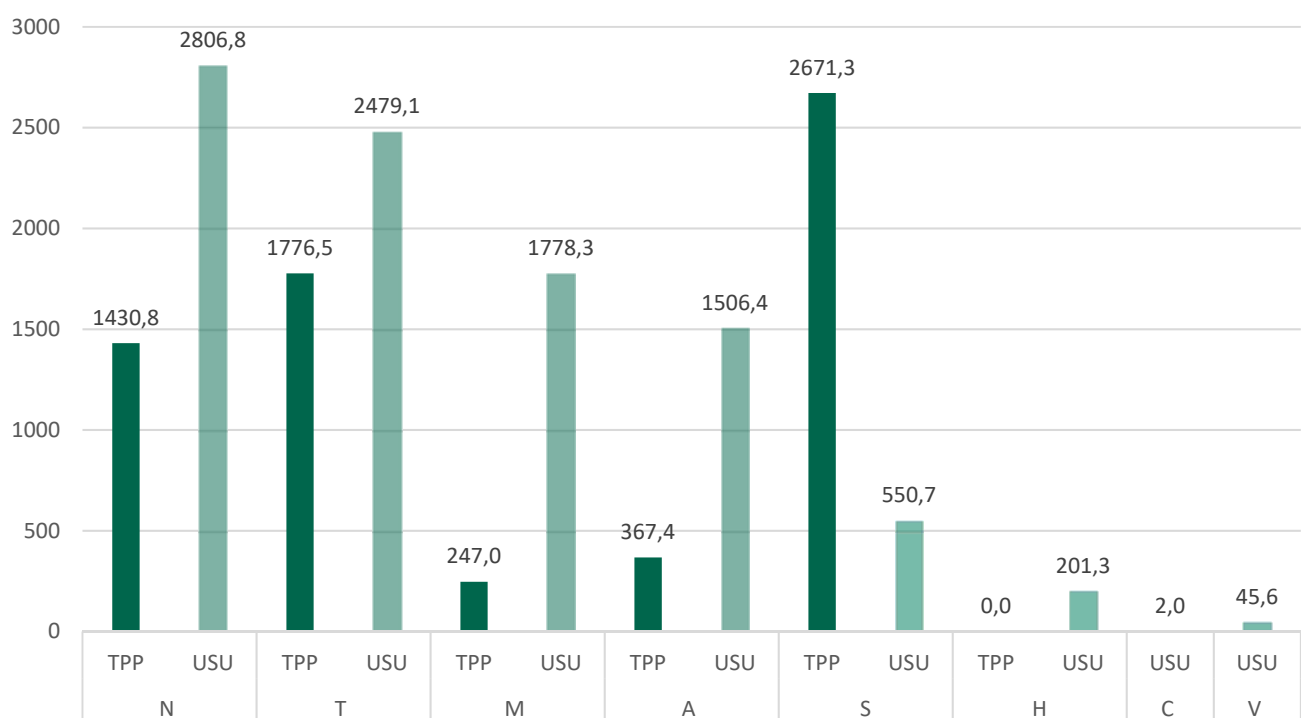
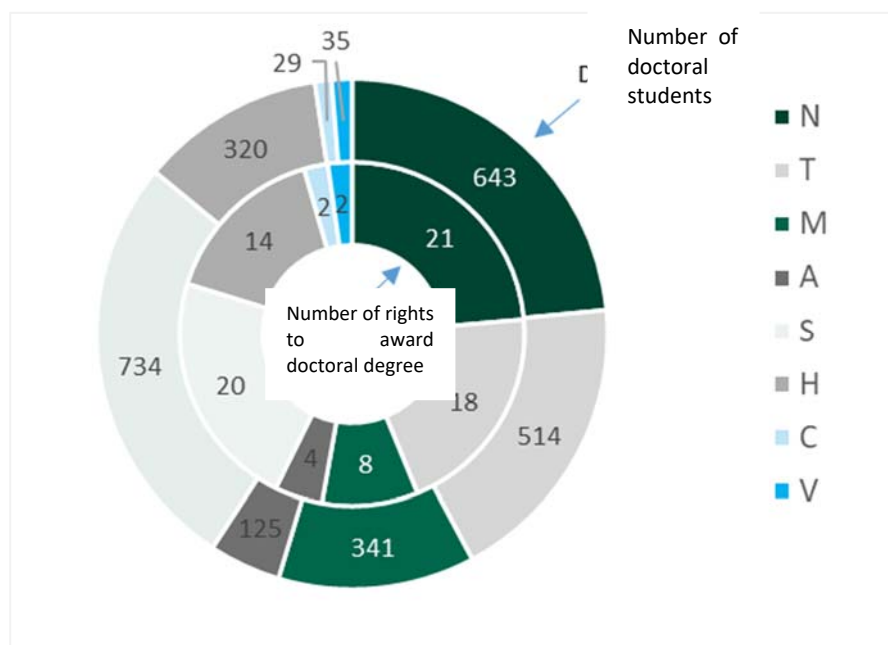


Figure 7. Budgeted funds (thousands EUR) from R&D projects and agreements and art agreements (y-axis) based on the fields of research (art). N – Natural Sciences, T – Technological Sciences, M – Medical and Health Sciences, A – Agricultural Sciences, S – Social Sciences, H – Humanities, C – Stage and Screen Arts, V – Visual Arts, TPP – Amount of funds (thousands EUR) budgeted from participation of institutions in the projects of international research programmes; USU –Amount of funds (thousands EUR) budgeted from implementation of commissioning's for research and experimental development (social and cultural) by economic operators.

Annex 5. Number of rights to award doctoral degrees in research (art) and number of doctoral students³ based on the fields of research (art)



N – Natural Sciences, T – Technological Sciences, M – Medical and Health Sciences, A – Agricultural Sciences, S – Social Sciences, H – Humanities, C – Stage and Screen Arts, V – Visual Arts.

Annex 6. Changes in composition of research (art) doctoral committees approved by the Council in 2019

RHE	Field of Research (Art)	Members replaced ¹	RHE	Field of Research (Art)	Members Replaced ¹
VU	Political Sciences	-2,+4	VAA	Fine Art	1
KTU	Environmental Engineering	3	VAA	Design	1
KTU	Informatics Engineering	1, +1	VAA	Art History	1
VGTU	Environmental Engineering	1, 1**	VMU	Biology	1
VU	Mathematics	1*, 1	VMU	Economics	1
LSMU	Nursing	+1	VMU	Political Sciences	1
VMU	Educology	+1	VGTU	Art History	1
KTU	Chemical Engineering	1	VU	Philosophy	1
LMTA	Theatre and Cinema	1	VGTU	Materials Engineering	1**
LSMU	Animal Science	1			

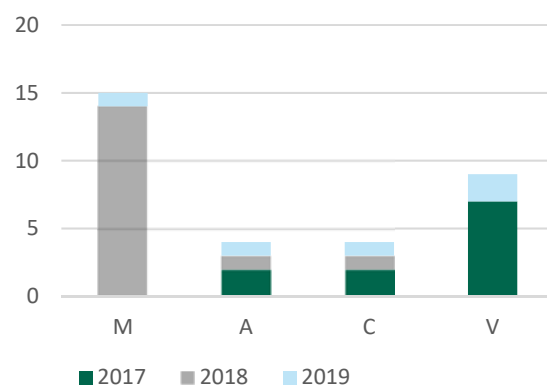
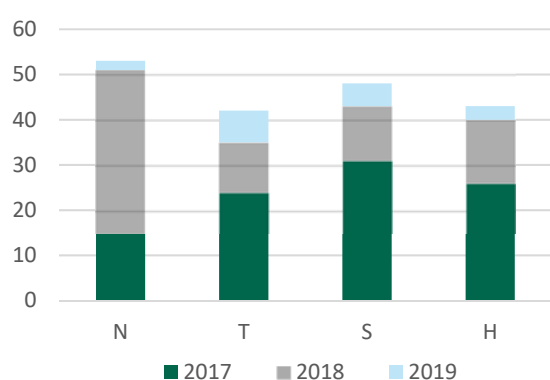
¹ '-' – number of members removed from the committee; '+' – number of members additionally involved into the committee; no marking – number of replaced members of the committee;

* the Council did not consent to replacement; ** assessment of application is still pending.

³ Source of data: Education Management Information System. Preliminary data as of December 31, 2019.

Annex 7. Number of replaced, removed or additionally involved members of doctoral committees of sciences (art) in 2017–2019

Through the year 2017–2019, the Council agreed to replacement, removal or additional involvement of more than 200 members of doctoral committees. The majority of replacement of members was initiated by RHEs in 2017 after the approval of the new regulations of doctoral studies and establishment of new qualification requirements for members of doctoral committees. After the Council carried out the evaluations of doctoral committees and RHEs aligned the changes in composition of committees with the Council in 2019, the transition towards final qualification requirements laid down for members of doctoral committees was finished.



N – Natural Sciences, T – Technological Sciences, M – Medical and Health Sciences, A – Agricultural Sciences, S – Social Sciences, H – Humanities, C – Stage and Screen Arts, V – Visual Arts.

Annex 8. Acknowledgement of qualifications

Figure 1. Based on the citizenship of the applicant and the country where the qualification was awarded (2019)

Citizenship of the applicant	Country, where the qualification was awarded
Lithuanian (10)	The United Kingdom (2)
	USSR (2)
	Germany (2)
	The Kingdom of Netherlands (1)
	France (1)
	Russian Federation (1)
	The Holy See (1)
Belarussian (19)	Bulgaria (8)
	Russian Federation (4)
	USSR (4)
	Poland (3)
Bulgarian (1)	Bulgaria (1)
Italian (1)	Brazil (1)
Russian Federation (1)	Russian Federation (1)

Figure 2. Based on the scientific field and country where the qualification was awarded (2019)

Scientific field*	Qualifications acknowledged	Country, where the qualification was awarded
H	17	Belarus (7)
		Russian Federation (4)
		USSR (3)
		Poland (2)
		Bulgaria (1)
S	8	Russian Federation (2)
		Belarus (1)
		Poland (1)
		The Kingdom of Netherlands (1)
		France (1)
		USSR (1)
M	5	The Holy See (1)
		Germany (2)
		Brazil (1)
		The United Kingdom (1)
N	2	USSR (1)
		The United Kingdom (1)

* N – Natural Sciences, M – Medical and Health Sciences, S – Social Sciences, H – Humanities.

Annex 9. Long-term institutional R&D programmes for 2017–2021 implemented by the State Research Institute

Titles of long-term institutional R&D programmes in the fields of Humanities and Social Sciences implemented by the State Research Institute	
1. LAEI	1.3. Development of Lithuanian Rural Regions Towards Knowledge Society 1.4. Development of Sustainable Agriculture in Lithuania
2. LII	2.1. Grand Duchy of Lithuania: governance, castes and individual (historical junctions of 14 th -18 th centuries) 2.2. Research of Lithuanian Metrica and other Historical Sources of the Grand Duchy of Lithuania 2.3. The Nation in Delay, part 2: Lithuanian modernisation problems 2.4. Millenniums before the state. Multilayer research of pre-historical communities
3. LKI	3.1. Fundamental and applied research of names and etymology of names in Lithuania and other Baltic nations, 2017–2021 3.2. Fundamental and applied research and dissemination of changes and innovations in normative language 3.3. Sociolinguistic databases, research and popular dissemination, 2017–2021 3.4. Developing the model of 21 st century dialect studies and applied research on regional variations
4. LKTI	4.1. Research on Lithuanian arts, music and theatre: heritage, new phenomena, contexts 4.2. Tension between tradition and modernity: interdisciplinary research of 20-21 st century culture
5. LLTI	5.1. Canon literature of modern Lithuania 5.2. Research on Lithuanian folklore, mythology and processes in modern folklore 5.3. Literature as witness of sociality: aesthetics, memory, mentality during late Soviet era and the beginning of 21 st century 5.4. Fundamental research of old Lithuanian and Prussian writings
6. LSTC	6.1. Processes of the social differentiation in Lithuanian society and preconditions for integration 6.2. Research on the impact of social and economic change to the labour market and occupation of different resident groups 6.3. Inclusion of social and ethnic groups and factors of improving their welfare: family, dwelling, income, social services
7. LTI	7.1. New point of view on corruption: challenges and opportunities outside public sector 7.2. Towards balanced penal policy and effective crime prevention: research on possibilities of improving public safety in the context of protection of human rights
8. LII, LKTI	Sociocultural field of 19 th century: groups of society, personalities, institutions
Titles of long-term institutional R&D programmes in the fields of Natural Sciences and Technology implemented by the State Research Institute	
1. GTC	1.1. Biota resources in the changing environment: research on the state of populations, species and communities, evidence of management and sustainable use (BIOTA) 1.2. Molecular basics of wildlife biodiversity and ecology 1.3. Research on functions, reactions and adapting of biological systems and the perspectives of their application 1.4. Geo-environment and its resources in conditions of changing climate and human impact
2. LAMMC	2.1. Bio-potential and quality of plants for multifunction use 2.2. Sustainable forestry and global change 2.3. Harmful organisms in agro- and forest ecosystems (KOMAS) 2.4. Horticulture: agro-biological grounds and technology 2.5. Efficiency and sustainability of agricultural and forest soils 2.6. Research on genetic nature of features and characteristics of agricultural and forest plants, targeted change of genotypes for development of modern varieties
3. LEI	3.1. Development of future energy technology, research on their safety and reliability 3.2. Prognoses for development of renewable energy sources, research on their effective use and social impact 3.3. Modelling of sustainable development of energy and research on its management 3.4. Research on the patterns in thermal and hydrodynamic processes in innovative technological systems 3.5. Research on the impact of ionising radiation and other issues related with cessation of usage of nuclear power plants.
4. NVI	4.1. Research on the epidemiology of cancerogenesis and other malignant tumours for the development of cancer prevention 4.2. Development of early diagnostics of cancer 4.3. Development of individualised treatment of malignant tumours
5. FTMC	5.1. Environmentally-friendly energy and environmental technologies 5.2. Functional materials and technologies

	5.3.Measurement technologies and equipment
	5.4.Molecular electronics and nano-engineering
	5.5.Nano-structured materials and electronic devices
	5.6.Optoelectronic and laser technologies
	5.7.Dynamics and characterisation of complex systems
	5.8.Textile technologies and technical textile clothing systems
6. IMC	6.1.Research on molecular and cellular immunity in biological models in vitro and in vivo
	6.2. New technologies of stem cells and recombinant molecules for tissue engineering and regenerative medicine
	6.3. Research on application of health promotion, innovative diagnostics and treatment methods and prevention of diseases

Annex 10. Competitive funding groups

Field of funded activities	Source of funding	Task/measure
I. Funding of research and other activities commissioned by the State		
National research programmes: <ul style="list-style-type: none"> ▪ 2016–2021 ‘Towards Future Technologies’ ▪ 2015–2021 ‘Sustainability of Agro-, Forest and Water Ecosystems’ ▪ 2015–2021 ‘Healthy Ageing’ ▪ 2017–2022 ‘Modernity in Lithuania’ 2020–2022 competitive priority research programme ‘Welfare Society’	SB	01 03 01
State Lithuanian Studies and Dissemination programme for 2016–2024	SB	01 03 01
On-demand research projects	SB	01 03 02
Research carried out by high-level researcher groups in Smart Specialisation areas	EU SF	01 03 01
Attraction of foreign researchers to carry out research in Smart Specialisation areas	EU SF	01 03 01
The R&D Activities of Parallel Laboratories in Smart Specialisation Areas	EU SF	01 03 01
Development of infrastructures	SB	01 02 04
State professors’ programme	EU SF	01 03 01
II. Researcher (researcher group) initiated projects		
Researcher group projects	SB	01 02 03
World-class R&D projects	EU SF	01 02 03
Attraction and reintegration of brains (talents)	EU SF	01 02 03
Promotion of H2020 (Encouraging the participation in H2020 programme)	EU SF	01 02 03
III. International and cross-border programmes and initiatives		
Bilateral-tripartite research funding agreements with Belarus, Latvia-China (Taiwan), France (‘Gilibert’), Ukraine; Lithuanian-Japanese and Lithuanian-Polish projects	SB	01 04 03
International programmes and initiatives: H2020, COST, BONUS, ERA-NET measures (Biodiversa, ENSUF/JPI Urban, EuroNanoMed, HERA, M-era.NET, SUMFOREST, FLAG-ERA II, CHIST-ERA, QUANTERA, NORFACE), JPI ‘Cultural Heritage and Global Change: a New Challenge for Europe’, EJP ‘Rare diseases’	SB	01 04 02
Participation in activities of international organisations, initiatives and working groups: ‘Science Europe’, COST, BONUS EEIG, EURAXESS, UNESCO, etc.	SB	01 04 01
Support for H2020 applicants	SB	01 04 01
Representation in EU working groups	SB	01 04 01
Baltic Research Programme (Norwegian financial mechanism)	NORW	01 04 03
IV. Support		
4.1. For career		
Competitive doctoral studies	EU SF	01 02 02
Postdoctoral training	EU SF	01 02 02
Support to PhD students for academic achievements	SB	01 02 02
Encouraging student research activities	EU SF	01 02 02
4.2. For mobility		
Traineeships at European Space Agency	SB	01 02 02
Support for research trips: <ul style="list-style-type: none"> ▪ Improving of expertise in research traineeship ▪ Improving of expertise in research events abroad ▪ Visit to ILSS for improving of expertise ▪ Visit to participate in the process of PhD studies at ILSS 	EU SF	01 02 02
Support for research trips of PhD students	SB	01 02 02
4.3. For dissemination		
Support for publication of research papers and books	SB	01 04 05
Support for research events	SB	01 04 05
Support for academic associations	SB	01 04 05

Annex 11. Measures of research commissioned by State and funded from the State budget

Programme*	Calls	Proposals evaluated**	Projects funded**	Success rate (%)**
LIP (2016–2024)	7	220 155 83 85 84 56 24	79 44 20 31 58 16 21	35,9 28,4 24,1 36,5 69 28,6 87,5
AGE (2015–2021)	3	92 80 36	21 9 ***	22,8 11,2 ***
SYS (2015–2021)	2	39 15	11 ***	28 ***
TFT (2016–2021)	2	31 23	12 3	38,7 13,0
MOD (2017–2022)	1	62	21	33,9
WES (2020–2022)	1	47	***	***
DEP (since 2015)	4	16 11 18 11	9 6 7 ***	56 55 39 ***

* LIP means the State Lithuanian Studies and Dissemination programme for 2016–2024, AGE means NRP 'Healthy Ageing', SYS means NRP 'Sustainability of Agro-, Forest and Water Ecosystems', TFT means NRP 'Towards future technologies', MOD means NRP 'Modernity in Lithuania', WES – PRP 'Welfare Society', DEP means on-demand research projects.

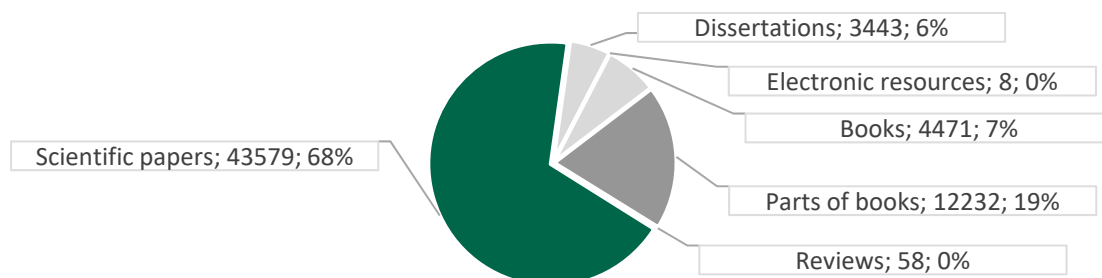
** Data based on calls for proposals

***The call for proposals is ongoing, no data.

Data as of December 31, 2019.

Annex 12. Development of the LDB and its contents based on genre

Development of the database		2019	2016–2019	Project indicator	Data in total
Registered publications		5675	26815	39000	81230
Publications in compliance with the criteria and included to LDB		6298	28249	37000	65054
	<i>Within the Research set</i>	5214	27165	34000	63970
	<i>Within the Dissemination set</i>	1084	1084	3000	1084
Prepared extensive metadata records and/or e-documents		4931	24642	34000	63687
	<i>Including open access texts</i>	4004	14104	14778	38200



Annex 13. Research group project reviews since 2010

Call No.	Proposals evaluated	Projects funded	Success rate (%)
I	503	148	29,4
II	495	122	24,7
III	317	120	37,9
IV	327	85	26,0
V	434	98	22,6
VI	627	108	17,2
VII	497	137	27,6
VIII	517	66	12,8
IX	409	*	*

* The call is ongoing, no data available.

Data as of December 31, 2019.

Annex 14. Results of participation of Lithuanian institutions in 'Horizon 2020'

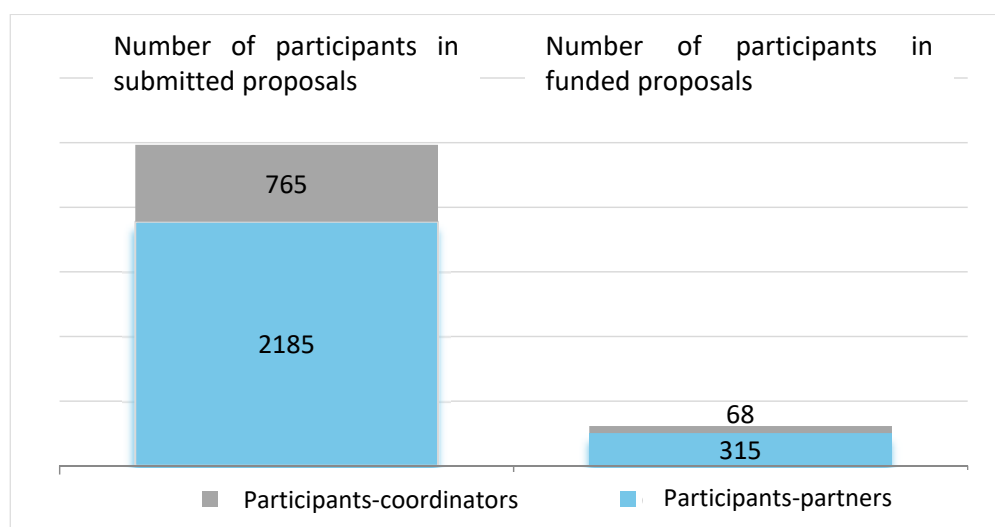


Figure 1. Results of participation of Lithuanian institutions in H2020 (Data according to EC as of November 8, 2019, <https://webgate.ec.europa.eu/dashboard>)

Figure 1. TOP20 Lithuanian participants of the H2020 projects based on ES grants (Data according to EC as of November 8, 2019, <https://webgate.ec.europa.eu/dashboard>)

Name of the participant	Number of projects	EC grant (thousand EUR)
Kaunas University of Technology	35	8 467,4
Vilnius University	29	7 119,6
Lithuanian Energy Institute	23	2 889,2
VĮ Oro navigacija	18	1 380,1
Vilnius Gediminas Technical University	18	1 097,8
Research Council of Lithuania	17	1 056,2
Vytautas Magnus University	15	1 796,0
State Research Institute Centre for Physical Sciences and Technology	12	1 853,5
VŠĮ Startup division	7	2 143,4
UAB Metis Baltic	6	1 098,6
UAB Soli tek r&d	5	2 184,4
UAB Modernios technologijos	5	1 536,6
UAB Civitta	5	1 172,3
Uab Ortho Baltic	4	1 813,0
Public Institution Lithuanian Agricultural Advisory Service	4	1 152,7
UAB Nanoavionika	3	2 987,6
UAB Fentika	3	1 801,0
Ekspla UAB	3	858,4
Ruptela UAB	2	1 244,6
Klaipėda city municipality administration	2	983,1

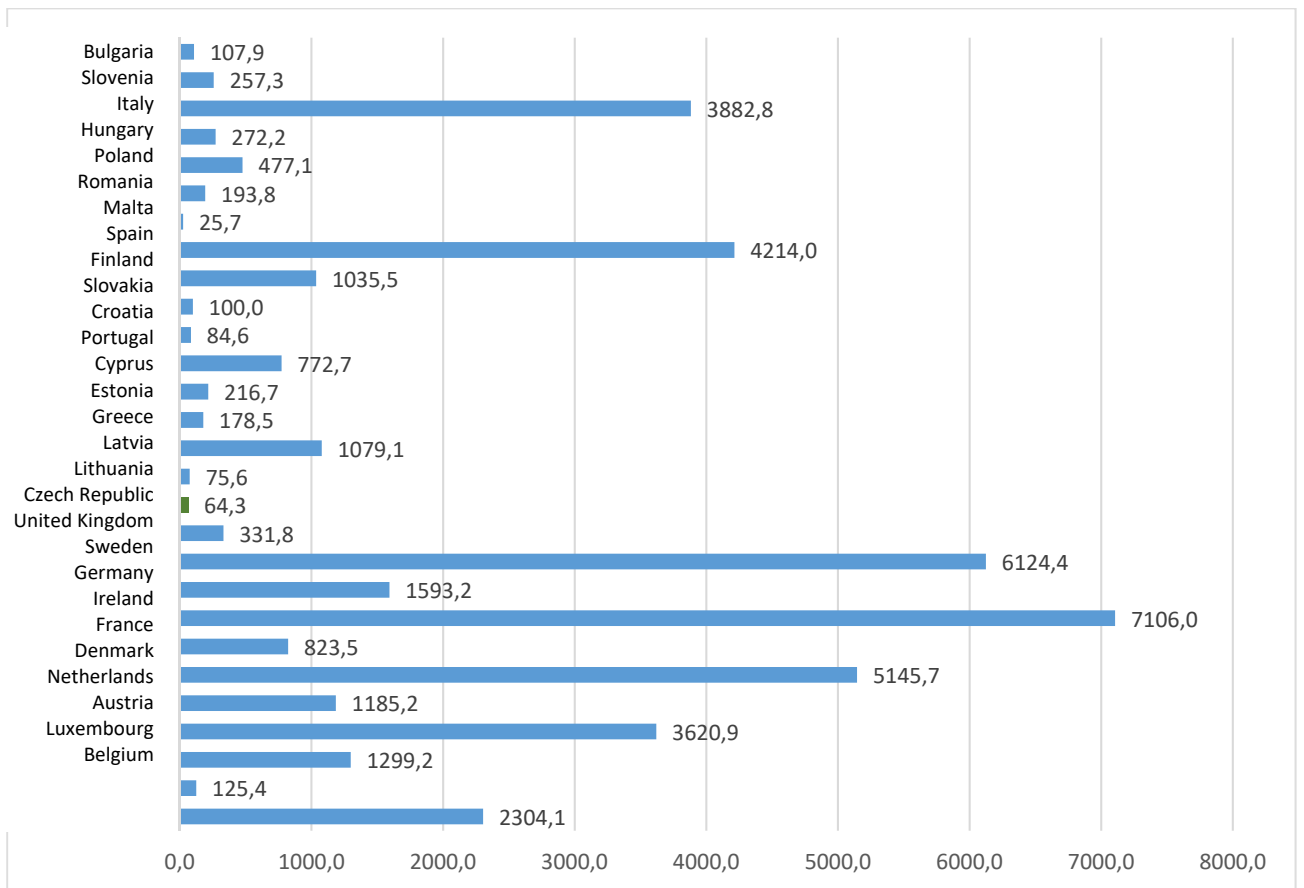


Figure 2. EC grant for participants of H2020 projects based on countries (million euros) (Data according to EC as of November 8, 2019, <https://webgate.ec.europa.eu/dashboard>, Member States are listed in ascending order of the success rate)

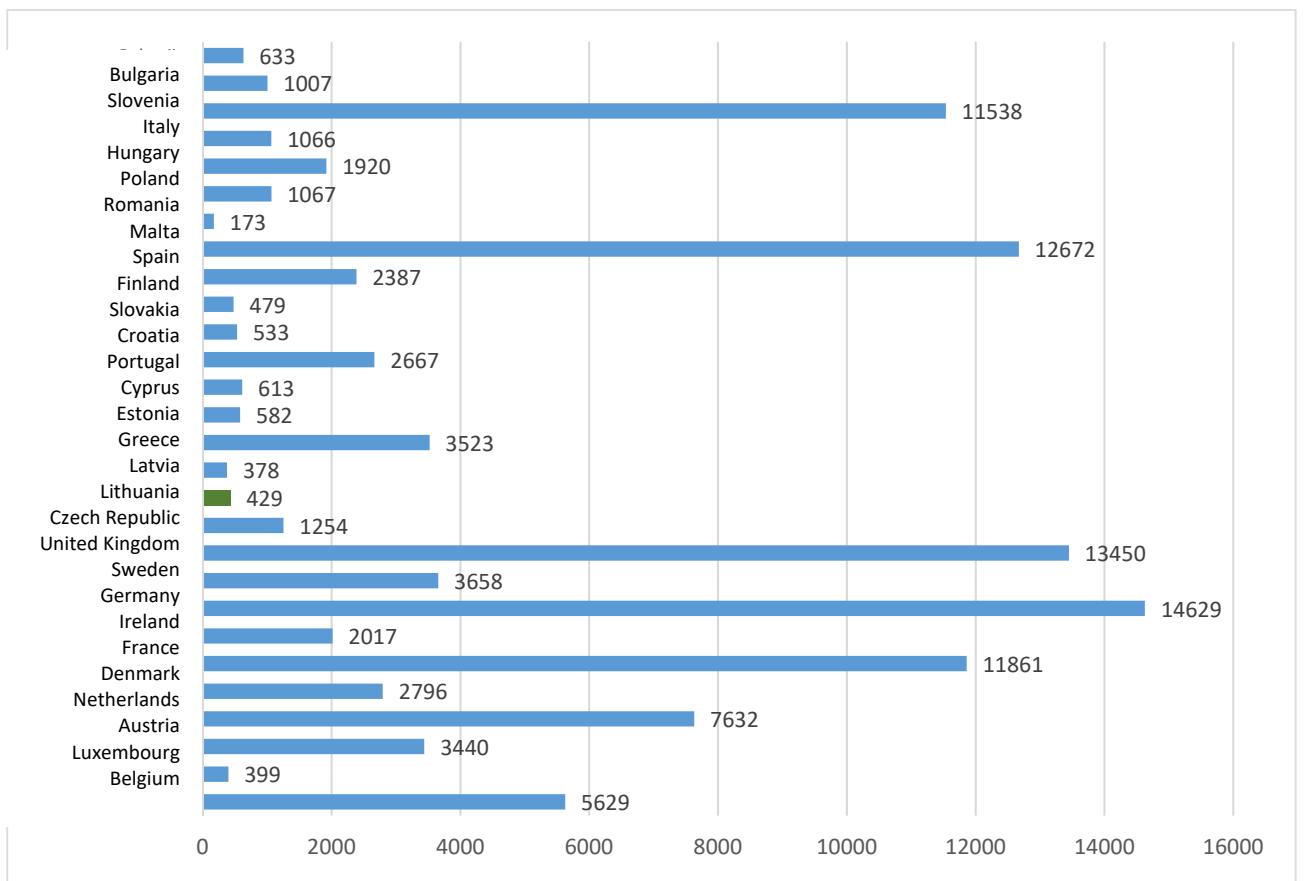


Figure 3. Number of participants in H2020 projects based on countries (Data according to EC as of November 8, 2019, <https://webgate.ec.europa.eu/dashboard>, Member States are listed in ascending order of the success rate)

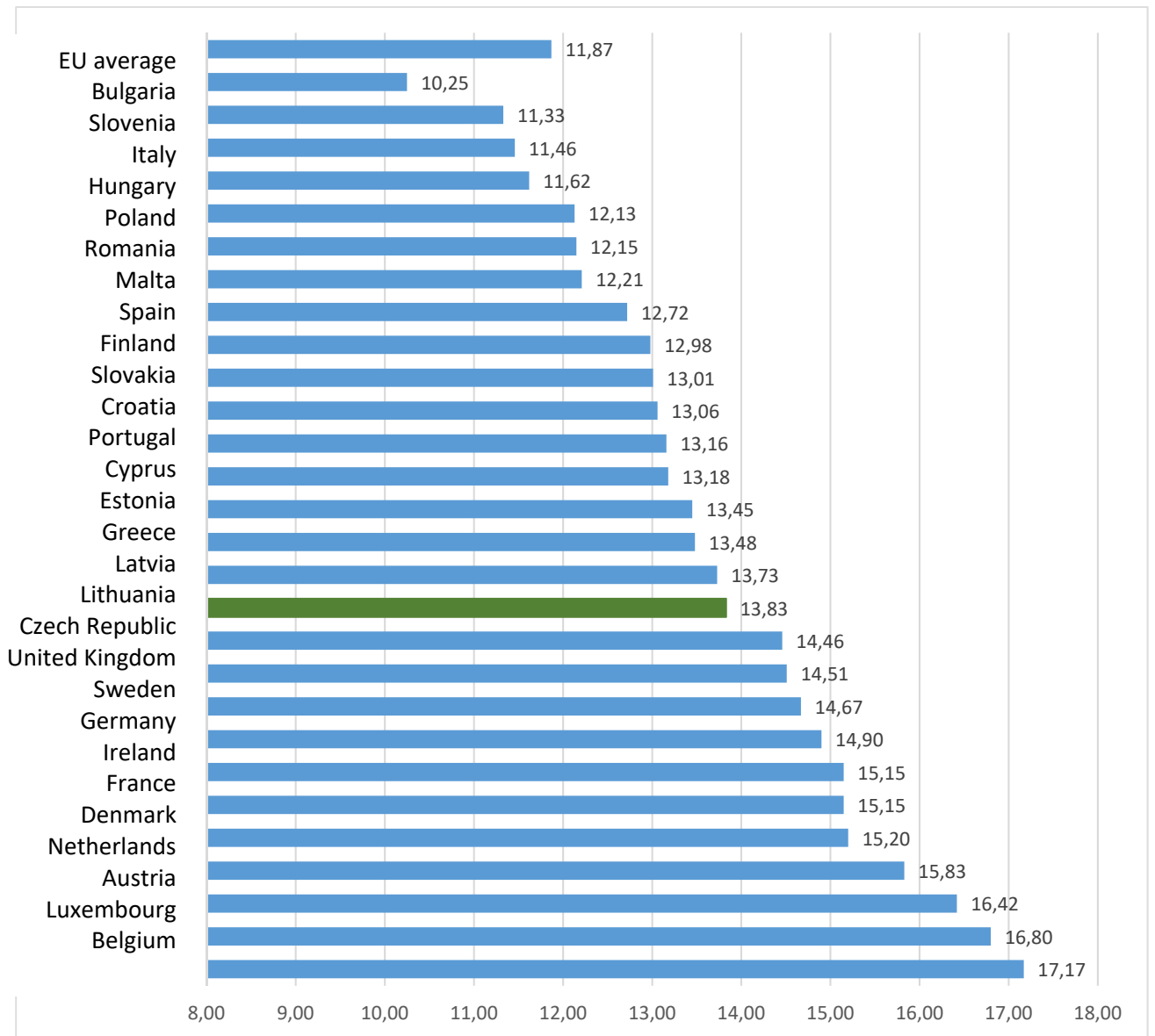


Figure 4. Success rate of participation in H2020 based on countries (%) (Data according to EC as of November 8, 2019, <https://webgate.ec.europa.eu/dashboard>)

Annex 15. International cooperation projects in 2019

Serial No.	Funded areas of activity	Competition results of 2019			Projects selected in previous years and implemented in 2019	Funds allocated in 2019 for projects selected in previous years (EUR)
		Proposals submitted	Projects selected	Funds allocated (EUR)		
1. Programmes and projects of bilateral (tripartite) cooperation*						
1.1.	Lithuania–Latvia–China (Taiwan)	16	4	0	12	193 194
1.2.	Lithuania–Belarus	0	0	0	8	50348
1.3.	Lithuania–France	0	0	0	6	28710
1.4.	Lithuania–Ukraine	78	12	164 329	13	74 269
1.5.	Lithuania–Japan	12	3	178 091	8	175 040
1.6.	Lithuania–Poland	0	0	0	16	594196
2. Open partnership projects*		0	0	0	4	25280
3. JPI, ERA-NET COFUND, Art. 185 Initiatives, EJP*						
3.1.	BiodivERsA	4	0	0	1	16 981
3.2.	BONUS	0	0	0	1	32 692
3.3.	CHIST-ERA	0	0	0	0	0
3.4.	ENSUF	0	0	0	1	31469
3.5.	EuroNanoMed	1	0	0	1	2 000
3.6.	FLAG-ERA	3	1	0	0	0
3.7.	HERA	0	0	0	0	0
3.8.	JPI Kultūros paveldas	0	0	0	0	0
3.9.	M-ERA.NET	18	3	11 635,07	7	182 216,07
3.10.	NORFACE	6	0	0	0	0
3.11.	SUMFOREST	0	0	0	1	26 766
3.12.	EJP RD	4	1	100 000	0	0
3.13.	QUANT-ERA	2	0	0	0	0
4. European Space Agency*		3	2	60 506	1	13357
5. Support for participants of H2020 *						
5.2.	Support for preparation of proposals for H2020	43	39	164 000	0	0
6. Representation in the EU working groups, etc.*		0	18	10 698	0	0

* possible values of 0: the call was not announced; there are no eligible projects; not applicable

Annex 16. Participation in the COST activities

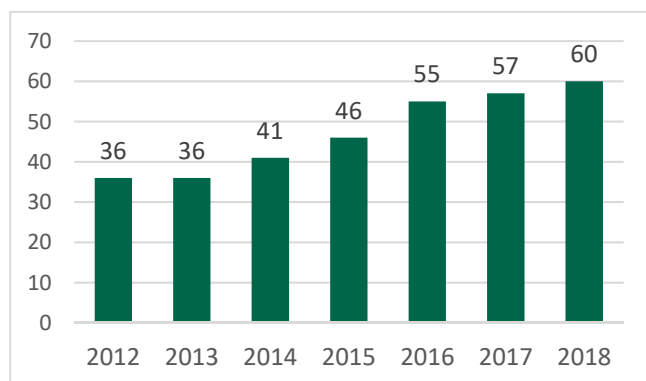


Figure 1. Participation of Lithuania in the COST activities (percentage of all COST activities taking place) (COST will publish results of the year 2019 in April, 2020)

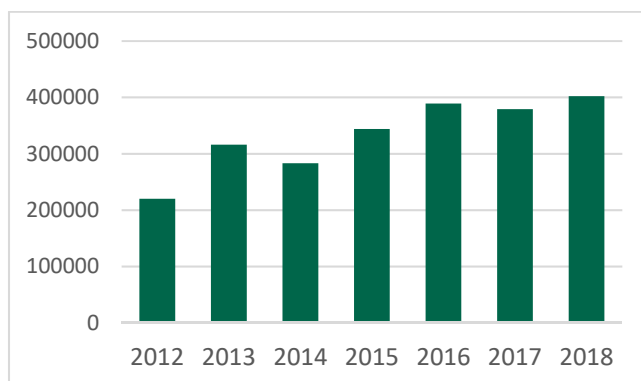


Figure 2. Funds allocated for Lithuanian participants in the COST activities (EUR) (COST will publish results of the year 2019 in April, 2020)

Annex 17. Review of support funded from the State budget in 2017-2019

Support *	Calls	Proposals assessed**	Projects funded**	Success rate (%)**
DAA	3 (once a year)	566 548 438	282 241 344	49,8 43,9 78,5
DAT	6 (twice a year)	111 118 103 57 82 116	24 27 32 37 26 55	21,6 22,9 31,1 23,6 31,7 47,4
SCE	3 (once a year)	53 65 68	37 50 55	69,8 76,9 80,9
PUB	Continuous	72 73 90	25 42 42	34,7 57,5 46,6
ACA	3 (once a year)	34 34 37	27 27 32	79,4 79,4 86,5

*Acronyms: DAA means support to PhD students for academic achievements (implemented since 2012), DAT means support for academic trips of PhD students (since 2012), SCE means support for scientific events (since 2010), PUB means support for publication of scientific papers and books (since 2012), ACA means support to academic associations (since 2009).

** Information based on the calls.

*** Summarised annual data (2017, 2018, 2019).

Data as of December 31, 2019.

Annex 18. Distribution of selected positions for competitive doctoral studies on the basis of scientific fields in 2019

Scientific field	Number of topics
Humanities	10
Social Sciences	8
Natural Sciences	19
Medical and Health Sciences	8
Engineering	19
Agricultural Sciences	4
Arts	2
In total:	70

Annex 19. Scientific co-publications of Lithuanian and foreign researchers in 2019



Figure 1. Scientific co-publications of Lithuanian and foreign researchers (except for the European region) in 2019. Data from the CA WoS database as of February 10, 2020.

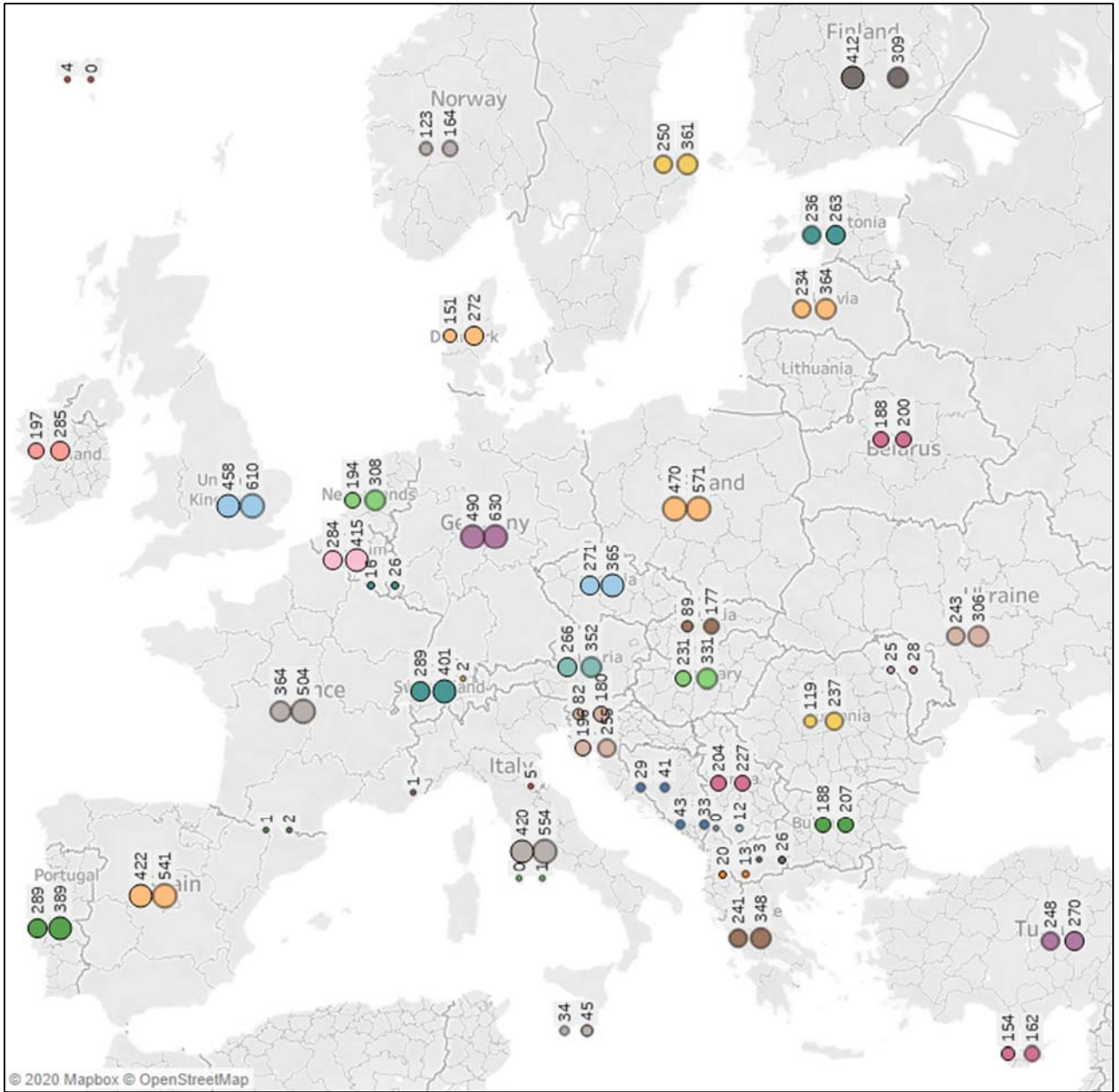


Figure 2. Scientific co-publications of researchers from Lithuania and countries of the European region 2019. Data from the CA WoS (right circle) and Scopus (left circle) databases as of February 10, 2020. If only one number is present, the indicator in both databases is the same.

Annex 20. Budgetary appropriations and the use of funds

Table 1. Appropriations allocated to the Council in 2019.

Code of the programme	Code of the source of funding	Title of measure	Appropriations (thousands of euros)			Implementation percentage
			Planned, including revisions	Used	Deviation (5–4)	
1	2	3	4	5	6	7
01001	1.1.1.1.1.	Development of the State higher education and research system (State budget funds)	18110.0	15702.7	2407.3	86.7
01001	1.2.3.1.48/ 1.3.3.1.48	Development of the State higher education and research system (technical assistance funds from 2014–2021 European Economic Area/Norway financial mechanisms)	61.0	50.6	10.4	76.0
01001	1.3.3.1.50/ 1.3.3.1.51	Development of the State higher education and research system (funds from the 2014–2021 EEA/NOR bilateral cooperation fund)	670	0.0	67.0	0.0
01001	1.2.2.7.2/ 1.3.2.7.2	Development of the State higher education and research system (technical assistance funds from the EU Cohesion Fund 2014–2020)	888.0	727.4	160.6	82.0
In total:			19126.0	16480.7	2645.3	86.2

Table 2. Allocation of costs of the Council in 2019

Serial No.	Name of the item	Appropriations (thousands of euros)		
		Planned	Used	Unused
1	2	3	4	5 (3–4)
1.1.	Wage costs	2135.0	2074.4	60.6
1.2.	Social security costs	34.7	33.3	1.4
1.3.	Acquisition costs of pharmaceuticals and medical preparations	0.6	0.0	0.6
1.4.	Communication costs	6.2	5.4	0.8
1.5.	Secondment costs	57.5	51.0	6.5
1.6.	Ordinary repair costs of tangible assets	0.2	0.0	0.2
1.7.	Transport services	2.8	2.2	0.6
1.8.	Lease of the fixed tangible and intangible assets	46.0	45.5	0.5
1.9.	Utilities	41.5	40.4	1.1
1.10.	Royalty agreements	649.8	554.0	95.8
1.11.	Qualification enhancement costs	10.0	7.2	2.8
1.12.	Acquisition costs of other goods and services	765.9	681.1	84.8
1.13.	Acquisition costs of IT goods and services	82.0	75.2	6.8
1.14.	Representation costs	12.8	11.7	1.1
1.15.	Social support (redundancy benefits)	18.1	15.2	2.9
1.16.	Other expenses for operational purposes (for institutions described in the Art. 2.8)	15089.9	12779.5	2310.4
1.17.	Transferred funds of the EU and other international support (Art. 2.9 funds of the bilateral EEA/NOR cooperation)	67.0	0.0	67.0
1.18.	Fixed assets	106.1	104.7	1.4
In total:		19126.0	16480.7	2645.3