TALLINNA ÜLIKOOL

ANNUAL REPORT 2017

ANNUAL REPORT

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Form of ownership	legal person under public law
Main field of activity	academic research activities;
	provision of higher education based on study and research
	activities;
	provision of services based on study and research activities to the
	society
Beginning of financial year	1 January 2017
End of financial year	31 December 2017
Executive manager	Rector Tiit Land
Auditor	BDO Eesti AS
Annexed documents	Independent Auditor's Report

CONTENTS

ACTIVITY REPORT	5
I. General information about the University	5
1.1. The Rector looks back at 2017	5
1.2. Objectives of Tallinn University	5
1.3. Strategic management and development	6
1.4. Quality culture	6
1.5. Code of Conduct for Research Integrity Agreement and ethics	8
1.6. Effects of external environment.	8
II. Research, development and creative activities and impact on the society	10
2.1. Objectives of the University and the achievement thereof in RDC, and impact on the	2
society	10
2.2. RDC and impact on the society	11
2.2.1. Funding of research and research-based development activities	11
2.2.2. Funding for activities aimed at study and organisation development	13
2.2.3. Overview of funding for creative activities.	14
2.2.4. Activities aimed at the society	14
2.2.5. Publications and recognitions.	16
2.3. Impact of the external environment	17
2.3.1. Research funding in Estonia	17
2.3.2. Baseline funding of research	18
2.3.3. Institutional and personal research funding	19
2.3.4. EU Framework Programme for Research and Innovation Horizon 2020	19
2.4. Regular evaluation of Estonian Research	20
2.5. Opinion of Vice-Rector for Research on the development of the area	21
III. Studies	24
3.1. Objectives of the University and the achievement thereof in studies	24
3.2. Studies	25
3.2.1. Overview of study programme development	28
3.2.2. Overview of ELU (innovation integrating specialities)	29
3.2.3. Study process development	30
3.3. Effects of the external environment	32
3.3.1. International factors	
3.3.2. Internal Estonian factors	33
3.4. Opinion of the Vice-Rector for Academic Affairs on the development of the area	
IV. Management, membership and finances	37
4.1. Objectives of the University in management, membership and finances	
4.2. Employees and personnel work	
4.2.1. Filling academic positions	38
4.2.2. Labour turnover at the University.	
4.2.3. Remuneration of employees	40
4 2 4 Personnel development	40
4.2.5. Employee mobility	40
4.2.6 Effects of the external environment	40
4.3. Marketing and image development	
4.4. Financial activities	42

4.5. Opinion of the Rector's Office on management, finances and membership	.44
4.6. Effects of the external environment on management and finances	. 45
BALANCE SHEET	. 46
PROFIT AND LOSS STATEMENT	. 47
CASH FLOW STATEMENT	.48
Note 1. Accounting principles	. 50
Note 2. Cash and cash equivalents	60
Note 3. Receivables and prepayments	. 60
Note 4. Inventories	.61
Note 5. Financial investments	.61
Note 6. Real estate investments	. 61
Note 7. Property, plant and equipment	. 63
Note 8. Intangible assets	. 65
Note 9. Loan obligations	.67
Note 10. Payables and prepayments	. 70
Note 11. Provisions	.70
Note 12. Revenue from economic activities	.71
Note 13. Activity support	71
Note 14. Ad hoc financing of operating expenses and non-current assets	. 72
Note 15. Other income	.72
Note 16. Support granted	.73
Note 17. Management expenses	. 73
Note 18. Labour expenses	.73
Note 19. Other operating expenses	.74
Note 20. Financial income and expenses	.74
Note 21. Operating lease	.74
Note 22. Tax receivables and tax payables	.75
Note 23. Related parties	.76
Note 24. Holdings in foundations and non-profit associations and a private limited company	.76
Note 25. Off-the-balance sheet assets	.76
Note 26. Off-the-balance sheet ad hoc financing receivables and payables	.78
Note 27. Events after the balance sheet date	. 79
Note 28. Going concern	.79
Independent auditor's report	ed.
Signatures to the 2017 Annual Report	.82

MANAGEMENT REPORT

I. General information about the University

1.1. The Rector looks back at 2017

2017 was a busy year for Tallinn University. It included the scheduled evaluation of research, in the course of which our research capability was assessed in three areas: natural sciences, social sciences, and arts and humanities. We passed the evaluation positively in all the areas and received feedback and recommendations from external evaluators with regard to what we should focus on more in the future. The University's financial indicators have improved over the years and we ended the financial year with a positive result for a second year in a row. In spring 2017, the institutes elected new directors for the coming three years. The results of the employee satisfaction survey held in spring show that both academic and support staff are mostly satisfied with the working environment, the content of work and the colleagues.

In 2017, plans were launched for several changes in the external environment, which will have an effect on the activities of Tallinn University in the future. The state started the process of amendment of the obsolete laws on higher education, as a result of which various regulations and acts regulating the activities of universities will change in the future. In connection with that, we initiated the development of a draft Tallinn University Act. Launching the development of a career model for academic employees is also very important – it is aimed at creating an achievement-based transparent career system which would ensure a flexible ratio of study and research work.

A negative effect stems from the unchanged state financing of higher education, which has remained on the same level for the past three years. The Rectorate therefore started to consolidate the study programmes in order to ensure the sustainability of the University. A positive factor is that the state has somewhat increased the baseline funding of research – this is also important in the planning of the career model for academic employees.

In conclusion, 2017 was mostly successful for Tallinn University. We have been able to respond to changes in the external environment and improved the financial standing of the University. The biggest challenges in the coming years include increasing the salary of employees and ensuring motivating working conditions while the state financing stays the same.

I wish to thank all the members of the University for the work done and the contribution made in such an interesting year!

1.2. Objectives of Tallinn University

The activities in 2017 continued on the basis of the Development Plan 2015–2020 the objectives and activities of which the Senate approved on 26 January 2015. The Development Plan described the most important development milestones of the University as follows.

• Tallinn University's mission is to support the sustainable development of Estonia through highquality research and study, education of intellectuals, public discussion and promotion of academic partnership. By developing research carried out in Estonian and for the development of Estonia, the University integrates into the European education and research area, and through that integration contributes to the development of Estonia as a country with a smart economy and an astute organisation of society.

- According to the TU Academic Charter, the University's basic values are: openness, quality, professionalism and unity.
- Tallinn University's vision is to play a leading role in promoting and developing an intelligent lifestyle in Estonia, thus supporting both Estonia's sustainability and the self-actualisation of individuals.
- Tallinn University's strategic objectives for 2015–2020 is to concentrate resources and activities on developing interdisciplinary research-based focus fields: educational innovation, digital and media culture, health and sustainable lifestyle, and society and open governance.
- The University has defined the guiding principles of activity to support its strategic objective: (1) the University is interdisciplinary in its activities; (2) the University is international; (3) the University demands excellence and sustainability in its activities.

1.3. Strategic management and development activities

On the basis of the University's Research and Development Strategy, the Rector on 25 April 2017 formed a work group which was tasked with making proposals for updating the career and development model for academic employees in line with the University's development objectives and resources. The work group analysed the different aspects of applying the career model in the context of the amended legal acts (including the requirement for employment contracts entered into for an unspecified term) and the current situation at the University with regard to the distribution, remuneration and other such aspects of academic positions, studied the career models used in Europe and the United States, developed a vision of the possible underlying principles for TU's future career model, and used that as the basis for preparing a preliminary concept for the career model. The concept was introduced at public discussions and at a Senate session. Criteria for academic assessment were also developed. The career model will be further updated in 2018 and the current plan is to apply the new model as of 1 September 2019.

On 13 March 2017, the Senate unilaterally decided to amend the sections concerning the election of the directors of the Schools in the Tallinn University Statutes, the Statutes of the Schools and the Tallinn University Employment Relations Rules. Previously, the directors had been elected for an unspecified term and in the course of a public competition. The amendment of the said legal acts now allowed for directors to be selected internally at the University and for a specified term. The Rector appointed the directors of the Schools for the term of 1 September 2017 to 31 August 2018, having heard the opinion of the council of the respective academic units. Selecting the directors in an internal competition and for a specified term allowed using the University's internal competence while also engaging the University's staff in the management of units. Katrin Saks continues as the Director of the School of Digital Technologies (SDT), Kristi Vinter-Nemvalts as the Director of the School of Educational Sciences (SES), Tõnu Viik as the Director of the School of Humanities (SH), Ruth Shimmo as the Director of the School of Natural Sciences and Health (SNSH) and Indrek Grauberg as the Director of the School of Governance, Law and Society (SGLS).

1.4. Quality culture

In 2017, the risks obstructing the achievement of the objectives of the Tallinn University Development Plan 2015–2020 were assessed and the principles of activity planning and reporting were specified. Under the leadership of the Rectorate, the sustainability of the University's study programmes was assessed and proposals were made to academic units on how to consolidate study activities. In addition, work started to create a new electronic reporting environment in order to improve the regular overview of the current

trends in the University's main areas of activity, assess the effectiveness of activities and, if necessary, make changes.

An internal auditor started work at Tallinn University in 1 February 2017. During the year, the auditor conducted an audit of the invoices submitted via the study information system (ÕIS) (audit No. 1/2017), an audit of the work organisation of the marketing and communication area and the Marketing and Communication Office (TUKO) (audit No. 2/2017) and an audit of the assessment of the functions of the Academic Library (on 5 October 2017, the final report to be completed in 2018).

The risks that could obstruct the achievement of the objectives of the Tallinn University Development Plan 2015–2020 were formulated and assessed during the 2017 spring semester. The risks were assessed on a four-point scale of probability (improbable – definite) and impact (insignificant – detrimental). No definite risks with a detrimental effect were identified. Of the risks assessed by the members of the University, the most attention needs to be paid to the big workload of lecturers, the excessively project-based nature of activities, the labour turnover, the obscurity of the volume and granting principles of activity support for higher education studies, the excessive abundance of regulations, cooperation between units, the creation of an inspiring working environment, the future perspectives in the light of decreasing EU 2020 funding, and the system of indicators measuring the University's objectives and performance. The activities to hedge those risks were planned into the 2018 action plans of the University's units.

On 2 October 2017, the Rector called together a workgroup to prepare the initial task for assessing the impact and results of the structural reform of Tallinn University. The workgroup included Vice-Rector for Academic Affairs Priit Reiska, Vice-Rector for Creative Activities and Cooperation Andres Jõesaar, Professor of Social Psychology Mati Heidmets, Director of SH Tõnu Viik, Senior Research Fellow at SNSH Tiiu Koff, Head of the Student Union Elina Kersa, Financial Analyst Evely Palts and Head of Management Support Office Mikk Kasesalk. The objective of the workgroup was to formulate which impact and results of the structural reform need to be taken into focus in the assessment, how the impact and results should be assessed, and in what format the impact and results should be presented for making further plans. The workgroup found that in addition to the results of improving the academic structure, other changes which have taken place at the University since 1 January 2015 also have to be assessed. The assessment must be done in two stages: first, the achievement of the objectives established by the Senate for the improvement of the academic structure have to be assessed, and second, the current problems and bottlenecks in the University's main areas have to be identified. The assessment will be carried out during the 2018 spring semester and the results will be presented to the members of the University at the end of the 2018 spring semester at the latest.

A satisfaction survey was carried out among the employees of Tallinn University in May and June 2017. An Estonian questionnaire was sent to 926 employees and an English questionnaire to 52 employees. The response rate was 47.5% among those who received the Estonian questionnaire and 50% among those who received the English one. The results of the employee satisfaction survey allow us to conclude that TU employees are satisfied with the work, their physical working environment and their closer colleagues. The employees are also satisfied with the work of the support units, and work satisfaction among the support unit employees (both the ones working in academic units and the ones working in the support units) is on the average higher than that among academic employees. The salary level is the acutest point of concern at the University. A large part of the employees also find that the workload is too big, has an adverse effect on performance and is not in balance with the amount of remuneration. Besides the salary issue, academic employees are concerned about the increased bureaucracy and the lacking cooperation between the Schools. The feedback questionnaire also showed that only a half of the academic employees are satisfied with the results of the structural reform.

It can be said in conclusion that the operating environment of Tallinn University is on a good level and people are satisfied with it, as well as with the content of their work and with their colleagues. More attention needs to be paid to developing the University's academic capability: the working and salary conditions of the academic employees, a meaningful establishment of objectives and a set of rules motivating people to work more and better.

1.5. Code of Conduct for Research Integrity Agreement and ethics

In October 2017, Tallinn University joined the Code of Conduct for Research Integrity Agreement developed under the leadership of the Estonian Research Council in cooperation with the representatives of universities and research institutions. The renewal of the code of ethics and the discussion concerning research integrity were driven by new tasks in the areas of science, social media and technological development. The aim of the Code of Conduct for Research Integrity is to support the awareness, adoption and integration of good practices among the Estonian research community. The Code of Conduct for Research Integrity describes what kind of conduct is expected of researchers and what is the responsibility of a research institution in ensuring high-quality research and thereby helping increase confidence towards science among individuals and the general public.

1.6. Impact of the external environment

In 2017, the Ministry of Education and Research initiated the process of updating the law on higher education, with the aim to coordinate and simplify the relevant legal acts. Most of the currently applicable regulations date back to 1990s and are instead of learners focused on institutions. The renewed set of legal acts strives to focus more on the objectives of higher education studies and less on detailed activity instructions, and to more clearly outline both the main tasks on the state and the higher education institutions as well as the rights and obligations of the students. The plan is also to strengthen the links between the universities and the society and to facilitate the updating of the universities' career models. The renewal of the law on higher education is a part of the renewal of the entire regulation of education. In its feedback to the intention of the draft act, Tallinn University emphasised the principle that the act must ensure the legal clarity of higher education regulation and the uniform treatment of all the universities.

The Estonian Agency for Higher and Vocational Education presented the new institutional accreditation (IA) guidelines to higher education institutions for making proposals for supplementations and amendments. As of 2020, an institutional accreditation which will take place at least once in every seven years will be the main method of assessing the quality of higher education and will among other things also assess the functioning of internal quality assurance systems on the level of selected study programmes. The new assessment method is based on 12 standards of different volume and level of detail. Every standard includes guidelines for the possible applications of the standard. The new IA guidelines will be approved in 2018.

In 2017, the 2016-2018 agreements concluded between universities in public law and the Ministry of Education and Research with regard to allocating higher education activity support were brought into conformity with the amendments made to the Universities Act¹, which updated the higher education financing model. In the new system, baseline funding forms 80% and performance funding 20%. Up to 17% of performance funding is determined on the basis of reaching the performance indicators and up to 3% on the basis of fulfilment of the agreement concluded with the educational institution for the allocation of activity support. The proportion of students who have graduated within the nominal study

¹ <u>https://www.riigiteataja.ee/akt/131122016048</u>

period is the most important assessment criterion for performance funding (35%). Other criteria include the proportion of graduates who have found employment or continue in Master's/doctoral studies, the proportion of students admitted to the area of responsibility of the educational institution, international students, revenue received from educational activities, and mobile students. The agreements were also supplemented with a reference to the skills and labour needs forecasting system OSKA: universities will now have to take into account the results and recommendations of the OSKA reports in opening and developing study programmes and in conducting studies. The activity support provided from the state budget forms the largest part of the University's budget. In 2017, it made up 53% of the University's total income budget (57% in 2016).

The education and research area is largely financed from EU funds. The National Audit Office's 2017 audit to the $Riigikogu^2$ highlighted that when support from the EU Structural Funds ends, the higher education and R&D area will be one of the most vulnerable areas. In its assessment, the National Audit Office focused on what is financed from EU support, the proportion of support in different areas of activity, and whether the state has a long-term plan for ensuring the fulfilment of tasks and the future development when external support is not available or its volume is considerably reduced. According to the preliminary estimates of the representatives of the Ministry of Education and Research, the deterioration of the quality of education on all levels of education would be the main problem in the case of reduced funding, with the biggest impact on research and higher education. The system for funding research is even now insufficient to cover the necessary costs and the state's current goal – 1% of the GDP – has not been achieved even with the help of support. Ninety percent of support for business currently depends on EU funds. The Ministry of Education and Research will start developing areaspecific priorities and financing plans after the 2018 interim assessment of programmes.

The most significant and detrimental risk highlighted in the Tallinn University risk assessment carried out in 2017 was the fact that the University has not conducted an analysis of how to ensure financial sustainability when EU funding is reduced.

In 2016, a task force for the funding and organisation of higher education and research was formed at the Government Office force by a Government of the Republic Resolution³ in order to prepare for the consolidation of the higher education and research institutions and their support services addressed in the Research and Development Council's report as well as the implementation of the recommendations concerning the financing of higher education. The proposals of the task force are also used as inputs in updating the law on higher education. In 2017, the focus was on developing the principles and criteria of consolidation and planning the assessment of the efficiency of support activities.

² <u>National Audit Office's audit</u>

³ <u>https://riigikantselei.ee/et/teaduse-rakkeruhm</u>

II. Research, development and creative activities and impact on the society

2.1. Objectives of the University and the achievement thereof in RDC, and impact on the

society

In order to support the strategic objectives of Tallinn University, carrying principles of activity have been defined. Those principles also form a basis for the sub-objectives of the processes related to RDC (Table 1).

eejeen es ana pe	objectives una performance materices of processes related to social impact								
Principle of activity	The University is interdisciplinary in its activities	The University is international	The University demands excellence and sustainability						
Sub-objectives	Interdisciplinary solutions to social problems.	The University is a reliable and attractive employer and partner in international research.	Research is high-level and competitive.						
Expected result	 increased proportion of interdisciplinary research projects and research development services in the University's revenue; increased number of publications prepared in joint authorship of representatives of at least two specialities; increased number of cooperation partners in the public, private and third sectors. 	 increased proportion of funding for international research projects in RDC revenue. 	 increased three years' average volume of RDC funding per academic employee; increased number of defended doctoral theses; same number of highlevel research publications per academic employee. 						

Table 1. The University's principles of activity in research, development and creative activities, as well as the subobjectives and performance indicators of processes related to social impact

The achievement of the objectives of Tallinn University can be assessed on the basis of implemented activities and key indicators. In 2015, the methods for calculating the key indicators were established and the base level was recorded. Table 2 shows the base level in 2015 and the level of the key indicators in 2016 and 2017.

	Key indicator	2015	2016	2017
Interdisciplinary approach	Proportion of interdisciplinary research projects and research development services in the University's revenue	8.0%	7.0%	15.3%
	Number of publications prepared in joint authorship of representatives of at least two specialities	116	112	106
	Number of cooperation partners in the public, private and third sectors	1,203	1,258	1,392
Internationalisation	Proportion of international research projects in RDC revenue	16.1%	18.7%	32.9%
Excellence and sustainability	Three years' average volume of RDC funding per academic employee	28,423€	26,180€	30,305€
	Number of defended doctoral theses	20	20	25

Table 2. Level of RDC key indicators in 2015–2017

Number of high-level research publications per 1.31 1.28 1.12					
acadamia amplayaa	Number of high-level research publications per	1.31	1.28	1.12	
	academic employee				

2.2. RDC and impact on the society

The Tallinn University Development Plan 2015–2020 addresses RDC as a priority area and sets increasing the RDC funding as an objective. In the context of the Development Plan, the RDC revenue does not include the acquisition or repair of structures and buildings, and further training. In assessing the RDC revenue, it also only looks at the University's net income which does not include the mediation of project-based support to partners. Due to the above, the distribution of RDC revenue described in Figure 1 does not include the income related to the aforesaid activities and is therefore respectively smaller than the RDC revenue recognised in the accounts.



Figure 1. RDC funding in 2017 (in thousands of euros)

2.2.1. Funding of research and research-based development

There were a number of positive developments in RDC funding in 2017. The total RDC revenue grew considerably from 2016 (from 9,807,581 euros to 11,579,839 euros). The volume of funding of research and research-based development (9,539,122 euros) made up 82% of the total RDC volume (74% in 2016). The volume of baseline funding for research has considerably grown due to an increase in the total volume of the state resources allocated for baseline funding (18% from 2016). The Mobilitas+ grants launched in 2017 approximately tripled the volume of the projects of post-doctoral fellows, returning researchers and top researchers compared to 2016. The revenue of projects financed from the EU Structural Funds also grew considerably (2.5 times from 2016).

The consistent growth of payments to projects under the EU Horizon 2020 and its predecessor, the Seventh Framework Programme (FP7), is particularly noteworthy. While in 2016 the figure was

1,184,918 euros, in 2017 it rose to 1,590,539 euros, which means a 26% increase. In 2017, final payments came to the total of six FP7 projects, funding continued for a Marie Curie IRSES (International Research Staff Exchange Scheme) grant and two European Research Council ERA.NET-RUS Plus projects, and a new ERA-Net COFASP project was started. The Horizon 2020 programme financed 13 projects. Two new large-scale projects were launched in 2017 and Tallinn University also joined a previously started Horizon 2020 project. Important factors in ensuring growth are the increased application activity and the improved quality of applications. In 2017, 52 Horizon 2020 applications were submitted with the participation of Tallinn University (37 in 2016), of which three received funding (one in 2016), three were put on a reserve list and five have not yet passed the evaluation process.

In addition to the increased funding from FP7 and Horizon 2020, international funding⁴ also experienced a 21% increase from 2016 in the funding of research and RD projects under other EU programmes (from 855,050 euros to 1,088,071 euros). This was mainly due to the payments under new EU programme period picking up. Income was primarily received from programmes like Interreg Central Baltic Programme, Interreg Baltic Sea Region Programme and two key actions of Erasmus+ – "Strategic Partnerships in the Field of Education, Training and Youth" and "Capacity Building in the Field of Higher Education". In total, 21 research-related Erasmus+ projects (13 in 2016) and 9 Interreg projects (8 in 2016) were financed in 2017. Funding was also provided to Life+, JUSTICE PROGRAMME (2014–2020) programme projects as well as other projects. However, the volume of projects financed from other international sources decreased. By 2017, most of the projects under the EEA/Norwegian Financial Mechanism programme have ended, with only two still in work, and the volume of funding to these was therefore very small (537,915 euros in 2015, 197,988 euros in 2016, and 28,675 euros in 2017). The income of the Nordplus programme projects also decreased somewhat. Of newly funded projects, participation in the project "The Viking Phenomenon" carried out by the Uppsala University and funded by the Swedish Research Council is worth mentioning.

Financing from the new programme period of the EU Structural Funds started in full volume in 2017 and therefore the volume of the University's projects financed from Structural Funds also grew about 2.5 times compared to 2016, plus Mobilitas+ individual grants. The total volume exceeded the respective funding volume in 2015, but still remained 14% smaller than in 2014 when funding from the previous programme period was still fully underway.

The largest projects financed from the Structural Funds include Tallinn University's TEE, financed from the institutional development programme ASTRA (1,049,987 euros in 2017), Tallinn University's Centre for Innovation in Education (444,037 euros in 2017) and the project "Systemic Development of Entrepreneurship and Business Studies at All Levels of Education" (173,745 euros in 2017). The ERA Chair project "Cross-border Educational Innovation thru Technology-Enhanced Research" was financed from the Mobilitas+ Horizon 2020 ERA Chair funding measure.

No more rounds will be opened for institutional research grants and therefore no new projects were launched in 2017 and the former eight topics continued. The total volume of funding also remained on the same level as in 2016 (1,032,906 euros). The volume of personal research funding grew by 66% compared to the total volume in (810,522 euros in 2017 and 531,442 euros in 2016). That was mainly due to the launching of the Mobilitas+ mobility support programme (one post-doctoral grant, two returning researcher grants and one top researcher grant) and an increase in the number of state-funded personal research grants (7 projects were launched in 2017, which means a total of 12 personal research grants – three more than in 2016) and the growth of the volume of those grants from the 337,225 euros in 2016 to

⁴ Projects with international funding are here understood to mean projects financed by non-recidents, including international organisations.

569,910 euros in 2017. Of the state-funded personal research grants, four were exploratory research grants and eight were start-up research grants. One state-funded post-doctoral personal research grant was also continued in 2017. The University takes part in the consortiums of four objects in the Estonian Research Infrastructures Roadmap, for the development of which the total of 93,972 euros was received in 2017.

Funding from other national sources increased by 217,377 euros in 2017. These include the noteworthy HITSA IT Academy which financed research development related projects with 148,155 euros. More service agreements were also concluded with companies, non-profit associations and local governments.

The Ministry of Education and Research financed the acquisition of research information for the Tallinn University Academic Library from the state budget with 338,232 euros and supported several R&D projects and applied research studies, including an international civic education studies and several education studies via the state budget with a total of 48,746 euros. A number of projects which won the public procurements held by the Ministry of Education and Research as well as the Ministry of Culture and the Ministry of Social Affairs also received funding (a total of 420,845 euros in 2017). The Estonian Cultural Endowment, the Estonian Film Foundation, the Estonian Youth Work Centre and the Estonian Olympic Committee also offered support for carrying out R&D projects.

In total, the volume of funding for research and research development projects was in 2017 24% bigger than in 2016.

2.2.2. Funding for activities aimed at study and organisation development

Funding for development projects (primarily mobility and study development projects, as well as projects aimed at organisation development) decreased by 24% compared to the previous year, mainly due to a decrease in the volume of projects with international funding.

The European Union financing for development projects mainly came from the Erasmus Mundus and Erasmus Multilateral programmes, the Tempus programme and the Erasmus+ Key Action 1 and 2 projects which are primarily related to study development and mobility. One Interreg Central Baltic project was also financed: "STARPABS Startup Passion in the Baltic Sea". Two projects with a very large support volume – Hermes and Humeria – ended in the middle of 2017 and the volume of support dropped significantly. A very large project, "Interdisciplinary Study Programmes in Informatics", also ended at the end of 2016. This in turn caused the volume of development projects financed by the European Union to considerably decrease in 2017.

Other noteworthy projects with international funding include the support given from the Nordplus programmes of the Nordic Council of Ministers for the development of study-related cooperation and the support for the development of the Chinese language and culture given by the Head Office of the Global Network of Confucius Institutes (in China). The study grant programme of the EEA/Norwegian Financial Mechanism ended in 2016, also reducing the volume of international funding for development projects.

At the same time, the volume of funding for projects financed from the Structural Funds has grown by 22%, although the number of projects is still small, as the new Structural Funds period only just opened. In 2017, funding was mostly provided from the higher education scholarship programme in the smart specialisation areas, financed via Foundation Archimedes under the Structural Funds measure "Enhancing the local socioeconomic impact of the RD&I system and smart specialisation".

Funding for projects financed from other national funds also increased by 26%. This was due to new financing sources (the national programme of grants for international students, researchers and lecturers mediated by Foundation Archimedes) and an increase in the volume of support. Projects were mostly financed from the following sources: state budget support via Foundation Archimedes for specialisation grants in teacher training, study cooperation support under the Development Cooperation Programme of the Ministry of Foreign Affairs, the Tallinn Enterprise Department's non-profit activity support programme funding for implementing a four-month development programme of creative entrepreneurship business ideas, for financing the best business ideas and for holding a competition of applied R&D works at Tallinn University, support from the Ministry of Education and Research for organising study subject competitions, the HITSA IT Academy programme support for improving the level of studies in the ICT area, and the efficient application of ICT in other, mainly creative areas, as well as funding from the Tallinn Education Department for a pilot project of co-supervising students' research papers and funding of scholarships from Tallinn City.

Development projects were financed with a total of 1,984,415 euros in 2017 (2,607,375 euros in 2016). However, it must be kept in mind that the division of projects into research-based projects and directly development focused ones is somewhat conditional, as many projects contain both research and development activities. This particularly concerns the Erasmus+ programme.

2.2.3. Overview of funding for creative activities

Creative activities also received external financing in a small volume in 2017 (56,302 euros). This primarily includes the Estonian Cultural Endowment's support for the production of the BFM diploma films at various levels of education. In 2017, the Estonian Cultural Endowment and the Ministry of Culture provided support for presenting "Brain Dance", a Neuro Theatre performance produced jointly by the SDT and the BFM in the course of the Government Office's EV100 programme at BEAF'17 (Bozar Electronic Arts Festival) at the Bozar Centre in Brussels. The proportion of creative projects is still below 1% of the University's RDC funding and the financing options still need to be expanded.

2.2.4. Activities aimed at the society

In developing cooperation relationships, the focus was on the University's five focal areas. The value offers of companies more specifically highlighted areas with the biggest cooperation potential.

- People's study and health behaviour, i.e. how employees acquire new information and skills most efficiently and how to retain the employees' maximum work ability and performance.

- The natural environment, the natural and exact sciences, i.e. knowledge about the condition and development of ecosystems, knowledge of materials and material technology (e.g. the composition of substances, the characteristics of materials) and the relevant analyses.

- Digital media and technologies, i.e. augmented and virtual reality stories and solutions, gamification, the human-computer interaction, including interaction design, user interfaces.

The coordination and implementation of development and innovation projects was supported from three programmes: (1) TLÜ_TEE or Tallinn University as an advocate of smart lifestyle, (2) Edu&Tegu (Success & Action) or the systemic development of entrepreneurship and business studies at all levels of education, and (3) StartUp Passion or the international project for the development of students' business ideas.

Tallinn University as an advocate of smart lifestyle

TLÜ TEE activities which supported the capability of the University's staff to cooperate with companies were as follows: developing the Open Lab (OL) concept, preparing value offers to companies, the F2F event series, the universities and companies' cooperation festival "In the right place at the right time" and organising a partner week for the representatives of organisations. The project also supports the business platform ADAPTER.

ADAPTER

ADAPTER is a business cooperation platform between Estonian research and development institutions, created by six Estonian public universities on 6 April 2016. By now, ten partners have joined the platform and another two are expected soon. The aim of the platform is to provide companies a quick and simple opportunity to cooperate with Estonian universities, higher education establishments and other research and development institutions.

In 2017, ADAPTER received 159 enquiries to which Tallinn University made 32 offers. Across all the partners, 19 contracts was concluded, worth a total of more than 850,000 euros. (Tallinn University is in the process of concluding three contracts). The database of services contains a total of 411 services of which 40 have been specified for Tallinn University.

Edu&Tegu

In 2017, the Edu&Tegu programme included ten training courses on the following topics: the use of new technologies in business studies, training concerning the teaching of vocational education and general education modules, social entrepreneurship etc. With regard to study development, Tallinn University took part in the development of level 2 and 3 basic and specialisation modules for business studies (the School of Educational Sciences in cooperation with the University of Tartu and Innove), a humanities business module (in cooperation with the University of Tartu and the School of Humanities) and a MA module for entrepreneurship in the creative sector (the Open Academy of Tallinn University in cooperation with the Estonian Academy of Arts and the Estonian Academy of Music and Theatre, and in the work to develop digital study materials (the Open Academy of Tallinn University in cooperation with the School of Digital Technologies). In the case of the latter, a demo version of the digital solution for the value offer of the business model canvas was developed. The plans for 2018 include the piloting of the demo version and the development of a digital solution for the entire business model canvas.

STARTERcreative

2017 was a successful year for the pre-incubation programme of creative sector entrepreneurship, STARTERcreative. Tallinn University is a leading partner in the programme and the programme is implemented in cooperation with another four higher education establishments: the Estonian Business School, the Estonian Academy of Arts, the Estonian Academy of Music and Theatre and the Estonian Entrepreneurship University of Applied Sciences. The aim of STARTERcreative is to offer team-based entrepreneurship studies which are as practice-centred as possible and provide support in moving from a business idea to a business model. In total, 42 teams completed the STARTERcreative programme in 2017: 19 in the spring semester and 23 in the autumn semester, and 16 of them under the instruction of Tallinn University.

Continuing education

In 2017, a total of 13,867 people participated in continuing education at Tallinn University. The number of participants in continuing education has grown compared to 2015 and 2016 (Figure 2).



Figure 2. Number of participants in continuing education at Tallinn University in 2015–2017

Across the academic units, the number of participants in continuing education was the highest at the School of Natural Sciences and Health and the School of Educational Sciences (Figure 3).



Figure 3. Participants in continuing education across units in 2015-2017

Other units to have organised further training with the highest number of participants were the Open Academy (1,749 participants), the Personnel Office (1,258 participants), the Tallinn Summer School and Winter School (399 participants), the Student Academy (261 participants), the Academic Affairs Office, including the E-Learning Centre (151 participants) and the Confucius Institute (129 participants).

2.2.5. Publications and recognitions

According to the Estonian Research Information System (ETIS) (as at 2 April 2018), the employees of Tallinn University published 1,118 publications in 2017, of which approximately 40% are high-level publications (ETIS categories 1.1, 1.2, 2.1, 3.1). Compared to previous years, the overall number of publications has decreased and the number of high-level publications per academic employee has also dropped somewhat. In 2017, about 1.12. high-level publications per academic employee (full-time equivalent) were published at Tallinn University.

Of the publications published in 2017, the following were recognised as the best ones in the University's internal competition. The best monographs - Rein Müllerson (2017). Dawn of a New Order: Geopolitics and the Clash of Ideologies. London: i. B. Tauris.

- Kalle Pihlainen (2017). The Work of History: Constructivism and a Politics of the Past. New York: Routledge.

The best humanities article

- Daniele Monticelli; Eneken Laanes (2017). Battling Around the Exception: A Stateless 'Russian' Writer and His Translation in Today's Estonia. In: Brian James Baer, Susanna Witt (Ed.). Translation in Russian Contexts: Culture, Politics, Identity (321–335). Routledge.

- Oliver Laas (2017). On Game Definitions. Journal of the Philosophy of Sport, 44 (1), 81–94.

The best social sciences article

- Tauri Tuvikene; Susana Neves Alves; Hanna Hilbrandt (2017). Strategies for relating diverse cities: A multi-sited individualising comparison of informality in Bafatá, Berlin and Tallinn. Current Sociology, 65 (2), 276–288.

- Borbála Kovács; Jeremy Morris; Abel Polese; Drini Imami. (2017). Looking at the 'sharing' economies concept through the prism of informality. Cambridge journal of regions, economy and society, 10 (2), 365–378.

- Eeva Kesküla; Krista Loogma (2017). The value of and values in teachers' work in Estonia. Work, Employment and Society, 31 (2), 248–264.

The best natural sciences article

- Martin Küttim; Maaike L. Hofsommer; Bjorn J. M. Robroek; Constant Signarbieux; Vincent E. J. Jassey; Anna M. Laine; Mariusz Lamentowicz; Alexandre Buttler; Mati Ilomets & Robert T. E. Mills (2017). Freeze-thaw cycles simultaneously decrease peatland photosynthetic carbon uptake and ecosystem respiration. Boreal Environment Research, 22, 267–276.

- Mihkel Saluri; Marju Robal; Rando Tuvikene (2018). Hybrid carrageenans as beer wort fining agents. Food Hydrocolloids.

The best exact sciences article

- Sander Paekivi; Romi Mankin; Astrid Rekker (2017). Memory effects on a resonate-and-fire neuron model subjected to Ornstein-Uhlenbeck noise. In: M. D. Todorov (Ed.). Application of Mathematics in Technical and Natural Sciences (Book Series: AIP Conference Proceedings, Volume 1895) (070004-1–070004-10). Amer Inst Physics: American Institute of Physics.

The best general education or higher education textbook

- Sirje Virkus; Aira Lepik; Elviine Uverskaja; Tiiu Reimo; Silvi Metsar; Raivo Ruusalepp; Aile Möldre; Merle Laurits (2017). Information sciences in theory and practice: a higher education textbook. Tallinna Ülikooli Kirjastus.

- Kadi Härma; Maia Muldma (2016). Stories of Music Land. Music textbook for the 5th grade. Tallinn Koolibri.

Reward for the best creative project

Aleksander Väljamäe (2017). BrainDance performance "Demultiplexia", Experimental multidisciplinary project which used novel neuro-technologies for visualising human (brain) activity.

2.3. Impact of the external environment

2.3.1. Research funding in Estonia

One of the main bottlenecks in the development of Estonian research is its largely project-based nature and the large proportion of international financing sources (Structural Funds and Horizon 2020) in research funding, particularly in the case of public sector research and development activities. Estonia's RD&Innovation strategy "Knowledge-based Estonia" establishes the objective of increasing the total costs of the area to 3% of the GDP by 2020, with the state contributing 1% and the private sector 2%. By now it is clear that achieving this objective by the established term is not realistic. The level of Estonian R&D investments has been constantly decreasing since 2012. In 2016, the proportion of expenses incurred on R&D activities made up 1.28% of the gross domestic product (the EU average is 2.03%, the Eurozone average is 2.12%).

The proportion of expenses incurred on R&D by the state and local governments made up 0.78% of the GDP in 2017. The proportion is forecast to be 0.81% in 2018, but a significant decrease is foreseen for the subsequent years: 0.72% of the GDP in 2017, 0.65% in 2020 and 0.61% in 2021. According to Eurostat data, this figure still places Estonia in the middle of the ranking of the EU Member States, although there has been quite a considerable drop from the EU average over the past four years. The expenses incurred on R&D in Estonia in 2016 were 11% smaller than in 2015. 38% of the R&D expenses came from the state budget and 52% from the business sector. The R&D expenses of the business sector amounted to 139 million euros of which 5% came from the state budget. The state's share in the R&D expenses incurred in the business sector have decreased by nearly a half in the past five years.

The education and research area is largely financed from EU funds. The National Audit Office's 2017 audit to the *Riigikogu* highlighted that when support from the EU Structural Funds ends, the higher education and R&D area will be one of the most vulnerable areas. According to the preliminary estimates of the representatives of the Ministry of Education and Research, the deterioration of the quality of education on all levels of education would be the main problem in the case of reduced funding, with the biggest impact on research and higher education. The most significant and detrimental risk highlighted in the University's risk assessment carried out in 2017 was the fact that the University has not conducted an analysis of how to ensure financial sustainability when EU funding is reduced.

As a positive development, the amount of the doctoral student grant was under the state budget approved at the end of 2017 increased from the former 422 euros to 660 euros as of 1 January 2018. That decision will definitely have a positive impact on doctoral studies, but unfortunately the amount still does not allow doctoral students to fully dedicate themselves to doctoral studies.

2.3.2. Baseline funding of research

In 2017, the total volume of state-provided baseline funding grew by 3 million euros or 22% compared to 2016. The state budget of 2017 allocated 16,882,991 euros for the baseline funding of research and development institutions in 2017.

The more important changes made in the Baseline Funding Regulation in 2016, which had an impact on the structure of baseline funding in 2017:

(1) the proportion of contractual income from business, the public sector and external funds was increased in the allocation of baseline resources and the proportion of high-level publications to be taken into account was reduced. Contractual income is now 50% and the proportion of publications is now 40% in baseline funding calculation;

(2) on the basis of international practice, fractional counting was introduced – this applies a coefficient of 0.5 to those research articles which have more than 100 authors and a coefficient of 0.3 to those research articles which have more than 1,000 authors;

(3) the coefficient for monographs was raised from the former three to five.

The total volume of Tallinn University's baseline funding has more than doubled during the period of 2013–2017, but the proportion of overall baseline funding has somewhat decreased.

On 22 March 2017, the Research and Development Council decided to support the proposal to increase the importance of the proportion of business contract in the baseline funding allocation formula. The Baseline Funding Regulation therefore needed to be specified and updated. The amendment of the

Regulation was aimed at stimulating contractual cooperation between enterprises and research institutions. For this purpose, a distinction is made on the baseline funding allocation formula between business contracts and other contract, with the business contracts valued twice as highly as other contracts that are taken into account.

As this amendment places higher value on business contracts, research and development institutions with a small number of such contracts may in the future experience a relative decrease of the baseline funding allocation received on account of contracts. The amendment did not influence the volume of baseline funding in 2017, but it will have an effect on the volume of baseline funding in 2018.

2.3.3. Institutional and personal research funding

As institutional research funding as a financing instrument will end in its current form (no application rounds were held in 2017), the allocations to institutional research funding decreased respectively and the total volume of personal research funding increased.

In the framework of the gradual application of the new baseline funding concept, an application round was announced in 2017 for new personal research funding grant types: post-doctoral, start-up and group grants. While the post-doctoral and start-up grants do not in essence differ from the previous grants of the same type, the group grant is considerably different from the former exploratory research grant (both by period and financial volume). The establishment of fixed grant volumes is also a significant difference compared to previous rounds.

A total of 317 applications were processed in the personal research funding application round in 2017. Of these, 76 were in the area of bio- and environmental sciences (12 applications funded, success rate 15.8%) 120 in the area of natural sciences and technology (18 funded, success rate 15%), 42 in the area of health research (6 funded, success rate 14.3%) and 79 in the area of social sciences and culture (7 funded, success rate 8.9%).

Tallinn University researchers submitted a total of 20 applications in the 2017 application round (4 postdoctoral, 8 start-up and 8 group grant applications). Of these, two group grant applications received funding (topic leaders L. Lõugas ja A. Puur). The application success rate of Tallinn University is thus similar to that of other universities (Tallinn University of Technology 8%, Estonian University of Life Sciences 12%).

2.3.4. EU Framework Programme for Research and Innovation Horizon 2020

Horizon 2020 is the biggest EU research and innovation programme ever with 77 billion euros of funding available for 2014–2020. Competition for support from the Framework Programme is very tight. In 2016, the EUA held a consultation with its member universities concerning the Horizon 2020 interim assessment, which showed that when the Member States' state support to R&D decreases, pressure on the Framework Programme funding increases. The EUA overview of funding trends published in 2017 stated that nearly 90% of all the applications and nearly 75% of high-level applications do not receive funding, because the Framework Programme resources cannot cover all the needs. The Member States' strategies aimed at compensating the reduction of funding for universities from the EU funds are therefore not only unsustainable in the national context, but also undermine the financing capability of the entire EU.

Over the first four years, Estonian participants have received 98 million euros worth of positive funding decisions from Horizon 2020. By now, a total of 272 with 342 participants have received funding from Horizon 2020. Funding has been allocated to 13% of the applications submitted by Estonian institutions and the success rate of projects submitted by Estonian applicants is the second best after the Czech Republic among 13 EU Member States. This means that Estonia is already more successful than it was in the Seventh Framework Programme (in 2007–2014).

The University of Tartu has received the most funding from Horizon 2020, participating in 58 projects with a total funding budget of 19.32 million euros. The Tallinn University of Technology participates in 30 projects with a total funding budget of 11.75 million euros and the Tartu City Government's funding in the SmartEnCity project is 5.41 million euros. Tallinn University has 13 Horizon 2020 projects running in 2017 (4.7 million euros in total) and acts as the coordinator in three of these, including an ERA Chair project and a Twinning project.

2.4. Regular evaluation of Estonian research

The second regular evaluation of Estonian research was carried out in 2017, with focus on the activities of R&D institutions in 2010–2015. Thirty-six applications from 20 institutions were evaluated positively. Compared to the previous regular evaluation, there were several significant changes in 2017. As the quality assessment of doctoral level study programme groups was also conducted in 2017, both external evaluations were coordinated and the former overlaps were minimised. The quality assessment of doctoral study programmes no longer re-reviews the research basis. Secondly, the evaluation was conducted in six areas (instead of the former four) in accordance with the OECD Frascati Manual. Thirdly, the evaluation criteria, indicators and guidelines were specified so that in addition to basic level evaluation results (level sufficient/insufficient) both the R&D institutions and the Ministry of Education and Research can get assessments from the evaluators by individual criteria and indicators on a distinctive scale. For the first time, the impact of research on the society and economy was reviewed in line with the trends in international research evaluation. Fourthly, an attempt was made to simplify the process, with the ETIS data entered to a pre-completed evaluation form.

It was generally found that Estonian researchers are internationally competitive and future-oriented and benefit the society in various ways. There is a very good infrastructure which meets the international standards. The main problem in the Estonian research system is the unstable (project based) funding and dependence on the EU Structural Funds. Other highlighted problems included the long duration and lack of funding of doctoral studies.

Tallinn University was evaluated in three areas: natural sciences, social sciences, and arts and humanities. The University received positive evaluations in all three areas. Experts provided feedback on the influence, sustainability, potential and social impact of research, as well as on doctoral studies. The evaluation was provided on the basis of self-assessment reports and on-site visits.

In all of our areas, good infrastructure, particularly the BFM infrastructure, and an attractive operating environment were found worthy of recognition. The University's databases and archives, particularly the Lotman Archives and the Academic Library were considered highly valuable. The evaluation also highlighted the interdisciplinary approach and the social importance of research areas as well as the contribution of the Tallinn University researchers in shaping national policies: researchers are involved in the development of national strategies, contribute to the improvement of business education, provide input to the development of national curricula, etc. In social sciences, the high international level of research groups, high-level publications, the capability of obtaining international funding, and the good gender and age balance were highlighted and the area was therefore considered to be sustainable with good development potential.

In arts and humanities, the influence of research and development was considered varied, but it was noted that there are some high-level research areas. Research areas include topics of international interest. Issues related to publication were considered to need improvement. The organisation and management of research and development is generally clear and efficient and takes into account the specifics of the area, and the capability to obtain international funding as well as the composition of the personnel indicate good sustainability. Strategic management should be further developed and focus should specified. The number of translations done was considered impressive.

Natural sciences are at a very good level at the University, people are dedicated and enthusiastic. The evaluation highlighted the good grant funding of digital technologies, the diversity of project areas and the links with the education area. The field of ecology was recognised as a good provider of sustainability. Possibilities of improvement were also noted: some research directions lack critical mass and the area is fragmented, research results are published in renowned international journals, but only a few in leading top journals. Strategic management should be improved and research results could be reported better on the web.

It was found that the University's research basis is sufficient for developing doctoral studies. Doctoral studies in social sciences are well-organised and on a high level. Tallinn University has a long-standing tradition in the area of social sciences and thus a good environment has been created for doctoral studies. In arts and humanities, doctoral studies are supported well, but there is no broader network of doctoral students and doctors. Doctoral theses are on a good level in natural sciences. Doctoral students have good conditions for research, weekly seminars are held and they have access to a good library and a strong material base. Both local and international students are satisfied with the studies.

2.5. Opinion of Vice-Rector for Research of the development of the area

In providing an overall opinion, I can rely on the results of the regular evaluation held in 2017, which are described in more detail above. A look from the outside confirms that the Tallinn University researchers are capable and visible in the society: they have created a wealth of new knowledge and many products and services and obtained many doctoral degrees. Although the evaluated period covered the years from 2010 to 2015, the trends in the key indicators of the University Development Plan show that the positive development of RDC has continued also in 2016 and 2017 and the entire research staff of the University deserves recognition.

As the three most important developments in the RDC area in 2017, I would point out the significantly increased participation in and level of applying for competition-based financing, the increased activity in RDC initiatives aimed at the society, and the extensive work in the development of a new career model for academic employees.

Although the volume of baseline research funding has grown, we are still in a situation where success in applying for competition-based financing is the key to the development of the RDC area. I would firstly note that receiving two group grants in the area of governance, law and society and culture, where only four grants were allocated, was a considerable achievement. As a result of the implementation of various measures, more applications are being prepared for international funding programmes and the success of applications has also grown. The fact that we are moving towards the goals established in the University Development Plan is evidenced by the continued increase in the proportion of both interdisciplinary and

international RDC projects. We are a valued partner in international consortiums and also assume the leading role in several important areas.

The Institute of International Social Studies under the leadership of Professor Marge Unt ran the Horizon 2020 project "Social Exclusion of Youth in Europe: Cumulative Disadvantage, Coping Strategies, Effective Policies and Transfer" (EXCEPT) which focused on determining the causes of the social exclusion of young people. The aim of the project was to identify the best practices and to give recommendations for reforms and policy-making which would improve the situation of youth facing the uncertainties of the labour market.

Professor Mart Susi from the School of Governance, Law and Society coordinates the Twinning measure project "Hurmur – mutually raising excellence" in which the Danish Institute for human Rights and the Walther Schücking Institute for International Law in Kiel are partners. The project expands the worldclass research area of human rights in Europe, developing research excellence of human rights at Tallinn University and linking Estonian researchers to global and regional dissemination networks.

Under the leadership of Timo Tobias Ley, Professor of Learning Analytics and Educational Innovation at the School of Educational Sciences, we are carrying out the ERA Chair measure project "Cross-Border Educational Innovation thru Technology-Enhanced Research" (CEITER). In the framework of the project, an international interdisciplinary research group has been established at Tallinn University, focused on evidence-based educational innovation, the creation of next-generation digital learning environments, tools and methods, and the advancement of learning analytics and education-oriented research.

It has been confirmed by the time of writing this report that funding has been allocated for another Tallinn University's ERA Chair project, "Cultural Data Analytics", for which we submitted an application in 2017. The ERA Chair will be opened in cooperation between the BFM, the School of Humanities and the School of Digital Technologies. Until the election of the holder of the Chair, the project is managed by Indrek Ibrus, Professor of Media Innovation at the BFM.

If we use the shares of baseline research funding as the background system (TU's share in the total volume of the baseline funding of universities was 8.6% in 2017), we are more successful than other Estonian universities in applying for funding from the Horizon 2020 measure (as at 2017, more than 12% of the Horizon 2020 funding allocated to Estonian universities).

Increased activity in society-oriented RDC initiatives or the implementation of knowledge-based services and applied projects is evidenced in an increase in the volume of and number of participants in commissioned R&D work set as an indicator in the R&D strategy (1,437,098 euros and 122 employees in 2017 and 952,453 euros and 100 employees in 2016. This development is successfully supported by the Open Academy via several initiatives described above, like the F2F seminar series for researchers, the cooperation festival of universities and enterprises "In the right place at the right time", the Partner Week for potential cooperation partners, the implementation of the business cooperation platform ADAPTER, etc.

At the same time, we can clearly see from our large-scale international RDC projects described above that our research and development activities are more broadly targeted at the needs of the society and aimed at developing practical models and solutions.

A new R&D strategy entered into force in 2017. The biggest objective we established in the strategy is the development of a new career model for academic employees in accordance with amended legal acts. The development of a new career model primarily derived from the need to ensure a flexible ratio of studies and research and to provide different career paths, to formulate clear assessment criteria for

academic employees, focused on the substantive quality and not the quantity of activities, and to develop a career model based on achievements, which would also ensure systemic planning of academic positions in accordance with development plans at the University as a whole. We have discussed the concept of the career model among the University members at various stages of development and by the time of signing the activity report we have received the Senate's approval to the concept and started to prepare specific regulations.

That development process and the viewpoints developed and principles agreed in the course of it have allowed us to provide substantive input in the process of amending the higher education law initiated by the Ministry, thus ensuring that the updated legal acts (including the Universities Act, the Institutions of Professional Higher Education Act and the Organisation of Research and Development Act) provide maximum support in shaping our career model.

III. Studies

3.1. Objectives of the University and the achievement thereof in studies

In order to support the strategic objectives of Tallinn University, carrying principles of activity have been defined. Those principles also form a basis for the sub-objectives of processes related to studies (Table 3).

Principle of activity	The University is interdisciplinary in its activities	The University is international	The University demands excellence and sustainability
Sub-objectives	The development of general competences and practical skills in the study process	Studies in English are a natural part of the study process	Study programmes based on the needs of the society, the labour market and the learners
Expected result	 increased number of study programmes that integrate courses from two or more specialities; improved satisfaction of graduates with the general competences obtained; increased number of theses jointly defended by students of different study programmes. 	 increased proportion of English study programmes; improved satisfaction of students with the quality of studies in English; increased proportion of students who have participated in studies abroad; increased proportion of international students; increased number of international doctoral students. 	 increased proportion of over 25-year-old students on the Bachelor and Master's study levels; increased proportion of graduates compared to admissions.

Table 3. The University's principles of activity as study-related sub-objectives, with the expected results

The achievement of the University's objectives can be assessed on the basis of the implemented activities and key indicators. The methods for calculating the key indicators were established and the initial level was registered in 2015. Table 4 shows the initial level in 2015 and the level of the key indicators in 2016 and 2017.

Table 4. Key indicators in studies in 2015–2017

	Key indicator	2015	2016	2017
Inter-	number of study programmes that integrate courses	23	26	18
disciplinary	from two or more specialities			
approach,	improved satisfaction of graduates with the general	3.59	3.68	4.33
	competences obtained ⁵			
Inter-	proportion of English study programmes	21.4%	25.6%	26.5%
nationalisation	students' satisfaction with the quality of studies in	4.23	-	4.24^{6}
	English			
	proportion of students who have participated in studies	1.9%	1.7%	2.3%
	abroad			
	proportion of international students	7.3%	8.7%	9.2%
	number of international post-doctoral students	4	1	2

⁵ The graduates' satisfaction with the general competences obtained is measured on a five-point scale.

⁶ Due to changes in methods, the satisfaction surveys cannot be directly compared to earlier ones as of 2016.

Demand for	proportion of over 25-year-old students in Bachelor	51.8%	53.2%	55.2%
excellence and	and Master's studies			
sustainability	proportion of graduates compared to admissions	42.6%	47.2%	47.8%

3.2. Studies

Admission

In autumn 2017, 2,350 new students started their studies at Tallinn University. Of these, 1,406 started Bachelor's studies and professional higher education studies, 903 Master's studies and 41 doctoral studies. Compared to 2016, the number of students admitted to level 1 study programmes decreased by 5%, the number of students admitted to level 2 study programmes by 9% and the number of students admitted to level 3 study programmes by 18% (see Figure 4).



Figure 4. Admissions to Tallinn University in 2009-2017

Study programmes and students

The University had 121 study programmes open for admission in 2017. While the number of study programmes decreased by 14 from 2015 to 2016, the number of programmes increased by four from 2016 to 2017. One Bachelor's programme and three Master's programmes were added. Admission was reopened to the Bachelor's study programme of Interdisciplinary Humanities – Artes Liberales, to which there was no admission in the academic year of 2016/2017.

On the Master's level, admission to some study programmes is open every other year (Choreography, Audiovisual Media: Television/ Documentary Film) and the University decided not open some study programmes for admission in 2017 (Educational Science, Organisation of Youth Work).

The following study programmes were opened with changes

- study programme of Contemporary Media, which replaced the former study programme of Television: direction, editing and production;

- study programme of Teacher of Technology Subjects, which replaced the former study programmes of Teacher of Handicraft and Home Economics and Teacher of Craft.

The following new Master's level English study programmes were opened:

- Estonian Studies
- Literature, Visual Culture and Film Studies, which is taught as a joint study programme in cooperation with the Estonian Academy of Arts;
- Film Direction joint study programme taught together with the Hungarian Academy of Drama and Film in Budapest and the Irish Dún Laoghaire Institute of Art, Design and Technology.

The number of students in 2017 was 7,520, which indicates a continued decreasing trend. The decrease has been the greatest on level 1 of higher education (Figure 5).



Figure 5. The number of students at Tallinn University by higher education levels in 2011–2017

International exchange students and Tallinn University students who have participated in studies

abroad

Of the indicators characterising the internationalisation of the University, both the proportion of international students in degree studies and the proportion of students who have participated in studies abroad show a positive trend (Table 5). By the end of the year, international students made up 9.2% of the students at Tallinn University and 2.3% of the students had participated in studies abroad. The number of international exchange students has remained stable in recent years.

Table 5. The number of Tallinn University students who have participated in studies abroad, the students in degree studies and the international exchange students in 2010–2017

		2010	2011	2012	2013	2014	2015	2016	2017
Proportion of TU	total	2.23	2.5	1.96	2.0	2.5	1.94	1.70	2.31
students who have	PHE				0.63	1.59	-	0,90	1.23
participated in	BA	2.3	2.5	1.97	2.27	2.43	1.84	1,78	2.18
studies abroad (%)	MA	1.6	1.9	1.31	1.83	1.84	2.11	1,53	2.23
	PhD	6.7	6.7	1.86	0.81	8.99	4.4	2,75	6.01
Proportion of	total	1.78	2.2	2.6	3.8	5.5	7.29	8,67	9.15
international	PHE			0.42	0.73	0.43	0.23	1.12	0.25
	BA	0.8	1.2	2.79	4.2	6.14	7.78	9.22	9.59

students in degree	MA	3.8	2.3	2.1	3.55	4.73	6.72	8.36	9.25
studies (%)	PhD	6.6	7.7	6.6	8.1	10.8	12.4	13.2	13.8
Total number of intern	ational		207	302	318	307	366	357	354
exchange students									

Graduation

In 2017, 1,802 students, including 25 doctoral students, graduated from Tallinn University. In 2016, the number of graduates from Tallinn University was 1,884 and in 2015 it was 1,910. Compared to 2016, the graduation efficiency⁷ has somewhat grown (see Figures 6 and 7), as well as the number of graduates from doctoral studies (20 students completed doctoral studies at Tallinn University in 2016).



Figure 6. Change in graduation efficiency at Tallinn University by study levels in 2015–2017

By Schools, the proportion of graduates of admissions shows a positive trend at the BFM, the SDT, the SGLS and the SNSH. The 2016 growth at the SH and the SES has turned into a decline this year, but the proportion of graduates at the SES is still higher than the University average (see Figure 7). The proportion of graduates is significantly lower than the University average at the SH and also at SGLS and the SNSH.

⁷ The proportion of graduates with nominal duration +1 year (+2 in doctoral and integrated studies) of the number of admitted students (person-based) as at 10 November.



Figure 7. Change in graduation efficiency by academic units in 2015–2017

3.2.1. Overview of study programme development

The Tallinn University Statute of Study Programme (the SSP) regulates the structure and the conditions of opening, altering, developing and closing of the study programmes of degree studies. The SSP amendments approved in 2015 were for the first time applied in the study programme versions of the 2016/2017 academic year. The most important changes in levels 1 and 2 included the implementation of University-wide courses (including the general course, the ELU project and the area-specific course supporting the development of general competences), the obligation to learn area-specific or speciality-specific foreign language, the integration of digital competences into speciality courses, and supporting international study experience.

In 2017, the implementation of the changes was analysed through internal assessment of study programmes and via topical roundtables (ELU, the course supporting the development of general competences) and the results were used for making changes in the study programme versions of the 2017/2018 academic year.

In 2017, changes were made in the SSP, regulating the conditions of starting and ending studies. As of the 2017/2018 academic year, it is presumed that a candidate for the Estonian language based Master's study programme are proficient in the foreign language necessary for achieving the learning outcomes of the study programme at least on level A2 of the Common European Framework of Reference, in order to ensure that it is possible for the student to complete the study programme within the nominal duration. In professional higher education and Bachelor's study programmes, students are no longer allowed to take the thesis and the final examination in parallel, but have to choose the most appropriate option. The main reasons for the change were primarily related to ensuring the quality of studies.

In 2017, Tallinn University passed the quality assessment of several study programme groups, which is an important input in the development of study programmes (Table 6). The assessment results are positive from the University's point of view.

Table 6. Study programme groups in the 2017 quality assessment

Study programme group	Next assessment	Term for fulfilling secondary conditions
Journalism and information		
communication (levels 1 and 2)	In 7 years	
Humanities (level 3)	In 7 years	
Languages and cultures (level 3)	In 7 years	
Arts (levels 1 and 2)	In 7 years	
Mathematics (level 1)	In 7 years	
Music and theatre (levels 1 and 2)	In 7 years with secondary	2 February 2020
	conditions	
Healthcare (level 2)	In 7 years	

In addition to the assessments conducted, the assessment committee made decisions on the fulfilment of secondary conditions with regard to three study programme groups.

- The secondary condition established in the assessment of the study programme group of law was considered fulfilled and the next assessment will be held in 7 years.
- The secondary condition of the study programme group of social sciences was not considered fulfilled and the next assessment will be held in 5 years. The main deficiencies highlighted included the lack of qualified personnel in the study programmes of Youth Work and Social Pedagogics and Child Protection as well as the unclear connection of the study programme of Health Manager with labour market needs.
- With regard to the fulfilment of the secondary conditions of social sciences, the University's explanations were not considered sufficient and the University was asked to present additional data concerning the qualification of the lecturers of the study programme of International Relations by the beginning of the 2018/2019 academic year.

3.2.2. Overview of ELU (innovation integrating specialities)

ELU is a novel course in which students of different specialities in cooperation with supervisors prepare a project on a topic of interest to them, independently choosing the appropriate methods for realising their ideas. ELU is a project carried out as group work, with clearly formulated objectives, pre-defined terms and an actual result. A group is formed of 6 to 8 students from at least three specialities. The volume of the course is 6 ECP and evaluation is done by pass-fail assessment.

The completion of ELU is mandatory for level 1 and 2 students matriculated as of the 2016/2017 academic year. In 2017, 119 ELU projects were carried out. In one semester, a little over 70 lecturers and about 650 students were involved in instruction, and about 25 of them were exchange students (from the Estonian Academy of Arts, the Tallinn Health Care College, the Tartu Health Care College, the University of Tartu and the Erasmus+ partner universities).

Learning to implement projects is important, as work organisation is today ever more frequently projectbased in various areas of life: concrete objectives have to be achieved and non-standard tasks solved often in teamwork by a pre-defined term and with limited resources. Some examples of the 2017 projects.

- "The Hybrid War" (spring 2017). The aim of the project was to discuss the possibilities of a hybrid war occurring in Estonia, based on a theoretical background, similar situations in the world and experience from different fields. Project participants included students from Tallinn University as well as international students from ten different countries, who studied political science, communication, information technology and social sciences. The project was supervised by security expert Professor Bradley Thayer. In the course of the project, three analyses were carried out, focussed on the hybrid war from the viewpoints of cyber security, internal security and general security.

- "Green Shakespeare" (autumn 2017). The project brought together 20 students from four study programmes and five countries. The aim was to study nature and natural phenomena and the related vocabulary in the works of the English 16th-17th century author William Shakespeare. Shakespeare introduced nearly 1,700 new words to the language. ELU students explored the life of plants thus named also outside text: in the forest, home garden and botanical gardens, art, photography and cookery as well as in different cultures (in Estonian, Spanish, Italian, Japanese, Turkish and Russian culture and nature). That was done from different angles, creating associations between culture and science, the past and the present. Three blogs were created as a result.
- "Microscopic Life" (spring 2017). An interdisciplinary project carried out in cooperation between students of molecular biochemistry and ecology and students of textile design from the Estonian Academy of Arts, in the course of which silk protein obtained from silkworms was used for making textile materials, silk sculptures and a night lamp. An presentational video clip was made as well as photos of various design objects were. This ELU project was used as an input for a Master's thesis of an EAA student.

The supervision of ELU projects is a challenge also for lecturers who constantly improve their teachingrelated competences. In 2017, the ELU supervisors visited the interdisciplinary study programmes and projects of foreign universities in order to gain and share experience which would help supervisors to implement their ELU projects and to apply problem-specific study methods also in everyday work. Supervisors visited the universities of Roskilde, Aalto, Warwick, Utrecht and Amsterdam.

3.2.3. Study process development

Teacher Education Development Plan and the application of the changed approach to teaching and

learning at Tallinn University

In autumn 2017, the Teacher Education Council discussed the teacher education development plan, as a result of which the Senate on 18 December 2017 approved the Tallinn University Teacher Education Development Plan for 2018–2020. The Teacher Education Council found that it is important to formulate a common vision and understanding for the development of teacher education at Tallinn University. As teacher education is provided at five Schools and one regional College, it is extremely important for all the parties to have a uniform understanding of their role and the development direction of teacher education. Without a shared vision, development aspirations will not achieve their full potential. The teacher education scene has changed and this requires the common vision and development plan to reflect the developments in the society. These changes and developments include the increasing diversity, technological developments and the increasing scarcity of teachers. The decision of the quality assessment of the study programme group of teacher education and educational sciences made on 10 March 2017 highlighted critical issues and established secondary conditions which have to be addressed in the subsequent two years. The Teacher Education Development Plan takes into account the secondary conditions specified in that document and proposes directions for development.

On the basis of the problems of the area and the objectives of the Estonian Lifelong Learning Strategy and the Tallinn University Development Plan 2020 as well as the results of the quality assessment of the study programme group of teacher education and educational sciences, the Teacher Education Development Plan establishes the following objectives:

1) Stronger cooperation between units and clear work distribution in the area of teacher education;

2) Ensuring that graduates from teacher education (including continuing education) possess the student-centred teaching competences which support the changing approach to teaching and learning;

3) Stronger research culture and the research-based development of teacher education.

Feedback system for degree students

In 2017, a new feedback system was introduced for the first time, created on the basis of the following principles:

- A research-based approach: focus on the reliability of the measurement indicators used, and input for research related to the University.
- Changes over time: the structure allows monitoring changes over time both in factors related to learners and by lecturers.
- A more individual approach: individual automated feedback to both learners and lecturers.
- Information materials: information materials concerning the topics addressed in feedback, and a possibility to interpret one's results and learning experience on the basis of research-based information.
- An input for development: study programme based reports and a possibility to monitor the development of learners and their opinions of the study environment where information is in accordance with the University's development objectives.

Course feedback was launched in January 2017 (for the 2016 autumn semester courses) and additional modules in spring (feedback related to the organisation of studies, feedback related to studies and feedback from graduates). Feedback from applicants was launched in autumn 2017. Changes were simultaneously made in reporting and an option was created for students to view their given feedback and an option for lecturers to in turn provide feedback to students, and reports for heads of studies and study programme curators were created. In autumn 2017, the Tallinn University Procedure for Organisation of Feedback Surveys and Analyses in Degree Studies was repealed due to its substantive outdatedness. The new procedure will be established in 2018.

Changes in the organisation of studies

The underlying document which regulates the organisation of studies – the Study Regulations – were amended twice in 2017. The most significant changes made in 2017 with regard to the organisation of studies were as follows:

- The principles of compensating study costs were changed for students matriculated as of the 2017/2018 academic year. The partial compensation of study costs is required starting from the beginning of the second semester, if the student has not completed the volume prescribed under the study programme. The price of one unearned credit point is 30 euros (previously 10 euros). It was also decided that the partial compensation of study costs is not required, if the study load of the student is changed when the student continues studies on new terms, and the partial compensation of study costs is not required for the volume of the thesis if the student has not completed the study programme within the nominal duration of the study programme.
- In order to support the transfer to international studies, the courses completed abroad are prioritised in calculating the volume of elective course and elective course modules, thus creating more favourable terms for students in completing their study programmes. At the same time, the Academic Affairs Office piloted the course Studying Abroad, which supports students during their studies abroad. This will not, however, be continued in the format of a course instead, students will be offered supportive seminars so as not to create additional obligations for students to complete the course.
- Application and admission regulations were established for international exchange students who come to Tallinn University for practical training; these processes were previously not regulated with legal acts.

- More attention than previously was paid to the counselling of students with special needs and to updating the related regulations. Pursuant to the Study Regulations, lecturers now have the right to offer adjustments to students with special needs with advice and support from the counsellor of students with special needs. The Requirements and Procedures for Admission contain a procedure and requirements for the admission of students with special needs.
- The regulations concerning theses and final examinations were updated. Theses can now be prepared and defended as group work and failed theses (final examinations) can now be defended (taken) again for one time without losing student status.
- Large-scale amendments were made in the procedure for filing appeals related to theses and a separate procedure was established for handling suspicions of plagiarism with regard to theses.

3.3. Effects of the external environment

3.3.1. International factors

It can be said on the basis of studies by the University of Oxford⁸ that access to higher education is constantly expanding, while on the other hand demand is growing for high-level education which the state is not always able to ensure for everyone. The emigration of educated people is a problem in many countries. The largest numbers of students go to study elsewhere from Asia. The cooperation of the European Union countries has encouraged the ASEAN countries to establish their regional common higher education network in order to support cooperation and the exchange of students between universities. The objective is to offer international experience to students close to their home country, in order to get qualified employees who return to their home country after studies and contribute to its development. Similar developments can be observed in Latin America. Internal mobility in Africa is still modest, people mostly go to study outside Africa, particularly Nigeria. It can be said that the nature of mobility is changing. The former east-west mobility has been replaced by multi-directional mobility. The number of both sending and hosting countries is increasing.

In connection with the massive expansion of higher education, ensuring quality is becoming increasingly important. This continues to be a problem in many countries in the world, but is also being increasingly addressed. Pressure is increasing from students to obtain an education which provides the necessary preparation for entering the labour market and that in turn forces universities to review the learning outcomes of their study programmes and cooperate more closely with employers. A well-known trademark may no longer be sufficient, as students are looking for universities with the best price and quality ratio.

Internationalisation is a tool for increasing the visibility and influence of countries. The Government of Japan, for instance, puts pressure on universities to open more English language based study programmes in order to increase openness, attract international students and highly qualified lecturers and expand international research cooperation, thereby increasing the academic level and international visibility of universities and rise to a high place in the international ranking lists of universities. Many countries apply positive discrimination to universities. This means the purposeful preferential development of strong universities. For instance, the nine elite universities in the Chinese C9 League (the so-called Chinese Ivy League) receive 10% if China's higher education and research budget. In return they provide 20% of the country's research publications and 30% of all the quotations. These universities are at high places in

⁸ <u>University of Oxford, International Trends in Higher Education 2015; University of Oxford, International Trends in Higher Education 2016-2017</u>

international ranking lists. The preferential development of selected universities is also practiced in several other countries, such as Australia, South Korea, Germany, Canada and Russia.

Over the past twenty years, Western universities have opened many affiliates in foreign countries. Many of these have thereafter been closed both for economic and political reasons. Academic freedom is also an important factor. Now new players from developing countries are coming as a second wave to replace the Western universities. Chinese universities are internationalising in several directions, with special focus on Africa, and Russia is opening affiliates in the former Soviet Union republics.

English is the *lingua franca* of international higher education. The number of English language based study programmes and courses is constantly growing. In 2014, European universities taught about 8,100 courses in English (2001: 725 courses), most of these at Master's and doctoral level. The reasons for creating English study programmes vary from country to country. The universities of Eastern Europe and the Baltic countries see that as an opportunity to compensate a decrease in their student numbers by increasing the number of international students. However, English study programmes may not necessarily be a tool for making a university more international. For instance, 97% of the students studying under the English study programmes of Lithuanian universities are local (90% in Romania). International students prefer to pick well-trodden paths, i.e. choose well-known universities and countries.

The development of information technology has brought the terms of blended learning, flipped classroom and virtual learning communities to supplement the traditional forms of learning and teaching. Many universities offer free of charge online courses – MOOCs, but the initial great enthusiasm is now being replaced by a somewhat sceptic view. A lot of people register for MOOCs, but only a modest number complete the courses. The questions of awarding credit points, charging for credit points, the quality and the comparability of diplomas with diplomas received in traditional studies are still an issue.

Tallinn University has followed international trends. As of the 2016/2017 academic year, the Bachelor's and Master's study programmes of the University have to include at least one course in a foreign language in order to offer students an international experience. The number of English study programmes has been increased (three new English study programmes were opened in 2017) and the proportion of international students of the total number of students has grown (7.29% in 2015 and 9.15% in 2017). In 2017, large-scale international projects supporting mobility ended very successfully (Erasmus Mundus projects HUMERIA and HERMES) as a result of which international joint study programmes have been developed (Tallinn University currently participates in four joint study programmes). With regard to the development of MOOCs, Tallinn University started the creation of two new MOOCs in 2017, one for international use and one for the Estonian society.

3.3.2. Internal Estonian factors

Changes in the number and structure of students

As of 2010, the number of upper secondary school graduates who continue studies in Estonian higher education institutions has decreased (2010: 62%, 2016: 52%). The European 2020 and the Estonian 2020 objective is to have at least 40% of people aged 30 to 34 years obtain a level 3 education. Estonia's respective indicator was 45.4% in 2016 (the European average 39.1%). In the 2016/2017 academic year, higher education could be obtained at 21 educational institutions in Estonia (20 in 2017/2018). Compared to the academic year of 2008/2009, the number of higher education institutions has decreased by 14. In the 2016/2017 academic year, a total of 47,794 students studied at a higher education level, 79% of them in tuition-free study places (in 2017/2018: 46,154 students 80% tuition-free), which is about 30% less than ten years ago.

The proportion of adult learners and international students has grown among students. Over ten years, the proportion of students studying informatics and technology specialities has increased and the proportion of those studying social sciences and business has decreased. A large part of the students (76%) work during their studies. Interest in the teacher's profession is still small, although the teachers' salary rise has been the fastest among the OECD countries. According to OECD, the proportion of students taking up studies in the field of education in Estonia (6%) is smaller than the average among the OECD countries (9%). In 2017, universities reviewed the admission requirements for teacher specialities in order to attract more motivated students.⁹

The number of students has been considerably reduced because of the higher education reform of 2013. In recent years, the proportion of over 25-year-olds has increased among candidates (2015: 51.81%, 2017: 55.16%). An increase in the proportion of older and working students has a direct impact on the organisation of studies (the time and frequency of contact learning) and the choice of study methods. For instance, several study programmes have replaced regular learning with cyclical learning. Finding motivated learners has become important in the admission process, both among Estonian and foreign candidates. In order to find more motivated and informed candidates, an academic test was mandatory for admission to all the study programmes in the study programme group of teacher education and educational sciences. Other parts of the admission examinations were also changed in order to find the best and most suitable candidates for the profession.

Decrease in the number of study programmes

Similarly to the decrease in the number of students and educational institutions, the number of study programmes has also been reduced in Estonia. In the academic year of 2011/2012 the average of 90.3 students studied under one study programme, but in the academic year of 2016/2017 the figure was 65.7 (27% smaller). In the academic year of 2016/2017, 10% of all the students studied under English language based study programmes (18% at the Master's level)¹⁰.

Increase in the number of international students

In the academic year of 2016/2017, Estonia had 3,917 (2017/2018: 4,394) international students, which is four times more than ten years ago and nearly 2,000 more than the goal established in the Internationalisation Strategy of Estonian Higher Education. In the academic year of 2016/2017, international students made up 8.2% of all the students (higher education programme objective for 2020: 10%). Most of the international students study at public universities and the proportion is the highest in doctoral studies (2016/2017: 14.2%). The most popular fields are business, administration and law. The number of international students is the smallest in the area of services and education. The proportion of international students who have completed their studies has increased among all the graduates and reached the same level as the respective figure for all the students in the academic year of 2015/2016 – international graduates made up 6.9% of all the graduates and the proportion of international students. However, the National Audit Office's 2015 overview of the national migration policy choices indicates a great unused potential: although the number of international students coming to study in Estonia has increased, only a fifth of them stay to find permanent employment here after completing their studies.¹¹

Student mobility

The number of Estonian students' mobility scholarships across all the students was stable in 2011-2014 (3,3-3,6%). The methodology changes in 2015 and records are now kept on the basis of the students'

⁹ Europe 2020; <u>Estonia 2020</u>; HaridusSilm; https://www.hm.ee/sites/default/files/htmaastaanaluus2017_kokkuvote.pdf https://www.hm.ee/sites/default/files/eag2017 ee 11 09.pdf; Vilistlaste uuring 2015

¹⁰ HaridusSilm https://www.hm.ee/sites/default/files/htmaastaanaluus2017 kokkuvote.pdf

¹¹ HaridusSilm https://www.hm.ee/sites/default/files/htmaastaanaluus2017_kokkuvote.pdf

results recorded in the data of the Estonian Education Information System (EHIS) instead of the Archimedes mobility scholarship based records. The figure has therefore considerably dropped (2015: 1.4%, 2016: 1.8%). The mobility of the Tallinn University students has somewhat increased (2015: 1.9%, 2017: 2.31).

An interim assessment of the implementation of the Erasmus+ programme was conducted in the EU countries in 2017. In Estonia, the interim assessment was carried out by KPMG Baltics OÜ, commissioned by the Ministry of Education and Research. The modest rate of those participating in study mobility was highlighted as the biggest problem. The number of participants in study mobility in higher education did grow by 14% in 2014–2016, but the increase has mainly come from the study mobility of lecturers – students' study mobility has not grown. There are various reasons for this: a decrease in the total number of students, the organisation of studies at universities (the transfer of credit points is complicated and mobility is likely to prolong the studies), low awareness and motivation to go to study abroad, as well as social and economic restrictions. At the level of higher education institutions, the impact of the programme may increase somewhat thanks to the performance based funding system introduced in 2017, under which one of the six components is related to the students' mobility and another with the proportion of international students.¹²

Agreements between universities

The most concrete impact on the organisation of studiers in 2017 derived from a proposal of Universities Estonia, aimed at harmonising the universities' procedure for the partial compensation of study costs. During the year, several universities, including Tallinn University, changed the amounts of the partial compensation of study costs and the procedure for collecting the compensation.

The standardisation work group of Universities Estonia gave a chance to compare the organisation of studies at different universities and to use the best practices. For instance, as a result of that Tallinn University allows the re-defending and re-taking of failed theses and final examinations as of 2017.

3.4. Opinion of the Vice-Rector for Academic Affairs of the development of the area

In 2017, the biggest challenge was the implementation of the changes established by the Statute of Study Programme: altering the structure of study programmes, adding additional conditions and developing the concept of the new ELU course. The launch of ELU projects for all the students at levels 1 and 2 of higher education has entailed various tasks starting from finding technical solutions to involving lecturers. In the future, ELU projects would benefit from closer cooperation with other higher education institutions and a more uniform quality across the projects.

The re-opening of student feedback in 2017 can be considered successful – the input in the study information system environment allows us to view learning and teaching at the University as well as the related aspects as a diverse whole. The aim of the feedback system is to increase the number of respondents and to apply the results systematically in the University's activities.

The good quality of study programmes and the fulfilment of the established objectives was recognised in the quality assessment of study programmes. However, there are some study programme groups where it is important to find solutions to the problems highlighted by the assessors in the coming years, in order to ensure that these study programmes are sustainable and meet the expectations of the society.

¹² Assessment Report, https://www.hm.ee/sites/default/files/htmaastaanaluus2017_kokkuvote.pdf

Changes in the structure and number of students (an increase in the proportion of international and older students, an increase in the number of working students) has a significant effect on the organisation of studies at the University, the students' expectations with regard to the support services offered, and the teaching methods. Such changes obligate the University to analyse its possibilities and find the best solutions for the future.

In 2018, the biggest tasks in the area of studies arise from the planned amendments of the legal acts regulating education, the conclusion of new contracts under public law and the preparations being made for institutional accreditation.

In conclusion, we can say that with its activities in 2017 the University is successfully moving towards the established objectives.
IV. Management, membership and finances

4.1. Objectives of the University in management, membership and finances

In order to support the strategic objectives of Tallinn University, carrying principles of activity have been defined. Those principles also form a basis for the sub-objectives of processes related to management, membership and finances (Table 7).

Principle of	The University is	The University is	The University demands	
activity	interdisciplinary in its activities	international	excellence and sustainability	
Sub-objectives	- Support for the interdisciplinary approach is reflected in financing principles and work organisation	 University members actively participate in the international research and study community. The University's information and work environment is bilingual. 	 The University has a uniform identity and motivated employees. The University is financially sustainable. 	
Expected result	- Satisfaction of academic employees with work organisation which supports interdisciplinary activities	 Proportion of international academic employees and academic employees who have worked abroad for longer periods Satisfaction of employees with the English language based information environment at the University 	 Satisfaction of employees with management and work conditions Satisfaction of students with the quality and organisation of studies The University's income base per employee 	

Table 7. The University's principles of activity in management as sub-objectives, with the expected results

The achievement of the University's objectives can be assessed on the basis of the implemented activities and key indicators. The methods for calculating the key indicators were established and the initial level was registered in 2015. Table 8 shows the initial level in 2015 and the level of the key indicators in 2016 and 2017.

Table 8. Key indicators in 2015–2017

	Key indicator	2015	2016	2017
Interdisciplinary approach	Satisfaction of academic employees with work organisation which supports interdisciplinary activities ¹³	3.7	-	3.99
Inter- nationalisation	Inter- nationalisationProportion ofofinternational academicacademic employeesnationalisationemployees and academicacademic employeeswho have worked abroad for longer periods		11.2%	10,7%
	Satisfaction of employees with the English language based information environment at the University	4.6	-	4,27
Demand for	Satisfaction of employees with management and work conditions	4.6	-	5.01

¹³ The satisfaction of employees was measured on a seven-point scale.

excellence and sustainability	Satisfaction of students with the quality and organisation of studies ¹⁴				4.6	-	4.39
	The University's employee	income	base	per	42,504 €	44,324 €	45,708 €

4.2. Employees and personnel work

In 2017, Tallinn University had 393.26 (full-time equivalent) academic employees, which is 3.9% less than in 2016. The distribution of employees by academic positions is described in Table 9.

		2015	2016	2017	
	Total	419.99	409.15	393.26	
	Early-stage researcher	20.2	16.5	18.9	
Number of	Teacher	18.68	18.3	15.45	
academic employees (full- time equivalent)	Teaching assistant	1.91	1.91	-	
	Researcher	31.8	23.05	32.52	
	Lecturer	174.5	162.56	147.66	
	Senior research fellow	47.85	55.87	55.28	
	Associate professor	72.15	77.9	71.3	
	Research professor	5.71	3.4	3.8	
	Professor	47.19	49.65	48.35	

Table 9. The number of academic employees (full-time equivalent) by positions in 2015–2017

In 2017, the proportion of academic employees with a doctoral degree or a corresponding qualification grew from the 54% in 2016 to 60% at Tallinn University.

The number of non-academic employees (full-time equivalent) was 436.94 in 2017, which is 2% more than in 2016. Of all the non-academic employees, 41% works in academic units, 41% in support units and 18% at the Academic Library. Compared to 2016, the number of non-academic employees working in academic units has in full-time equivalent increased by 9, which is 5% more than in the previous year. The number of non-academic employees has grown by 4 in support units and decreased by 5 at the Academic Library.

4.2.1. Filling academic positions

In 2017, four competitions were announced for 115 positions, including 13 professor, 1 research professor, 36 associate professor, 45 lecturer, 8 researcher, 10 teacher and 2 early-stage researcher positions. A follow-up competition was held for one position (accounted for as a separate competition).

In total, there were 175 candidates for all the positions, of whom 131 candidates who met the formal and professional requirements for academic positions were allowed to take part in the competition. The main reason for not meeting the requirements included non-conformity with the research publications requirement, the lack of experience in participating in international R&D projects and the lack of the required scientific degree. Five candidates withdrew their application during the competition.

¹⁴ The satisfaction of students was measured on a five-point scale. The feedback system was developed in 2016 and the methodology changed and therefore the 2017 data are not directly comparable with the 2015 data and the data for 2016 are missing.

As a result of the competitions, 90 positions were filled. The competition for 25 positions failed: in the case of 8 positions no candidates proved suitable, for 6 positions no applications were received by the established term and in the case of another 6 positions none of the candidates who submitted an application met the professional requirements. Three candidates who had submitted an application withdrew their candidacy during the competition and one candidate decided not to accept the position after having been selected.



Figure 8. Competition for academic positions in 2013-2017

Number of candidates
Number of candidates allowed to the competition
Number of positions announced

The selection result of one lecturer's position was disputed after the selection on the basis of the allegation that the competition terms and conditions or the procedure for conducting the competition had been violated and the violation affected the selection results. In accordance with the Employment Relations Rules, the appeal was handled by the Rector who decided to satisfy the appeal and annulled the selection result.

The average number of candidate for positions¹⁵ was still very small -1.14 across all the positions. The average candidacy rate is raised by international competitions – more candidates take part in competitions where the position does not require Estonian language skills. Unfortunately, international competitions also increase the number of those candidates who are not allowed to take part in a competition. In 2013, 90% of the applicants were allowed to take part, but in 2017 the figure was only 75%.

4.2.2. Labour turnover at the University

In 2017, the total labour turnover at the University was 12.6%, of which 5.6% was voluntary turnover. The total turnover of academic personnel was 8.7% (voluntary turnover 1.7%). The total turnover of non-

¹⁵ Candidates who meet the requirements for the position and are allowed to take part in the competition under the Rector's order.

academic personnel was 16.7%, of which 9.8% was voluntary turnover. Compared to 2016, voluntary turnover has increased somewhat in all employee categories (in 2016, the voluntary turnover of all personnel was 3.1%, the voluntary turnover of academic personnel 0.4% and the voluntary turnover of non-academic personnel 6.2%).

4.2.3. Remuneration of employees

Personnel expenses made up 59.4% of the University's expenses in 2017. The average basic salary of academic employees was 1,620.78 euros in 2017, which is 4.6% more than in 2016. The share of variable salary of the total salary was 5.7%, similar to the 2016 level.

In 2017, the University started paying employees on leave on the basis of a certificate of incapacity for work due to illness or injury a sickness benefit of 100% of the employee-s average salary from the second to the eighth calendar day of the sickness leave. Employers are obligated to pay a sickness benefit of 70% from the fourth to the eighth calendar day. The University also started offering employees one-time monetary support in the case of unexpected life events, such as the death of a close person and other accidents.

4.2.4. Personnel development

The largest training areas in personnel development were related to the development of English language skills, computer skills and general skills (e.g. conducting assessment interviews, promotion of health at work, grammar, etc.). English language level and further training courses are a part of the University's activities which support internationalisation and level courses are held for employees on levels A2.2 to C1.1. Upon the recommendation of the occupational healthcare doctor, academic employees were also offered speech and voice training. The number of courses aimed at developing the teaching and supervision skills of academic employees is small, the content of the courses has been prepared and the courses have been conducted by the Centre for Innovation in Education to which the Personnel Office has forwarded the training needs of units. In the area of management, seminars were held for the members of the Rector's Office and the heads of academic units, the members of the Senate, the employees of support units, and administrative heads. For the first time, training courses in the area of data protection, copyrights and intellectual property and the prevention of corruption were provided.

4.2.5. Employee mobility

The Erasmus+ programme was available for supporting employee mobility. In 2017, a total of 144 mobility assignments took place, of which 27 were lecturer exchanges for the purpose of conducting studies at a partner higher education institution and 177 employee exchanges for the purpose of participating in training. Fifty-five of the employee exchanges were related to an ELU project. The average length of a lecturer exchange was 7.3 days and the average support amount was 1,100 euros. The average length of an employee exchange was 5.5 days and the average support amount was 975 euros.

4.2.6 Effects of the external environment

Personnel work at the University is above all influenced by legislative and economic factors in Estonia. The following significant developments of 2017 can be highlighted.

The Ministry of Education and Research presented the intention to update the law on higher education¹⁶ with the aim of improving and simplifying the legal acts regulating the area to higher education institutions for their opinion. Among other things, the plans include the harmonisation and improvement of the regulation of teaching staff and research employees, in order to ensure stable employment relations with promotion possibilities and to give higher education institutions and research institutions more freedom in developing an appropriate career model for their academic employees, which would take into account the specifics of the field. In parallel with the development of the draft act, the University has started developing a career model for academic employees, upon the completion of which the University's regulation of the employment relations of academic employees will also be amended (principles of filling positions, attestation, conferring emeritus status, professional requirements, etc.).

The competitiveness of remuneration in the labour market. One of the remuneration principles at the University is to take into account the salary level of the position in the salary market, if possible. In order to obtain an overview of the salary market, the University exchanges salary data with other public universities in Estonia (reference data on remuneration of academic positions) and takes part in the salary surveys conducted by Fontes (comparison of the salary level of non-academic positions with the salary market in Tallinn and Harju County). According to the 2016 salary analysis of public universities, the average salary at universities has risen for all the positions and the salary rise was the biggest at Tallinn University. With regard to most positions though, Tallinn University lags behind the Tallinn University of Technology and the University of Tartu (we are leaders with regard to the positions of teacher and early-stage researcher, while gap is the greatest with regard to the positions of research professor and professor). From the positive side, the proportion of variable salary is the smallest compared to other universities, i.e. remuneration is more stable.

From the 2017 Fontes analysis we can draw a general conclusion that the University still has not reached the objective to pay the average salary of the salary market in non-academic positions and is generally at quartile level instead of median level. Although there are a few odd positions where the basic salary is at the market average or even higher level, the competitiveness of salaries tends to be higher in less complicated work positions and decreases in more complicated positions and this has a significant effect of filling the positions with suitable employees.

In addition to the salary market, increasing the national lower limit of the salary of basic school and upper secondary school teachers has also influenced and will continue to influence the remuneration of academic employees. Increasing the teachers' salary is an educational policy priority of the government coalition and the national lower limit of teachers' salary has been regularly raised in recent years. On 1 September 2017, the limit was raised to 1,050 euros and from 1 September 2018 it will be raised to 1,150 euros. The lower limit of the salary of the lowest academic position at the University (teacher, early-stage researcher, assistant) is 900 euros.

4.3. Marketing and image development

In 2017, marketing and communication activities supported the following objectives related to degree studies, open degree studies and continuing education at Tallinn University: increased number of students entering Master's studies (among both local and international candidates), increased number of international students, increased competition in Master's level study programmes, higher state examination results of students entering Bachelor's studies, increased number of learners in open studies and increased volume of continuing education and knowledge-based services.

In order to achieve objectives, the webpages of all the study programmes were updated in 2017 and in addition to a programme description the pages now list the main lecturers, possible career paths, well-

¹⁶ https://haridusseadustik.wordpress.com/korgharidusseadustik/

known graduates and provide other supporting information. The University campus virtual tour which was completed in 2016 and won the Design of the Year in Education award was also updated, the initial task for the new external web was prepared and a procurement was held (the new external web was launched in April 2018), and campaigns and digital advertising was organised in Estonia and in six target markets (Finland, Russia, Turkey, Ukraine, Georgia and Latvia; for BFM also Lithuania) throughout the year. In marketing communication, nearly a hundred articles were published in the media concerning the University's specialities, researchers, students and graduates, and the University's researchers and research topics were introduced via the short video clips created in the framework of "One-minute Lectures" and "A Scientist Knows" in cooperation with the Estonian Public Broadcasting.

As a result of the activities, the number of admissions increased by 31% compared to 2016, competition in Master's study programmes remained at the same level as in the previous year, and the state examination results of the 2017 candidates were 6 points higher than in 2016. Unfortunately, the proportion of admissions to Master's studies dropped by 5% compared to 2016 and the number of persons concluding an open studies contract also decreased (2015: 32.9%, 2016: 16.8%). The reason for the latter is the termination of the popular "A Year at the University" study programmes in 2017.

In 2017, communication activities supported the following objectives related to image development and membership at Tallinn University: the University is visible among target groups and the public media environment (above all with regard to the RDC achievement and the teacher education and education innovation topics), the prominence of the University has grown and its image has improved compared to competitors, the satisfaction of the University members (including students) with the movement of information and the usability of internal information channels has increased, the satisfaction of international employees with the English language based information environment at the University has increased, the sense of unity and motivation of the members have grown and the active part of the graduates of the University has grown.

In order to achieve its objectives, the University news were mediated and articles were written in mainstream media, popular science communication formats "One-minute Lectures" and "A Scientist Knows" were disseminated in cooperation with the Estonian Public Broadcasting, the efficiency of internal communication was improved in weekly information letters, cooperation between units in implementing internal communication was improved, activities supporting the assimilation of new employees were organised, a crisis communication plan was prepared, the internal web was further developed (including the English part), and the University's Style Handbook and presentation materials were updated. As a result of the activities, the satisfaction of the University employees with information movement is good and the University is visible in the public media, identified with positive tonality.

4.4. Financial activities

The University's 2017 budget was 36.5 million euros, which is 4% more than in 2016. The budget of academic units, which includes six Schools and two Colleges, made up 57% of the total volume of the 2017 budget. The budget of support units forms 29% of the budget and includes the units providing central support services as well as other units, such as the Tallinn University Press, the Confucius Institute, the Open Academy, the Conference Centre, the Archaeological Research Collection and the Estonian Pedagogical Archives and Museum. The budget of the Academic Library forms 5% of the entire University budget. The capital budget forms 4% of the total budget, because the budget included plans for a loan for reconstructing the URSA building at Narva Road 25/27/29. The loan was not taken, as the experts thought it more expedient to demolish the old building and build a new one to meet today's study requirements. The new study building will in turn ensure quality in carrying out the activities in the University's area of responsibility. The students and the University funds make up 4% of the budget. The

distribution proportions of the budget are the same as in the previous year, although the volume of income has grown.

Table 10. Structure of the 2017 budget of Tallinn University

	€	%
Academic units	20,842,059	57.1
Support units and university-wide activities	10,703,299	29.3
Academic Library	1,775,881	4.9
Capital budget	1,467,804	4.0
Funds	1,179,245	3.2
Rector's Office	399,724	1.1
Students	144,351	0.4

The University's revenue is made up of activity support allocated by the Ministry of Education and Research, study income outside the activity support, baseline research funding income, RDC income, other income and capital budget income.

Income from the activity support allocated under the contract under public law concluded between the University and the Ministry of Education and Research makes up 54% of the University's revenue budget (a decrease of 3% from the previous period). In accordance with the financing agreement with the Ministry of Education and Research, the activity support contains special-purpose appropriations. These include remuneration for professors emeriti and associate professors emeriti, funds allocated for providing teacher education, an allocation for the operation of the University's Library, the salary of early-stage researchers, activity support for the Estonian Pedagogical Archives and Museum, support for minor humanities specialities, doctoral student grants and the student scholarship fund.

As the activity support provided by the state has not increased in the past three years, the University strives to increase the revenue it earns itself. The main sources of revenue growth at the University are income from continuing education and RDC activities.

Income from continuing education has grown by 28% from 2016. RDC income together with baseline financing forms 37% of the University's revenue and has grown by 30% from the previous period. International funding income still makes up the largest part of the RDC income (68%). In addition, the University as the leading partner mediated 2.4 million euros to partners for operating expenses in 2017. The volume of service agreements has increased and income has grown by 84% compared to 2016. Labour expenses make up 59% of the University's operating expenses.

Table 11. Distribution of the University's revenue

	2015	2016	2017
Study activities	21,113	21,048	21,159
Research and development	9,774	12,564	14,369
Special-purpose appropriations	2,626	2,358	2,236
Other income	2,288	1,359	945
	35,801	37,329	38,710

Table 12. Key financial	indicators (in thousands	of euros)

Financial indicators	2015	2016	2017
Operating income	35,125	37,104	38,628
Operating expenses	32,717	34,168	35,911

Depreciation on non-current assets	3,377	2,877	2,423
Total operating expenses	35,996	37,044	38,334
Profit (loss) of the reporting year	-969	60	294
Balance sheet volume	55,300	53,445	51,213
Current assets	6,010	6,346	5,267
Non-current assets	49,290	47,099	45,945
Short-term liabilities	8,247	6,798	6,717
Long-term liabilities	7,068	6,602	4,156
Loan obligations	7,529	7,065	4,601
Net assets	39,985	40,045	40,339
Table 13. Key ratios			
Ratios	2015	2016	2017
Operating expenses/operating income	102.5%	99.8%	99.2%
Loans/operating expenses	21.4%	19.0%	11.9%
Non-current assets/balance sheet volume	89.1%	88.1%	89.7%
Current assets/short-term liabilities	72.9%	93.4%	78.4%
Net assets/balance sheet volume	72.3%	74.9%	78.8%
Loans/balance sheet volume	13.6%	13.2%	9.0%

4.5. Opinion of the Rectorate on management, finances and membership

The overall status of Tallinn University can be considered stable regardless of changes taking place in the external environment and the decreasing state funding for higher education. We have been able to respond to the external environment and reorganise the structure of the University without major disturbances. Compared to the situation a few years ago, the University's financial standing has considerably improved and the average salary at the University is growing, albeit not as fast as to catch up with developments in the society. We are still currently assessing the changes made in the course of improving the academic structure, but the risk assessment and the employee satisfaction survey have both provided guidelines for future activities. Of the risks assessed by the members of the University, greatest attention needs to be paid to the high workload of lecturers, the excessively project-based nature of activities, labour turnover, unclear volume and allocation principles of activity support for higher education studies, overabundance of regulations, cooperation between units, the creation of an inspiring work environment, future perspectives related to the decreasing 2020 EU funds, and the system of indicators measuring the University's objectives and performance. Looking back at the results of the 2017 satisfaction survey, we can say that the operating environment of Tallinn University is at a good level and people are satisfied with it, as well as with the content of their work and with their colleagues. More attention needs to be paid to the development of the University's academic capability: the work and salary conditions of academic personnel, a meaningful establishment of objectives, and a set of rules motivating employees to work more and better. We have already made progress with most of the issues and included these in our activity plans, but several highlighted problems also depend on developments in the external environment.

4.6. Effects of the external environment on management and finances

An assessment of economic effects of universities commissioned by Universities Estonia and Universities Finland was completed in 2017^{17} . The study was conducted by BiGGAR Economics Ltd. The study stated that the economic effect of Estonian public universities in 2016 was significant both in Estonia and abroad: total added value 1.6 billion euros a year, the ratio of which to the GDP is similar to that of Finland (Estonia – 6.4%, Finland – 6.0%). By estimation, the activities of Estonian universities support 37,000 jobs, i.e. 5.8% of all the jobs in Estonia. Every euro invested in Estonian universities gives 4.6 euros back to national economy. The universities' one euro of added value creates 7 euros of added value outside the universities. This includes both the direct economic activities and the indirect effect of the universities.

The state budget approved at the end of 2017 freezes the financing of higher education for the third consecutive year despite an increase in the state budget revenue (23% in 2016–2018) and the GDP. The standstill in financing in recent years and the lack of a financing perspective has a significant impact on the capability of higher education institutions to offer internationally competitive education. Inflation also reduces the actual value of the resources invested in higher education. Funding for higher education has decreased compared to the period before the economic crisis. A 2017 overview of financing trends compiled by the European University Association (EUA) classified the Estonian higher education on the basis of financing in the international comparison of European countries as a declining system under pressure. The Estonian data are based on the data presented in the education statistics portal. Universities Estonia has made a proposal to the Minister of Education and Research to start negotiations about the financing of higher education in order to find solutions in the course of preparation of the next state budget strategy, also taking into account the decreasing EU support in the next financing period, which has a very immediate and significant effect on higher education.

According to OECD¹⁸, Estonia's expenses per one student are below the average of the OECD countries. In 2014, the higher education (including R&D) expenses per one student amounted to 12,375 US dollars a year, while the OECD average was 16,143 US dollars a year, considering the purchasing power parity. The added value of higher education in the labour market is one of the lowest among the OECD countries, i.e. the salary differences by education levels are small. Adults with higher education only earn 24% more than employees with secondary education, which is the lowest salary difference after Sweden.

¹⁷ <u>http://ern.ee/et/uudis/eesti-uelikoolide-majanduslik-moju-on-1-6-miljardit-eurot-aastas</u>

¹⁸ OECD "Education at a Glance 2017"

BALANCE SHEET

(in euros)	Note	31.12.2017	31.12.2016
ASSETS			
Current assets			
Cash	2	1,077,416	2,983,845
Receivables and prepayments	3	4,094,763	3,257,524
Inventories	4	95,287	104,594
Total current assets		5,267,467	6,345,963
Non-current assets			
Financial investments	5	1,981	1,981
Real estate investments	6	2,035,823	2,035,823
Property, plant and equipment	7	43,349,484	44,658,879
Intangible assets	8	558,090	402,637
Total non-current assets		45,945,379	47,099,321
TOTAL ASSETS		51,212,846	53,445,283
LIABILITIES AND NET ASSETS			
Short-term liabilities			
Loan obligations	9	464,827	464,552
Payables and prepayments	10	6,252,653	6,285,841
Provisions	11 _	0	47,623
Total short-term liabilities		6,717,480	6,798,015
Long-term liabilities			
Long-term loan obligations	9	4,136,507	6,600,793
Other long-term payables		19,839	1,428
Total long-term liabilities		4,156,346	6,602,222
Total liabilities		10,873,826	13,400,237
Net assets			
Retained earnings		40,045,047	39,985,468
Profit (loss) of the reporting year		293,974	59,578
TOTAL NET ASSETS		40,339,020	40,045,047
TOTAL LIABILITIES AND NET			
ASSETS		51,212,846	53,445,283

PROFIT AND LOSS STATEMENT

(in euros)		31.12.2017	31.12.2016
Operating revenue			
Revenue from economic activities	12	5,321,765	4,524,039
Activity support	13	22,536,074	22,680,191
Ad hoc financing of operating expenses	14	10,443,220	9,187,106
Ad hoc financing of non-current assets	14	250,835	68,761
Other income	15	75,977	643,862
Total operating revenue	-	38,627,871	37,103,959
	_		
Operating expenses			
Support granted	16	5,099,404	5,732,664
Management expenses	17	6,819,965	6,057,821
Personnel expenses	18	23,052,838	21,443,304
Depreciation and impairment of value of	_	_	_
non-current assets	7,8	2,422,704	2,876,827
Other operating expenses	19	909,525	880,583
Total operating expenses	_	38,304,437	36,991,200
Operating profit (loss) of the second			
period	_	323,435	112,759
Financial income and expenses			
Interest income and expenses	20	-29,461	-53,181
Total financial income and expenses-	_	-29,461	-53,181
Profit (loss) of the renorting year		293.974	59.578
(-		

STATEMENT OF CHANGES IN NET ASSETS

(in euros)	
Retained earnings as at 31.12.2015	39,985,469
Profit (loss) of 2016	59,578
Retained earnings as at 31.12.2016	40,045,047

Profit (loss) of 2017	293,974
Retained earnings as at 31.12.2017	40,339,021

CASH FLOW STATEMENT

(in euros)	Note	2017	2016
Cash flows from main activities			
Operating profit (loss)		323,435	112,759
Adjustments			
Depreciation and impairment of value of non-current		2 422 704	
assets	7,8	2,422,704	2,876,827
VAT expenses on acquisition of non-current assets		213,541	19,129
Ad hoc financing received for acquisition of non-current		-250 835	
assets	14	200,000	-68,761
Gains from sales of non-current assets	7	0	-577,153
Adjusted operating profit (loss)		2,708,845	2,362,801
Change in customer receivables		-420,198	27,580
Change in ad hoc financing receivable for operating			
expenses		-950,061	-173,957
Change in other receivables		-40,000	-3,659
Change in prepaid and recoverable taxes		1,466	3,295
Change in prepaid support		672,130	458,522
Change in other prepayments		-40,839	-41,678
Change in inventories	4	9,307	-1,928
Total net change in current assets related to main activ	vities	-768,195	268,175
Change in supplier payables		53,254	241,628
Change in contractor payables		-16,823	91,637
Change in tax, fee and fine payables		86,381	28,276
Change in ad hoc financing payable for operating			
expenses		993,763	-41,287
Change in other payables		12,490	38,999
Change in prepaid ad hoc financing received		-1,123,670	-1,858,384
Change in other prepayments received		-20,173	692
Change in provisions	11	-47,623	47,623
Net change in payables related to main activities		-62,400	-1,450,816
Total cash flows from main activities		1,878,250	1,180,160
Cash flows from investment activities			

Paid upon acquisition of PPE and intangible assets		-1,399,304	-949,482
Received from sales of non-current assets		0	840,001
Ad hoc financing received for acquisition of non-current			
assets		107,923	29,407
Ad hoc financing paid for acquisition of non-current			
assets		462	0
Received interest and other financial income		0	103
Total cash flows from investment activities	_	-1,290,919	-79,971
Cash flows from financing activities			
Received loans			
Repaid loans	9	-2,464,011	-463,345
Paid interest	20	-29,748	-53,639
Total cash flows from financing activities		-2,493,759	-516,984
Net cash flow		-1,906,428	583,205
Cash and cash equivalents at the beginning of the period		2,983,845	2,400,640
Cash and cash equivalents at the end of the period		1,077,416	2,983,845
Change in cash and cash equivalents		-1,906,428	583,205

Note 1. Accounting principles

General information

The 2017 financial statements of Tallinn University (the University) have been prepared in accordance with the Estonian financial reporting standard the main requirements for which have been established in the Accounting Act and which is supplemented by the public sector financial accounting and reporting guidelines (the General Rules).

The numerical figures in the financial statements are provided in euros.

Cash and cash equivalents

Cash in hand and settlement account balances are considered cash and cash equivalents in the financial statements. Overdraft is included under short-term loan obligations on the balance sheet.

Division of assets and liabilities into short-term and long-term

Assets and liabilities are divided into short-term and long-term ones on the balance sheet depending on whether the expected possession of the asset or liability lasts up to one year from the reporting date or longer.

Receivables and prepayments

Receivables from customers, deferred income and other short-term and long-term receivables (including loan receivables, deposits) are recognised at adjusted acquisition cost. The adjusted acquisition cost of short-term receivables is generally equivalent to their nominal value (less discounts) and short-term receivables are therefore recognised on the balance sheet in the probably receivable amount. The adjusted acquisition cost of long-term financial assets is calculated by initially recording the financial assets at the fair value of the payment receivable and thereafter calculating interest income using the internal interest rate method.

Receivables not received are evaluated using the approximation method. In the case of approximate evaluation, receivables the due date of which has been exceeded by 90 to 180 days are written down by 50% and receivables the due date of which has been exceeded by more than 180 days are written down 100%. Receivables which have been declared doubtful are recognised until receipt or until they are declared bad debts and written off the balance sheet in the register of receivables not received from customers.

If it is determined that the receipt of a receivable is unrealistic, the receivables is declared a bad debt and written off the balance sheet. A receivable is considered a bad debt when the University has no possibility of collecting the receivable (the debtor has been liquidated or is bankrupt and the assets in the bankruptcy estate are not sufficient for paying the receivable, etc.) or if the expenses to be incurred in the collection of the receivable are estimated to exceed the gains expected from receipt.

If a doubtful receivable is later received, it is recognised as a reduction of the previously recognised doubtful receivables expense in the period in which it was received.

Inventories

Inventories are assets held for sale in the course of ordinary economic activities, assets currently produced for sale in the course of ordinary economic activities, materials or accessories consumed in the production process or in the provision of services. In addition to goods purchased for sale, materials, unfinished and finished products, inventories also include items like equipment and real estate properties held for resale and capitalised expenses directly related to the provision of services in the case of which revenue cannot yet be recognised using the level of completion method.

Inventories are initially recorded at acquisition cost which comprises the purchase costs and other expenses necessary for bringing the inventories into their current location and condition.

The acquisition cost of inventories does not include cost of using loans, and the non-recoverable taxes and fees incurred upon the acquisition of inventories are pursuant to a special requirement arising from the General Rules recognised as expenses.

Goods are expensed using the FIFO method. Inventories are measured on the balance sheet at acquisition cost or net realisable value, whichever is the lowest.

Financial investments

Short-term and long-term financial investments in shares and other equity instruments (excluding shares in subsidiaries and related companies) the fair value of which cannot be reliably measured are recognised at acquisition cost, less write-downs due to impairment of value, if necessary.

Subsidiaries

A subsidiary is a company over which the University has control. A subsidiary is considered to be under the control of a parent company when the parent company directly or indirectly holds more than 50% of the voting shares of the subsidiary or is otherwise able to control the operating or financial policy of the subsidiary.

The definition of a subsidiary also includes non-corporate entities (foundations and non-profit associations). In determining control and significant influence, consideration is given to whether the assets of the non-corporate entity are upon its liquidation transferred to the parent company. If the parent company has dominant influence (generally more than 50% of voting rights) in a foundation or a non-profit association, the holding is recognised as 100%.

Subsidiaries are initially recorded at historical cost which is thereafter adjusted by write-downs due to impairment of value.

Information concerning subsidiaries is presented in Note 23.

Related companies

A related company is a company in which the University or its subsidiary has significant influence, but not control. The existence of significant influence is generally expected when the University or it subsidiary holds 20% to 50% of the voting shares in the company.

If the University or its subsidiary has significant influence in a foundation or a non-profit association (generally 20% to 50% of voting rights), the holding and the financial investment is not recognised on the balance sheet. Payments into the foundation capital of the object of the holding are recognised as the expense of the support granted.

Related companies are initially recorded at historical cost which is thereafter adjusted by writedowns due to impairment of value.

Information concerning related parties is presented in Note 23.

Tallinn University is a founding member in foundations and non-profit associations (see Note 24).

Real estate investments

Real estate objects (land or buildings or parts of buildings) which the University gives on lease to an entity outside the public sector for the purpose of earning lease income or holds for the purpose of an increase in market value and which no public sector entities are using in their main activities are considered real estate investments. Buildings and rooms used by a public sector entity are recognised as property, plant and equipment.

A real estate investment is initially recorded on the balance sheet at its acquisition cost which also includes expenses not directly related to acquisition (i.e. notary fees, fees paid to consultants, and other expenses without which the purchase transaction would probably not have taken place). The acquisition cost of real estate investments does not include the cost of using loans, and the non-recoverable taxes and fees incurred upon acquisition are pursuant to a special requirement arising from the General Rules recognised as expenses. Pursuant to the General Rules, real estate investments are after initial recording recognised at acquisition cost, less accumulated depreciation and possible write-downs due to impairment of value.

Depreciation is calculated using the straight-line method. Depreciation rates are assigned separately to each real estate investment object, depending on its useful life. If a real estate investment object consists of distinguishable components with different useful lives, such components are recognised in the accounts as separate asset items and assigned separate depreciation rates on the basis of their useful lives. In 2016, the depreciation rates applied to the University's real estate investments were in the range of 2% to 3% a year, except in the case of non-developed registered immovables (land) on which depreciation is not calculated.

Expenses related to subsequent improvements are added to the acquisition cost of a real estate investment if it is probable that the University will receive economic benefit in connection with

the improvements and the acquisition cost of the improvements can be reliably measured. Other subsequent maintenance and repair costs of the real estate investment are recognised as the expenses of the reporting period. If a component is replaced on a real estate investment object, the acquisition cost of the new component is added to the acquisition cost of the object if it corresponds to the definition of a real estate investment and the criteria for recognising assets on the balance sheet and the residual value of the replaced component is written off the balance sheet.

The recognition of a real estate investment on the balance sheet is discontinued when it is transferred or removed from use if no future economic benefit is expected to arise from the asset. The gains or losses from discontinuing the recognition of the real estate investment are recognised in the profit and loss statement under 'Other income' or 'Other expenses' in the period of the discontinuation.

If the purpose of use of a real estate object changes, the asset is reclassified on the balance sheet. As of the date of the change, the object is subject to the accounting principles of the asset group to which it was transferred.

Property, plant and equipment and intangible assets

Assets, which the University uses in the fulfilment of tasks established in its Statutes or in the provision of services or for administrative purposes and which it intends to use for a period longer than one year and the acquisition cost of which is at least 5,000 euros, are recognised as property, plant and equipment (PPE).

Land, library books and information materials are recognised regardless of acquisition cost. Items of artistic, historical and research value which does not decrease over time may be recognised regardless of acquisition cost.

A non-current asset item is initially recorded at acquisition cost which comprises the purchase price and the costs directly related to acquisition. Pursuant to the General Rules, value added tax, other taxes and fees are not capitalised in the acquisition cost of non-current assets. PPE items are thereafter recognised on the balance sheet at their acquisition cost, less accumulated depreciation and possible write-downs due to impairment of value.

Expenses related to improvements are added to the acquisition cost of non-current assets only if the improvements correspond to the definition of non-current assets and the criteria for recognising assets on the balance sheet and the cost of the expense is at least equivalent to the amount established as the lower limit for the capitalisation of non-current assets. Expenses related to current maintenance and repair are recognised as periodic expenses in the profit and loss statement.

If a PPE item consists of distinguishable components with different useful lives, such components are recognised in the accounts as separate asset items and assigned separate depreciation rates on the basis of their useful lives.

Depreciation is calculated using the straight-line method.

The calculation of depreciation starts from the month in which an asset is taken into use. Depreciation is calculated until full depreciation, transfer or final removal of the asset from use. Unfinished construction objects are not depreciated. The depreciation norms and final values are reviewed at the end of each financial year. Changes in evaluations are recognised in the financial year prospectively.

The aim of the depreciation rates is to ensure the conformity of depreciation calculation with the useful life and use of the non-current assets.

The following depreciation rates are used in calculating the depreciation of PPE and intangible assets:

Non-current asset group	Depreciation rate, %
Buildings	2-5
Structures	2.5-10
Machinery and equipment	10-20
Fixtures and fittings	10-50
Computer equipment	33-50
Intangible assets	5-50

No depreciation is calculated on library books and information materials, land, and items of artistic, historical and research value which does not decrease over time.

The depreciation period is changed, if it is determined that the actual useful life of an asset is significantly different from the one initially estimated.

Library collections

Clause 41 (2) 2) of the General Rules stipulates that as an exception, information materials in public libraries were the storage and lending of information materials to the public is the main activity may be recognised as non-current assets regardless of their acquisition cost. The information materials procured for the library collections are recognised as non-current assets in aggregate. Records of units, titles and cost are maintained in the library information system ESTER. Information materials the value of which cannot be reliably measures are accounted for in the ESTER information system in quantities (at zero value). Information materials are fully expensed from the library collections when they are removed from use or determined to have been lost. No depreciation is calculated on the value of the library collections recognised on the balance sheet.

Intangible assets

Intangible assets are non-monetary assets without a physical substance and distinguishable from other assets, used over a period longer than one year and with an acquisition cost above the lower limit established for recognising assets as non-current assets. Intangible asset items (software, user rights, other intangible assets) are recognised on the balance sheet when the assets are controllable by the University, it is probable that the University will receive future economic benefit from their use, the acquisition cost of the assets can be reliably measured and the assets do not derive from the University's internal expenses incurred on R&D. R&D expenses are expensed upon being incurred. Intangible assets are initially recorded at acquisition cost which comprises the purchase price and the expenses directly related to acquisition. Intangible assets are thereafter recognised at acquisition cost, less accumulated amortisation and possible write-downs due to impairment of value.

All intangible assets are expected to have a limited useful life. Intangible assets are amortised using the straight-line method, depending on the expected useful life of the assets. The amortisation rate is assigned for each non-current asset item separately depending on its useful life. If the useful life of an intangible asset cannot be reliably measured, the useful life is expected to be up to 10 years. The reasonability of the asset amortisation periods and methods is assessed on every reporting date.

The following amortisation rates were used at the University in 2017 in calculating the amortisation of intangible assets: 5% to 50%.

Impairment of value of assets

The University as a public sector entity that applies the General Rules does not test assets for recoverable value and does not recognise the impairment of value of assets to recoverable value in the case of non-current assets necessary for the provision of public services, unless the impairment of value is due to spoilage or partial or full removal from use for other reasons. In other cases, the PPE with unlimited useful life and depreciated assets are evaluated on every reporting date for indications of possible impairment of value. In the case of such indications, the recoverable value of the assets is assessed and compared to their book value.

The expense due to impairment of value is recognised in the amount by which the book value of the assets exceeds the recoverable value. The recoverable value of assets is the fair value of assets, less sales expenses, or its value in use, whichever is the highest. The recoverable value is assessed for the purpose of testing for impairment of value either by individual assets or by the smallest possible asset group for which cash flows can be distinguished. Write-downs of assets are recognised as expenses of the reporting period.

Written-down assets are tested on every subsequent reporting date for a probability of an increase in their recoverable value. If the value test shows that the recoverable value of the assets or the asset group (cash generating unit) has risen over the carrying value, the earlier write-down is cancelled and the carrying value of the assets in increased to the amount which would have developed upon the calculation of normal depreciation over the years. The cancellation of the write-down is recognised in the profit and loss statement as a diminution of the expense of writing down non-current assets.

Financial liabilities

Financial liabilities (supplier payables, assumed loans, accruals and other short-term and long-term loan obligations), except for derivative instruments with a negative value, are initially

recorded at acquisition cost, which is the fair value of the payment received for the financial liability. Financial liabilities are thereafter recognised at adjusted acquisition cost.

The adjusted acquisition cost of a financial liability is generally equivalent to its nominal value and all financial liabilities are therefore recognised on the balance sheet in the amount payable.

The interest expense entailed in financial liabilities is recognised on accrual basis as an expense of the period under 'Financial income and expenses' in the profit and loss statement. The recognition of a financial liability on the balance sheet is discontinued when it has been paid or cancelled or it has expired.

Lease

In the case of operating lease, the lessor recognises the leased asset on its balance sheet. Operating lease payments are recognised as income by the lessor and as expense by the lessee using the straight-line method over the lease period. Assets given on lease on operating lease terms are recognised on the balance sheet in an ordinary manner similarly to other non-current assets. Operating lease payments are recognised as income evenly over the lease period.

The University as the lessee

In the case of operating lease, the lease payments for assets are recognised in the profit and loss statement on accrual basis as expenses of the period over the lease period.

The University as the lessor

Assets leased on operating lease terms are recognised on the balance sheet in an ordinary manner similarly to other assets recognised on the University's balance sheet. Leased assets are depreciated on the basis of the depreciation principles applied to assets of similar type at the University. Operating lease payments are recognised as income using the straight-line method over the lease period.

Tax accounting

Tallinn University uses the method combining direct calculation and proportional deduction in deducting input VAT. The ratio of taxable turnover and total turnover is determined on the basis of the turnover of the preceding calendar year. The proportion is adjusted at the end of the calendar year on the basis of the ratio of the taxable turnover and total turnover of that calendar year. The direct VAT calculation method is used for activities with only taxable turnover or with only tax-free turnover.

Revenue recognition

The accrual basis principle is applied in the recognition of income and expenses.

The fair value of the payment received or receivable for the sales of goods and the provision of services in the course of regular economic activities is recognised as revenue, taking into account all the discounts and concessions made.

Income from tuition fees received from students attending regular studies and the Open University studies, participants in continuing education training, etc. is recognised as revenue from the provision of education services. Revenue is recognised in the period in which the services were provided.

Income from the sales of services is recognised after the provision of the services or, if the services are provided over a longer period of time, using the level of completion method. Income from the sales of services provided over a longer period is recognised on the basis of the level of completion of the provided service on the reporting date on the condition that the end result of the transaction including the provision of the services (i.e. the income and expenses related to the transaction) can be reliably estimated and the receipt of the payment receivable from the transaction is probable. If the end result of the transaction or project including the provision of the services cannot be reliably estimated, but it is probable that the University can cover at least the costs related to the services, the income is recognised only in the extent of the actual costs related to the fulfilment of the contract.

Income from the sales of goods is recognised when all the material risks related to ownership have passed from the seller to the buyer, the sales revenue and the expenses related to the transaction can be reliably determined and the receipt of the payment receivable from the transaction is probable.

Interest income is recognised when the receipt thereof is probable and the amount of the income can be reliably measured. Interest income is recognised using the internal interest rate of the assets.

Recognition of expenses

Expenses are recognised on accrual basis. The non-recoverable taxes and fees, including VAT, paid upon the acquisition of non-current assets are recognised at the moment of acquisition as expenses under 'Other operating expenses' in the profit and loss statement.

Support

Resources received (support received) for which no goods or services are directly given and resources granted (support granted, mediated) for which no goods or services are directly received are recognised as support. Support is recognised in accordance with the principles established in the General Rules.

Support is divided into the following types of support:

 ad hoc financing – support received and granted for certain project-based target purposes, in the case of which the objectives and the indicators for monitoring the achievement of the objectives are established, as well as the time schedule and the financial budget, and the provider of support requires detailed reporting from the beneficiary about the use of the money and the surplus must be paid back to the provider of support; • activity support – granted and received activity support type support given to the beneficiary on the basis of its statutory tasks and the objectives established in its development documents.

Ad hoc financing types are:

- national ad hoc financing;
- international ad hoc financing.

Ad hoc financing is initially recorded on the balance sheet upon the transfer or receipt of the money or on the date of recognition of the receivables, payables, income and expenses related to the ad hoc financing. In recognising ad hoc financing, distinction is made between the ad hoc financing of operating expenses and non-current assets. The main precondition to the ad hoc financing of non-current assets is that the University as the beneficiary must purchase, build or otherwise acquire certain non-current assets. Ad hoc financing is recognised as income in the period of incurring the operating expenses or procuring the non-current assets, unless the ad hoc financing terms entail a substantive right of recourse or a risk on non-receipt. Activity support is recognised as income upon the receipt of the money.

If the provider or mediator of support grants support on the basis of simplified methods of compensation of costs (standardised unit prices, predefined payment amounts, indirect costs compensated on the basis of a standard rate) without requesting cost documents, the ad hoc financing income is recognised in the reporting period.

In recognising ad hoc financing, distinction is made in the profit and loss statement between ad hoc financing and the mediation thereof. Ad hoc financing is called mediation when the financing was received for re-financing, not for covering the receiver's own operating expenses or purchasing non-current assets. In the case of mediation, the income of support received for mediation is equivalent to the expense of the support mediated.

Non-monetary ad hoc financing is recognised at the fair value of goods and services received. Non-current assets received from another public sector entity as non-monetary ad hoc financing is recognised at fair value or, if that is not known, at the net book value indicated by the transferor of the asset.

If it turns out that not all the terms and condition of receiving support are fulfilled and the University as the mediator or beneficiary of support is liable to the provider of support for the fulfilment of the contract terms and conditions and the purposeful use of the support by the beneficiary, the recourse against the beneficiary and/or the repayment obligation to the provider of support is recognised if a violation of contract is determined. The income of the support received and/or the expense of the support given is respectively reduced.

Transactions in foreign currency

Transactions denominated in a foreign currency are recognised on the basis of the exchange rates of the European Central Bank officially applicable on the date of the transaction.

Cash flow statement

In the preparation of the cash flow statement, receipts and payments and changes in receivables and payables are recognised by their purpose as the cash flows of main activities, investment activities or financing activities.

Related parties

The Senate is the highest collegial decision-making body of the University. In the context of this annual report, related parties are the members of the Senate and their closest family members (including life partner, spouse or child) and the legal persons related to them.

Information concerning transactions performed with related parties, which do not conform to legal acts or requirements for the internal documents of accounting entities or general requirements or market conditions is disclosed in the annual report.

Contingent assets

Contractual ad hoc financing payables and receivables are recognised as contingent payables and receivables.

Provisions and contingent liabilities

A provision is recognised, if the University has, due to an obliging event that has taken place before the reporting date, a legal or factual liability, the realisation of the liability is probable and the amount thereof can be reliably measured. A provision is recognised on the balance sheet in the amount which is in the management's opinion as at the reporting date necessary for covering the liability related to the provision. If the provision is likely to be realised later than 12 months after the reporting date, it is recognised at discounted value, except if the effect of the discount is insignificant.

Other potential or existing liabilities the realisation of which is not probable or the amount of the expenses related to which cannot be measured with sufficient reliability are disclosed in the notes to the financial statements as contingent liabilities.

Off-the-balance sheet low-value assets

Assets with a useful life of more than one year, but acquisition cost of less than 5,000 euros are expensed at the moment of being taken into use. Expenses low-value assets with the acquisition cost of 640 to 4,999.99 euros are accounted for off the balance sheet.

Note 2 . Cash and cash equivalents

(in euros)	31.12.2017	31.12.2016
Cash in hand	1,917	3,276
Bank accounts	1,075,500	2,980,568
Total	1,077,416	2,983,845

Note 3. Receivables and prepayments

Ministry of Social Affairs

(in euros)	Note	31.12.2017	31.12.2016
Customer receivables		669,342	270,377
Doubtful customer receivables		-28,272	-49,505
Receivable ad hoc financing of operating			
expenses		2,723,569	1,773,369
Receivable ad hoc financing of non-current		100 550	10.010
assets		108,752	48,840
Other receivables		95,262	55,402
Prepaid support		305,174	977,304
Prepaid future expenses		195,695	155,031
Prepaid and recoverable taxes	22	25,240	26,706
Tatal			2 257 524
1 ota1:		4,094,763	3,257,524
1 otal:		4,094,763	3,257,524
Major ad hoc financing receivables:		4,094,763 31.12.2017	3,257,524
Major ad hoc financing receivables: Provider of funding		4,094,763 31.12.2017	3,257,524
Major ad hoc financing receivables: Provider of funding European Commission		4,094,763 31.12.2017 1,642,391	3,257,524 31.12.2016 823,588
Major ad hoc financing receivables: Provider of funding European Commission Foundation Archimedes		4,094,763 31.12.2017 1,642,391 589,041	3,257,524 31.12.2016 823,588 445,782
Major ad hoc financing receivables: Provider of funding European Commission Foundation Archimedes Foundation Innove		4,094,763 31.12.2017 1,642,391 589,041 395,487	3,257,524 31.12.2016 823,588 445,782 359,453
Major ad hoc financing receivables:Provider of fundingEuropean CommissionFoundation ArchimedesFoundation InnoveEstonian Research Council		4,094,763 31.12.2017 1,642,391 589,041 395,487 116,009	3,257,524 31.12.2016 823,588 445,782 359,453 29,343
I otal:Major ad hoc financing receivables:Provider of fundingEuropean CommissionFoundation ArchimedesFoundation InnoveEstonian Research CouncilFoundation Environmental Investment		4,094,763 31.12.2017 1,642,391 589,041 395,487 116,009	3,257,524 31.12.2016 823,588 445,782 359,453 29,343
Major ad hoc financing receivables:Provider of fundingEuropean CommissionFoundation ArchimedesFoundation InnoveEstonian Research CouncilFoundation Environmental InvestmentCentre		4,094,763 31.12.2017 1,642,391 589,041 395,487 116,009 43,399	3,257,524 31.12.2016 823,588 445,782 359,453 29,343 52,547
Iotal:Major ad hoc financing receivables:Provider of fundingEuropean CommissionFoundation ArchimedesFoundation InnoveEstonian Research CouncilFoundation Environmental InvestmentCentreMinistry of Foreign Affairs		4,094,763 31.12.2017 1,642,391 589,041 395,487 116,009 43,399 13,428	3,257,524 31.12.2016 823,588 445,782 359,453 29,343 52,547 0
I otal:Major ad hoc financing receivables:Provider of fundingEuropean CommissionFoundation ArchimedesFoundation InnoveEstonian Research CouncilFoundation Environmental InvestmentCentreMinistry of Foreign AffairsEnterprise Estonia		4,094,763 31.12.2017 1,642,391 589,041 395,487 116,009 43,399 13,428 11,255	3,257,524 31.12.2016 823,588 445,782 359,453 29,343 52,547 0 35,355

25,483

0

2,832,322	1,822,209
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Major prepaid ad hoc financing support:	31.12.2017	31.12.2016
Provider of funding		
European Commission	274,352	946,901
Foundation Archimedes	30,823	0
Estonian Research Council	0	30,403
Total	305,174	977,304

Note 4. Inventories

(in euros)	31.12.2017	31.12.2016
Materials	6,638	5,876
Goods purchased for sales	88,649	98,718
Total	95,287	104,594

No inventories were written down during the reporting period.

Note 5. Financial investments

(in euros)	31.12.2017	31.12.2016
Tervisetehnoloogiate Arenduskeskus AS,		
holding 7.69%	1,981	1,981

Upon the proposal of the Arenduskeskus AS, the holding has been sold back at the same acquisition cost in 2018.

Note 6. Real estate investments

(in euros)	
Balance as at 31.12.2016	31.12.2016
Land	2,035,823
Balance as at 31.12.2017	31.12.2017
Land	2,035,823

The land is on lease as a parking lot for	
passenger cars.	
Lease income in 2017:	64,370
Lease income in 2016:	56,964

Note 7. Property, plant and equipment

(in euros)	Land	Buildings	Machinery and	Other fixtures and fittings	Non-depreciated	Unfinished PPF	Total
Acquisition cost 31.12.2016	2 048 016	55 435 866	3 042 393	3 608 252	3 387 642	20,200	67 542 368
Accumulated depreciation	2,010,010	55,155,000	5,012,575	5,000,252	5,507,012	20,200	07,512,500
31.12.2016	0	-18,512,564	-1,744,522	-2,626,404	0	0	-22,883,490
Net book value 31.12.2016	2,048,016	36,923,302	1,297,871	981,848	3,387,642	20,200	44,658,878
Acquisitions	0	190,971	117,060	223,132	92,794	346,746	970,703
Non-monetary support	83,000	0	0	0	0	0	83,000
Depreciation and write-offs in the							
reporting year	0	-1,608,764	-285,019	-420,336	-48,979	0	-2,363,098
Acquisition cost 31.12.2017	2,131,016	55,626,837	3,150,981	3,684,223	3,431,456	366,946	68,391,459
Accumulated depreciation							
31.12.2017	0	-20,121,328	-2,021,069	-2,899,579	0	0	-25,041,976
Net book value 31.12.2017	2,131,016	35,505,509	1,129,912	784,644	3,431,456	366,946	43,349,484

Sold PPE in net value:	2017	2016
Land	0	27,277
Buildings	0	549,786

Note 8. Intangible assets

(in euros)	Software and licences	Prepayments	Total
Acquisition cost 31.12.2016	836,844	0	836,844
Accumulated depreciation 31.12.2016	-434,206	0	-434,206
Net book value 31.12.2016	402,637	0	402,637
Acquisitions	176,809	38,250	215,059
Depreciation in the reporting year	-59,606	0	-59,606
Acquisition cost 31.12.2017	1,013,653	38,250	1,051,903
Accumulated depreciation 31.12.2017	-493,812	0	-493,812
Net book value 31.12.2017	519,840	38,250	558,090

	Repayment term					
(in euros)	Balance as at 31.12.2017	Within 12 months	Within 2 to 5 years	More than 5 years	Currency	Interest rate
Loan No. 1	628,606	301,191	327,415	0	EUR	0.33 %+6m Euribor
Loan No. 2	3,972,728	163,636	654,544	3,154,548	EUR	0.895 %+ 3m Euribor
Total	4,601,334	464,827	981,959	3,154,548		
incl. long-term loan obligations	4,136,507					
incl. short-term loan obligations	464,827					

Repayment term						
(in euros)	Balance as at 31.12.2016	Within 12 months	Within 2 to 5 years	More than 5 years	Currency	Interest rate
Loan No. 1	928,981	300,916	628,065	0	EUR	0.33 %+6m Euribor
Loan No. 2	6,136,364	163,636	654,544	5,318,184	EUR	0.895%+3m Euribor
Total	7,065,345	464,552	1,282,609	5,318,184		
incl. long-term loan obligations incl. short-term loan obligations	6,600,793 464,552					

No overdraft facilities were used in 2017, an overdraft agreement was concluded with the maximum amount of 1,500,000 euros and with the term of 30 April 2019. In the reporting year, 2,000,000 euros were repaid of loan No. 2. No mortgages have been established to secure the loans.

Note 10. Payables and prepayments

(in euros)	Note	31.12.2017	31.12.2016
Supplier payables		672,495	619,240
Payable to employees		695,895	712,718
Tax payables	24	983,207	896,826
Ad hoc financing of operating expenses paya	able	1,187,360	193,597
Other payables		33,700	39,620
Prepayments of ad hoc financing of operating	g		
expenses received		2,381,844	3,505,514
Other prepayments and income received	_	298,153	318,326
Total		6,252,653	6,285,841

Major ad hoc financing of operating expenses payable:

Provider of funding	31.12.2017	31.12.2016
European Commission	1,160,975	155,046
Enterprise Estonia	26,385	36,141
Other providers of funding	0	2,410
Total	1,187,360	193,597

Major prepayments of ad hoic financing of operating expenses received:

31.12.2017	31.12.2016
1,348,079	2,528,162
643,834	436,588
105,015	104,870
67,922	109,105
15,140	1,392
10,044	74,743
191,811	250,654
2,381,844	3,505,514
	31.12.2017 1,348,079 643,834 105,015 67,922 15,140 10,044 191,811 2,381,844

Note 11. Provisions

(eurodes)	31.12.2017	31.12.2016
Provisions for securing court proceedings	0	47,623

(in euros)	Note	2017	2016
Revenue from the provision of education	on		
services		3,642,594	3,549,202
Revenue from research and development	nt	827,104	448,981
Other income from education-related			
activities		73,663	89,469
Rent and lease		321,544	245,509
Sales of other products and services	_	456,861	190,877
Total		5,321,765	4,524,039

Note 12. Revenue from economic activities

Distribution of revenue from economic activities across geographical regions:

(eurodes)	2017	2016
Estonia	4,876,754	4,200,822
European Union Member States	408,329	291,716
Other countries	36,682	31,501
Total	5,321,765	4,524,039

Note 13. Activity support

(in euros)	2017	2016
Activity support from the state budget	19,602,277	19,611,371
Baseline funding from the state budget	1,215,130	1,043,970
Study allowances and study loans from the		
state budget	76,898	156,032
Research funding from the state budget	1,574,138	1,698,320
Other activity support	67,632	170,498
Total	22,536,074	22,680,191

Note 14. Ad hoc financing of operating expenses and non-current assets

(in euros)	2017	2016
National ad hoc financing of operating expenses	1,616,831	1,452,060
International ad hoc financing of operating		
expenses	8,826,389	7,735,046
Total ad hoc financing of operating expenses	10,443,220	9,187,106
National ad hoc financing of non-current assets	83,000	27,398
International ad hoc financing of non-current		
assets	167,835	41,363
Total ad hoc financing of non-current assets	250,835	68,761
Total	10,694,054	9,255,867

Major providers of funding:	2017	2 016
European Commission	4,958,281	4,089,035
Ministry of Foreign Affairs	347,658	245,475
Foundation Archimedes	2,320,806	1,246,400
Estonian Research Council	849,572	552,210
Foundation Innove	833,461	478,529
Ministry of Education and Research	359,647	226,850
Enterprise Estonia	239,667	54,285
Other providers of funding	784,962	2,363,083
Total	10,694,054	9,255 867

Note 15. Other revenue

(in euros)	Note	2017	2016
Revenue from the sales of non-current			
assets	7	0	577,153
Revenue from the sales of inventories		41,973	39,052
Other income		34,004	27,656
Total		75,977	643,862
Note 16.	Support	granted	
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(in euros)	2017	2016
Study allowances and scholarships	2,531,099	2,697,736
Ad hoc financing support, mediation	2,384,081	2,890,333
Membership fees and other support granted	184,224	144,596
Total	5,099,404	5,732,664

Note 17. Management expenses

(in euros)	2017	2016
Management expenses of registered immovables,		
buildings and premises	1,602,162	1,801,886
Administration expenses	771,649	758,495
Assignment expenses	806,526	755,726
Learning tools and training expenses	991,546	750,621
Costs compensated to third persons, other expenses	610,408	456,328
Marketing expenses, incl. communication expenses	514,600	451,762
ICT expenses	578,502	384,461
Research and development	200,758	218,696
Management costs of fixtures and fittings	240,493	158,986
Information material expenses	238,740	102,087
Training expenses	84,849	88,435
Other consumables	87,980	65,740
Management costs of vehicles	70,115	47,943
Catering and medical expenses	19,779	13,040
Management costs of machinery and equipment	1,860	3,615
Total	6,819,965	6,057,821

Note 18. Personnel expenses

(in euros)	2017	2016
Salaries of employees	15,530,072	14,437,763

Remuneration of contractual employees	1,508,156	1,477,723
Fringe benefits	200,376	114,217
Tax expenses entailed in personnel		
expenses	5,841,530	5,413,601
Capitalisation of personnel expenses	27,295	0
Total	23,052,838	21,443,304
Average annual number of employees in		
full-time equivalent	850	846

Note 19. Other operating expenses

(in euros)	2017	2016
Value added tax expense	879,114	810,075
Land tax expense	30,551	31,538
Other tax expenses	7,033	51,378
Doubtful receivables expense	-7,905	-20,225
Other extraordinary expenses	732	7,816
Total	909,525	880,583

Note 20. Financial income and expenses

(in euros)	2017	2016
Interest income	-287	458
Interest expenses	29,748	-53,639
Total	29,461	-53,181

Note 21. Operating lease

The University as the lessee	2017	2016
Passenger car lease expenses	33,784	19,534
IT asset lease expenses	2,676	3,014
The University as the lessor	2017	2016
Lease income from premises and other assets	257,174	188,545

	31.12.2017		31.12.2016	
(in euros)	Prepaid	Payable	Prepaid	Payable
Value added tax	0	28,561	0	32,138
Corporate income tax	0	11,216	0	8,813
Personal income tax	0	306,942	0	275,263
Social tax	0	571,653	0	521,373
Mandatory contributed pension	0	27,588	0	25,084
Unemployment insurance payment	0	37,247	0	34,155
Other tax receivables and tax payables	0	0	0	0
Balances of prepayment accounts	25,240	0	26,706	0
Total	25,240	983,207	26,706	896,826

Note 22. Tax receivables and tax payables

(in euros)	2017	2016
Remuneration of Senate members, incl.		
remuneration of Rectorate members	1,109,808	1,008,234

In 2017, no transactions have been performed with related parties, which would not be in accordance with legal acts or the general requirements for the internal documents of accounting entities.

Note 24. Holdings in foundations and non-profit associations and a private limited company

Tallinn University is the founding member of and represented by supervisory board members:	Transaction partner code	TU's influence
Non-profit association Dormitorium	603501	Dominant
Non-profit association Tallinna Ülikooli		
Spordiklubi	603502	Dominant
Non-profit association Eesti Digikeskus (in		
liquidation)	609701	Significant
Foundation Enn Soosaare	800301	Significant
Foundation Läänemaa Elukeskkonna Tuleviku-		-
uuringute	609302	Significant
Foundation Virumaa Kompetentsikeskus		-
(bankrupt)	591305	Significant
Non-profit association Dormitorium is a		
founding member of:		
Private limited company E-Kyla Arendus	609401	Significant

All these entities are located in Estonia.

The bankruptcy of Foundation Virumaa Kompetentsikeskus has no monetarily appraisable effect In Tallinn University.

Note 25. Off-the-balance sheet

assets

(in euros)	31.12.2017	31.12.2016
Low-value assets	2,888,305	2,639,778

Note 26. Off-the-balance sheet ad hoc financing receivables and payables

National receivables (in euros)	Source	31.12.17	31.12.16
Ministry of Foreign Affairs	60	191,743	477,796
Enterprise Estonia	28	367,078	573,859
Information Technology Foundation for	60		
Education (HITSA)		10,660	43,755
Foundation INNOVE	27	1,180,831	1,601,774
Foundation Archimedes	28	5,413,857	6,024,864
Foundation Archimedes	39	515,180	274,193
Foundation Archimedes	60	15,314	26,004
Total:		7,694,663	9,022,245

International funding rceivables (in euros)	Source	Project	31.12.17	31.12.16
European Commission/Horizon 2020	39	CEITER	1,496,250	1,725,381
European Commission/Horizon 2020	39	EXCEPT	617,316	637,456
European Commission/ Erasmus Mundus	39	HUMERIA	0	538,460
European Commission/Horizon 2020	39	HURMUR	148,201	401,870
European Commission/ Erasmus +	39	PT&SCHE	462,978	462,978
Total:			2,724,746	3,766,145

National payables (in euros)	Allikas	31.12.17	31.12.16
Ministry of Education and Research	28	59,110	90,118
Total:		59,110	90,118

Note 27. Events after the balance sheet date

As at the date of preparation of the report, there are no events after the reporting date, which have not been taken into account in assessing the assets and liabilities but which have a significant impact on the result of the reporting year.

In 2018, permission has been given by the Senate's resolution for taking a loan of 6 million euros for the construction of the new URSA building.

Note 28. Going concern

As at 31 December 2017, the liabilities of Tallinn University exceeded the current assets in the amount of 1,450,013 euros (as at 31 December 2016: 452,053 euros). The annual financial statements of Tallinn University have been prepared on the basis of Tallinn University continuing as a going concern, because in the opinion of the management the negative current capital will not cause financial difficulties for Tallinn University. The financing of Tallinn University from the state budget is stable. According to the contract under public law concluded between Tallinn University and the Ministry of Education and Research, the University is pursuant to the financing agreement financed from the state budget funds on a monthly basis. Tallinn University has had a similar current capital structure throughout years.

Independent auditor's report

To the Senate of Tallinn University

Opinion

We have audited the financial statements of Tallinn University (the University), which comprise the balance sheet as at 31 December 2017 as well as the profit and loss statement, the cash flow statement and the statement of changes in net assets for the year ended on the aforesaid date, and the notes to the financial statements, which contain a summary of significant accounting principles and other explanatory information.

In our opinion, the financial statements provide, in all material aspects, a fair overview of the financial standing of Tallinn University as at 31 December 2017 and the financial result and cash flows for the financial year ended on that date in accordance with the Estonian financial reporting standard.

Basis of opinion

We conducted the audit in accordance with the International Auditing Standards (Estonia). Our responsibilities pursuant to those standards are additionally described in the part of our report titled "Authorised auditor's responsibility for the audit of the financial statements". We are independent of the University in accordance with the code of ethics of professional accountants (Estonia) (Code of Ethics (EE)) and we have fulfilled our other ethics related obligations in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and relevant to provide a basis for our opinion.

Other information

The Rector is responsible for other information. Other information includes the management report, but does not include the financial statements and our respective auditor's report.

Our opinion on the financial statements does not cover other information and we do not draw any conclusion on it to provide assurance in any form.

Our audit of the financial statements includes our obligation to read other information and consider whether the other information considerably differs from the financial statements or the knowledge we have obtained in the course of the audit, or seems otherwise significantly misstated. If we draw a conclusion on the basis of the work done that other information is significantly misrepresented, we are obligated to report that fact. We have nothing to report in this regard.

Responsibility of the Rector and those charged with governance for the financial statements

The Rector is responsible for the preparation of the financial statements and the fair presentation thereof in accordance with the Estonian financial reporting standard, as well as for maintaining an internal control system which the management deems necessary to ensure the correct preparation and presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the management is obligated to assess the University's sustainability in continuing as a going concern, to present information, where relevant, with regard to the circumstances related to continuity, and to apply the basic principles of continuity of activity, except if the management intends to either liquidate the University or discontinue operation or lacks a realistic alternative thereto.

Those charged with governance are responsible for performing supervision over the University's financial reporting process.

Authorised auditor's responsibility for the audit of the financial statements

Our objective is to obtain reasonable assurance that the financial statements as a whole are free from misstatement, whether due to fraud or error, and to issue an authorised auditor's

report containing our opinion. Reasonable assurance is high-level assurance, but it does not guarantee that if such misstatement exists, it will always be discovered in the course of an audit conducted in accordance with International Auditing Standards (Estonia). Misstatements may be due to fraud or error and they are considered material when it can be reasonably assumed that these may, either individually or in aggregate, influence economic decisions which the users make on the basis of the financial statements.

In auditing, we use professional decision-making in accordance with International Auditing Standards (Estonia) and maintain professional scepticism throughout the audit. We also do the following:

- We determine and assess the risks of material misstatement of the financial statements, whether due to fraud or error, plan and conduct audit procedures based on such risks, and obtain sufficient and relevant audit evidence to provide a basis for our opinion. The risk of non-discovery of a misstatement due to fraud is greater than in the case of a misstatement due to error, because a fraud may mean a secret agreement, forgery, omission of information, making misrepresentations or non-compliance with internal control;
- We obtain an understanding of internal control with regard to the audit, in order to plan appropriate audit procedures, but not in order to express an opinion on the efficiency of the University's internal control;
- We assess the appropriateness of the accounting principles used, and the relevance of the accounting estimates made by management and the reasonableness of the related information disclosed;
- We draw a conclusion on the relevance of the management's use of the principle of continuity of operation and, on the basis of the audit evidence obtained, on whether there is material uncertainty with regard to events or conditions which could create significant doubts as to the ability of the University to continue as a going concern. If we conclude that there is material uncertainty, we are obligated to draw attention to relevant information disclosed in the financial statement or, if the disclosed information is insufficient, modify our opinion. Our conclusions are based on the audit evidence obtained until the date of the independent auditor's report. However, future events or conditions may affect the University's ability to continue as a going concern;
- We assess the overall presentation, structure and content of the financial statements, including the disclosed information, and whether the financial statements present the underlying transactions and events in a manner that ensures fair presentation.

Among other things, we exchange information with those charged with the governance of the University concerning the planned scope and timing of the audit as well as the significant audit findings, including any significant deficiencies in internal control that we identify in the course of our audit.

/digitally signed/ Laile Kaasik Certified Public Accountant, licence No. 511

BDO Eesti AS Activity licence No. 1 A. H. Tammsaare tee 47, 11316 Tallinn 10 May 2018

Signatures to the 2017 Annual Report

The annual report of Tallinn University for the financial year ended on 31 December 2017 consists of the activity report and the financial statements.

The management of Tallinn University has prepared the activity report and the financial statements.

An independent auditor's report is a part of the annual report.

The Rector of Tallinn University has reviewed the annual report and approved it for presentation to the Senate.

(digitally signed)

Tiit Land Rector

(digitally signed)

Peep Jonas Chancellor

(digitally signed)

Liia Jaskeläinen Chief Accountant