



UNIVERSITAS

EESTI KÕRGKOOLOIDE, TEADUS- JA ARENDUSASUTUSTE AMETILITUDE ÜHENDUS

# Estonian R&D and HE staff satisfaction surveys 2013 & 2017

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A short illustrated summary of the UNIVERSITAS 2013 survey compared with the the first preliminary results of the 2017 survey



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# CONTENTS

1. INTRODUCTION .....	3
2. FIGURES CHARACTERIZING THE R&D REFORM .....	4
3. QUESTIONNAIRE 2013 (Translation into English) .....	6
4. PAGE OF COMMENTS 2013 (Questionnaire appendix, translation into English) .....	7
5. RESULTS OF THE POLL 2013 .....	9
6. PRELIMINARY RESULTS OF THE POLL 2017 .....	11
7. CONCLUSIONS .....	12
APPENDIX: Civil servant status of academic staff in Europe .....	13

# 1. INTRODUCTION

By the pressure of several political forces, in 2012 in Estonia a Research and Development (R&D) reform was started that terminated the relatively stable and internationally positively recognized system of R&D financing. Official reasoning was “too much fragmentation” (see more detailed comments in section 3 below).

Together with abrupt turn to the project-based financing and concentration of financing to few R&D groups, many departments, faculties and universities found themselves in an extremely difficult situation. Although in Estonia the number of scientists and engineers per million habitants involved in R&D is approximately 10% below the average European Union level, approximately 30% below the strong Central Europe countries and approximately two times below Nordic countries level (see Fig. 1 below), it was officially announced that number of state budget supported scientists in Estonia must decrease from 1880 to approximately 600-650. This drastic turn was the reason why the federation UNIVERSITAS decided to carry out the survey 2013.

The situation with social dialogue between government and representers of R&D and HE professionals has not improved substantially after 2014. In contrary, several changes in legislation have strengthened the unidirectional top-down management HE and R&D institutions. The number of involved R&D people working in HE system and industry has been decreasing already for 4 years (see Fig. 1). This is an alarming trend and contrary to the goals stated both in previous R&D&Innovation Strategy 2007-2013 and in the new one 2014-2010. Thus, instead of strengthening the basis for the support to the *EU smart specialisation initiative 2014-2020* (high-tech industry initiative), gap between the Central Europe and Estonia is increasing (not speaking about the Nordic Scandinavian region. Besides that the people working in R&D and HE system have expressed their dissatisfaction with the reduced financing and very unstable situation. UNIVERSITAS assumes that the main reasons for observed negative trends is the political management errors including the unwillingness to talk to people, the unsuccessful R&D funding concentration reform that left many good (and even very good & excellent) level R&D areas without funding, and the publications based assessment system instead industry-oriented approach. To establish basis for the oncoming policy planning both on national and EU levels, UNIVERSITAS has launched in December 2017 the new survey. Present short report show the preliminary results available by Jan. 11<sup>th</sup> 2018.

More detailed comments on the political and financial issues may be found from the sections below.

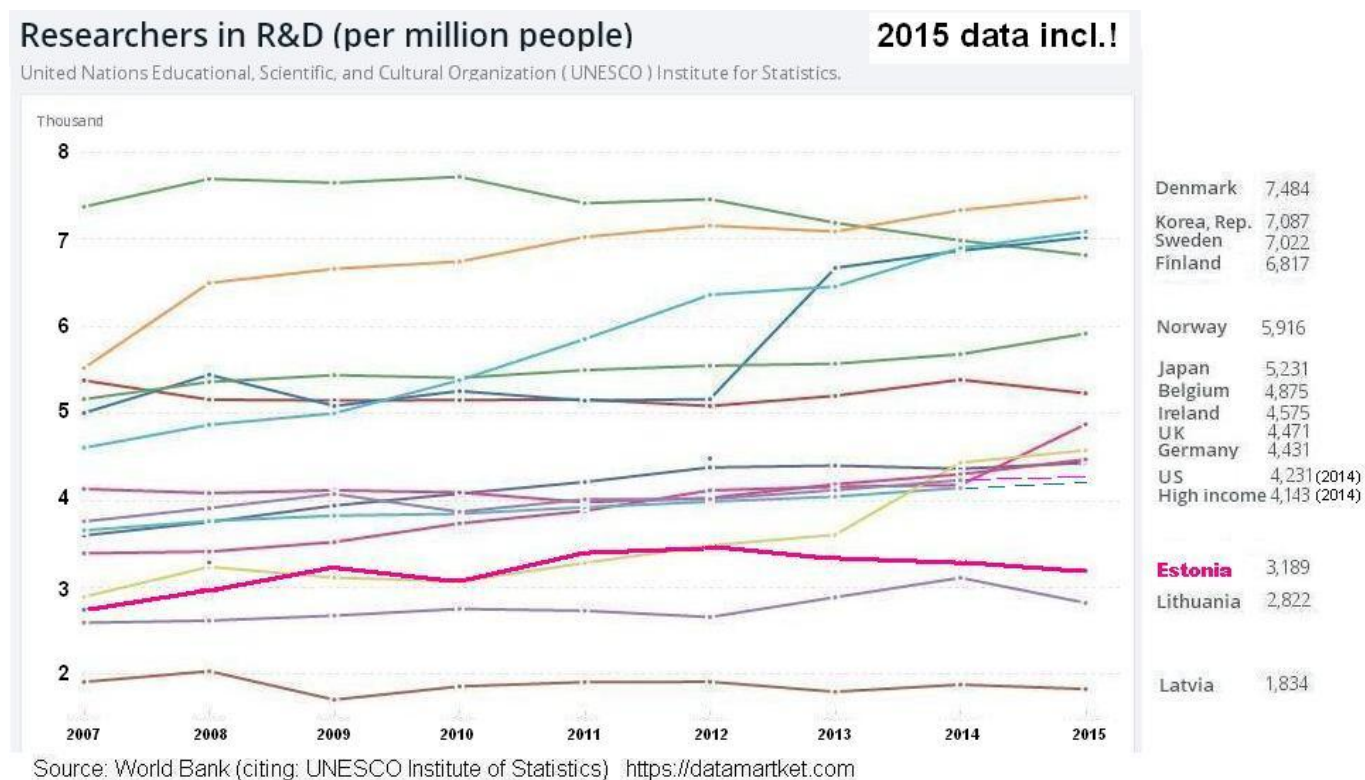


Fig. 1. Dynamics of researchers and engineers involved in Research & Development per million habitants in different leading countries of the world and Europe.

## 2. FIGURES CHARACTERIZING THE R&D REFORM

Here are shown some figures characterizing the R&D funding reform, launched in 2012-2013. Reform replaced relatively stable and moderate uniform funding with project-based grants, available only for a small amount of R&D groups.

The Figures are taken from the fresh report

“Ülevaade konkurentsist riiklikele uurimistoetustele Eestis 2008-2017” (Overview of Competition for National Research Grants in Estonia 2008-2017), Estonian Research Council, Tartu 2017, 39 p., (in Estonian, authors M. Sillaste and K. Raudvere, Analysis Dept. of ERC).

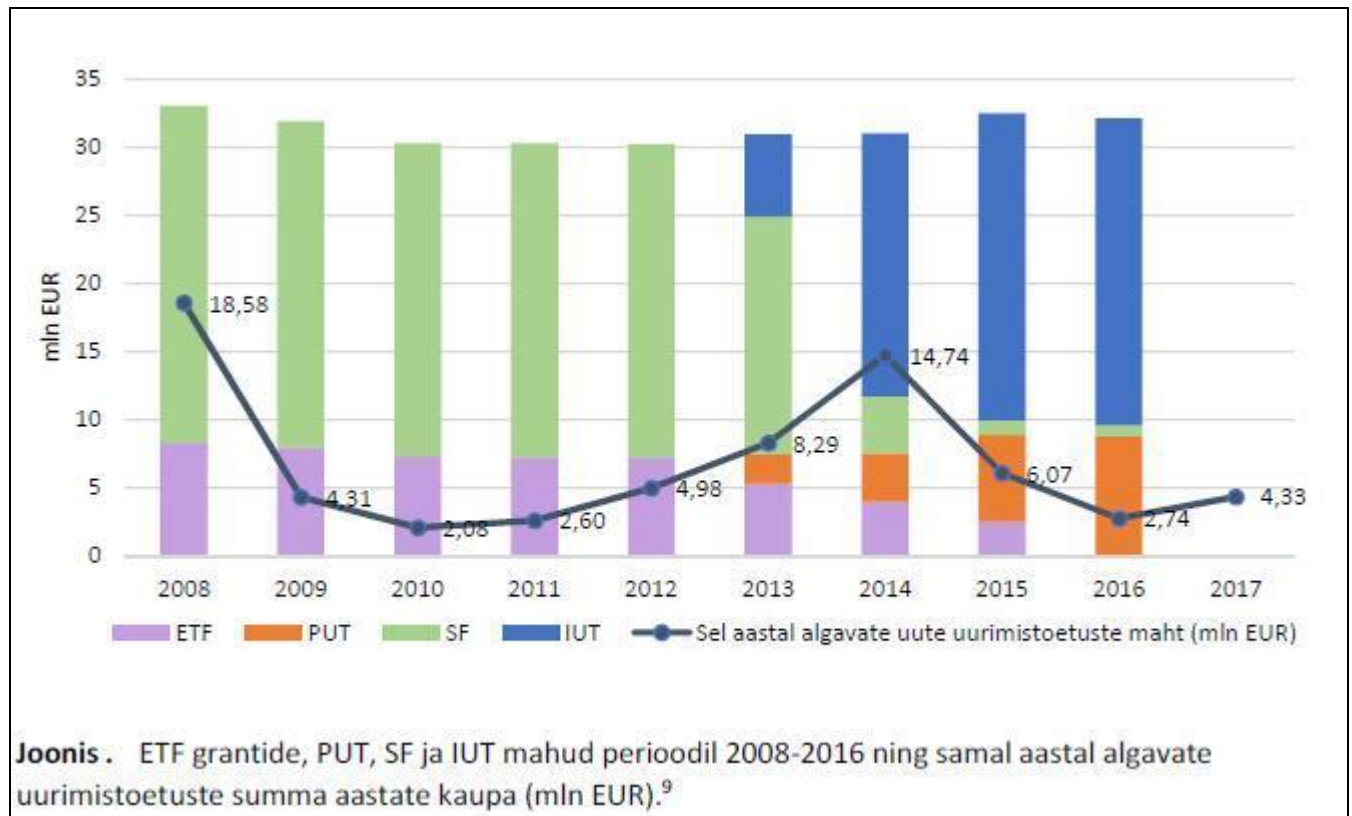


Fig. 2. Process of replacing targeted funding grants (SF) and Estonian Sci. Foundation grants (ETF) with institutional research grants (IUT) and personal research grants (PUT) available for relatively small part of research groups. Line – annual amount (MEUR) of starting grants corresponding to actual year.

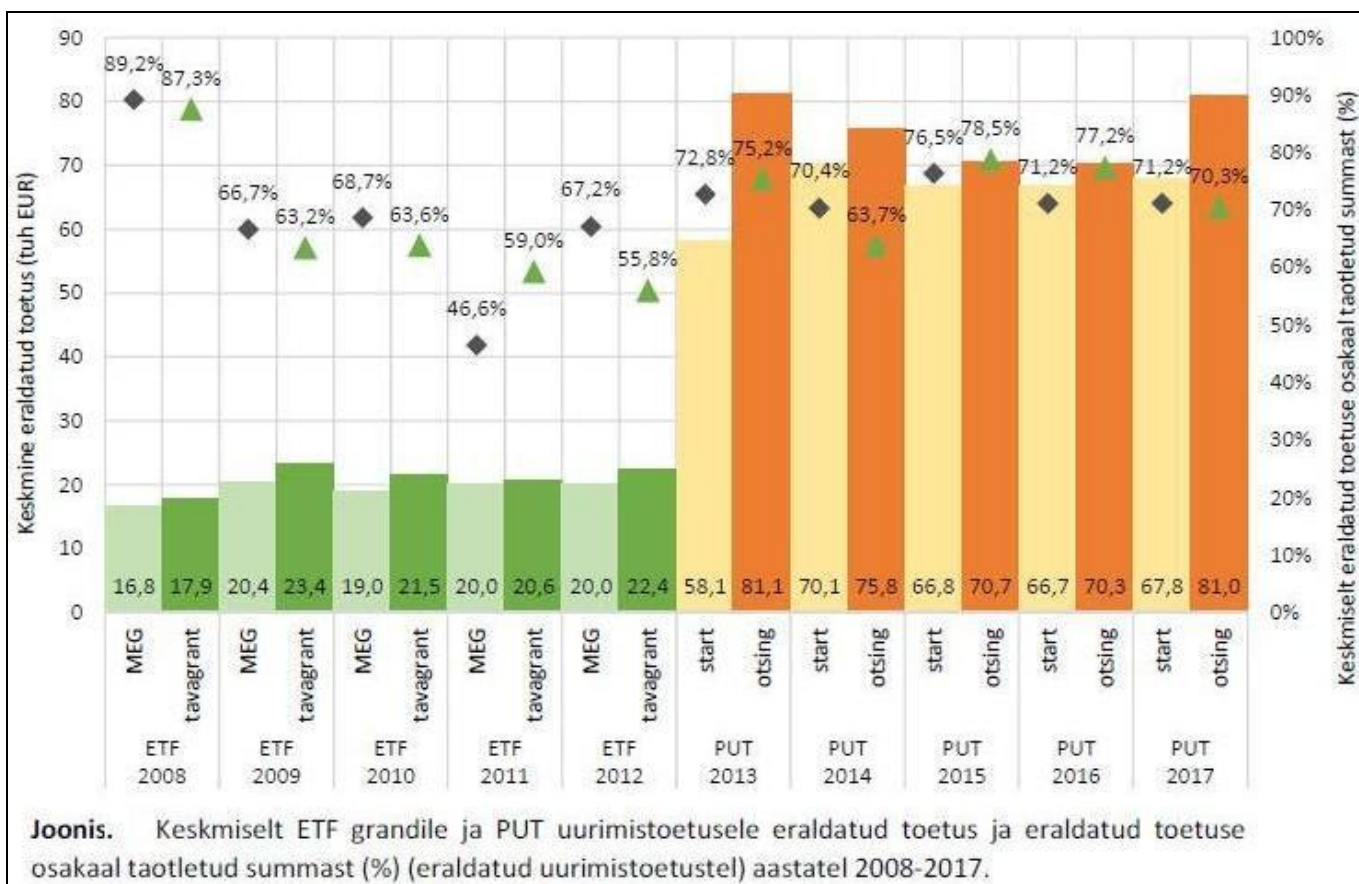


Fig. 3. Replacement of relatively big number of Est. Sci. Foundation grants of 20 kEUR range with 3-4 times greater personal research grants available only for a relatively small number of researchers and groups.

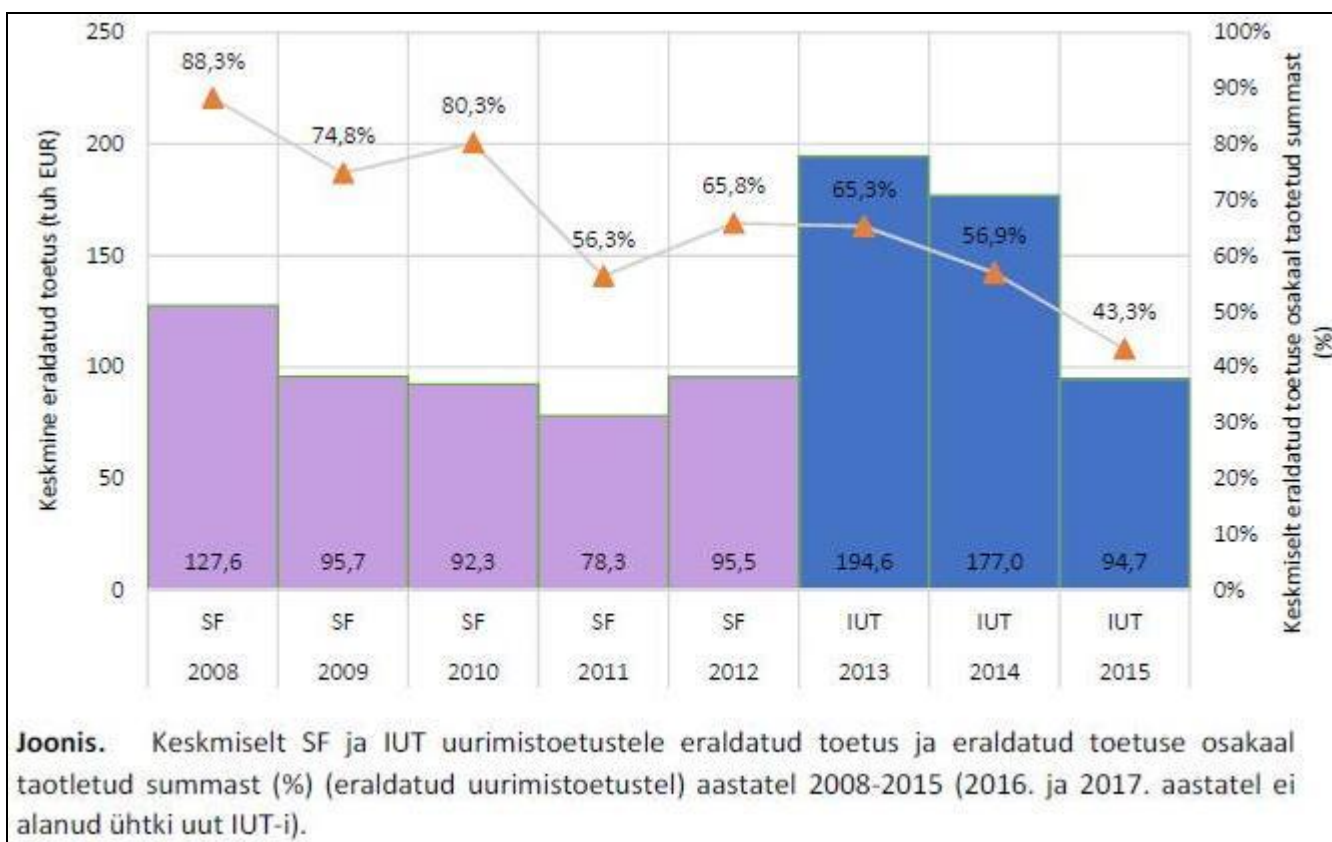


Fig. 4. Replacement of earlier targeted funding grants (SF) with relatively big project-type “institutional research grants” (IUT). Concentration of funding to small number of groups and departments caused serious crisis and was not “institutional” at all.

### 3. QUESTIONNAIRE 2013 (Translation into English)

Nation-wide poll of the Estonian Universities Trade Union Federation „Universitas“ concerning the science funding reform

## QUESTIONNAIRE

no. \_\_\_\_\_

1. Are you satisfied with the present science funding reform that replaces the stable targeted funding grants with the project-based “institutional grants” available only for limited number of research groups (mark your answer with circle)?

YES	FAIRLY YES	CAN NOT TELL	FAIRLY NO	NO
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2. Do you support the principle of concentrating research funds (no. of researchers must decrease from present around 1800 to approximately 650, only half of the research groups remain; "Estonian scientist eats other Estonian scientists" principle)?

YES	FAIRLY YES	CAN NOT TELL	FAIRLY NO	NO
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3. Do you agree that this reform is consistent with the Estonian R&D Strategy accepted by the parliament? (see the comments page)?

YES	FAIRLY YES	CAN NOT TELL	FAIRLY NO	NO
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4. Do you think that such a reform in accordance with the Constitution (the preservation of the Estonian nation and culture through the ages)?

YES	FAIRLY YES	CAN NOT TELL	FAIRLY NO	NO
-----	------------	--------------	-----------	----

5. Do you think that this reform will be actually "institutional" (helps research organizations to manage the activities)?

YES	FAIRLY YES	CAN NOT TELL	FAIRLY NO	NO
-----	------------	--------------	-----------	----

6. Do you trust the procedure of reviewing and selection of the successful groups?

YES	FAIRLY YES	CAN NOT TELL	FAIRLY NO	NO
-----	------------	--------------	-----------	----

7. Must the reviews defining the development of complete departments and faculties to be disputable?

YES	FAIRLY YES	CAN NOT TELL	FAIRLY NO	NO
-----	------------	--------------	-----------	----

8. Do you agree that final decision-making assessment council (13 members in 4 main research fields) is enough in size, balanced, objective and competent?

YES	FAIRLY YES	CAN NOT TELL	FAIRLY NO	NO
-----	------------	--------------	-----------	----

9. Do you agree that the funding volume adjustment must be smooth ("stimulating", i.e. not yes/no system) according to the grades given by the reviewers?

YES	FAIRLY YES	CAN NOT TELL	FAIRLY NO	NO
-----	------------	--------------	-----------	----

10. Do you support the suspension of the current reform and introduction of the new funding model ("base secured, domestic cooperation, international competition")?

YES	FAIRLY YES	CAN NOT TELL	FAIRLY NO	NO
-----	------------	--------------	-----------	----

11. Do you support the introduction of the more detailed research fields classification (5 or 6 fields relying e.g. on European CERCS system – see the comment page)?

YES	FAIRLY YES	CAN NOT TELL	FAIRLY NO	NO
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12. Do you support as the part of the more stable end transparent funding system the salary matrix system offered by Tallinn University of Technology?

YES	FAIRLY YES	CAN NOT TELL	FAIRLY NO	NO
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Please comment the situation (reason of crisis, how is possible direct violation of the R&D Strategy etc.)

.....

Your proposals (procedure-related, institutional and principal):

.....

Your position: researcher: \_\_\_\_\_ teacher: \_\_\_\_\_ manager: \_\_\_\_\_ (workload or level of management )

Faculty or Institution: \_\_\_\_\_

Universitas membership: YES NO Member of other academic society \_\_\_\_\_

Please fill the questionnaire and return it to the representative of the Universitas.

## 4. PAGE OF COMMENTS (Questionnaire appendix, translation into English)

### LIST OF COMMENTS

1. The research funding reform was started in 2012. Allegedly the purpose was to remove “the extra fragmentation”. For that the relatively stable system of targeted funding grants and centers of excellence (amount ca 30 MEUR/y. or approximately basic salary of 1500 researchers) was terminated. Additionally the well evaluated in Estonia and abroad the Est. Sci. Foundation grants (amount ca 6-7 MEUR/y.) were terminated. For replacement the project-based institutional research grants (IUT) available for only small no. of R&D groups (ca 30 MEUR/y.) and limited number of personal grants (PUT) (ca 8 MEUR/y. incl. post-doctoral grants) were offered (see paper by head of Est. Res. Council Andres Koppel “Teaduse rahastamise reformi teine aasta” (“The 2<sup>nd</sup> year of science funding reform”) in culture-related newspaper Sirp, [www.sirp.ee](http://www.sirp.ee) 04.10.2013).
2. The three-fold reduction of number of scientists working on basis of the public funding from 1883 to ca 600-650 as the goal of science reform and Est. Res. Council activities is mentioned in the same publication (A. Koppel, Sirp, 04.10.2013).
3. Estonian Strategy of R&D and Innovation 2007-2013 “Knowledge-based Estonia” states the following goals for number of R&D staff and human resources (see, e.g. annual report 2012 of Strategy, <http://www.hm.ee/index.php?03242>)
  - To reach the goals of Strategy the number of R&D staff must increase approximately by 1000 researchers and engineers.
  - In addition to temporary investments into physical and human capital the stable public financing to assure balanced development of basic activities of researchers is needed.
  - To achieve the desired goals by Estonian state, and to continue the planned growth of R&D and Innovation capability and number of R&D staff, the increase of the basic financing of scientific activities is needed.
  - The qualified human resources must be secured – one of the limiting factors for development of Estonian economy and society is the limited human capital. Because of that the possibilities must be found for better involvement of available people, for the increase of their qualification and additionally to import the know-how from abroad..
4. Constitution states the cultural continuity requirement. The quality of Estonian research-based universities can be secured and developed only via the scientific research in many directions. Considering the limited human resources of Estonia, organization of survival fight between R&D directions and forced termination of several R&D directions is a very short-sighted and destructive policy. RD & Innovation strategy is in line with the Constitution, but the implementation principles of the current R&D funding reform are in rather direct conflict with it.
5. “Institutional” should mean the continuity and planning opportunity for institutions. Please give your opinion – do you see it or the word “institutional” is introduced to conceal some other goals that may be even opposite to the goals openly declared.
6. Usually several domestic or international reviewers are involved. The procedure of their selection can not be publicly controlled. Artificially increased project volumes (together with limited number of funds) create very hard competition. Even one single mark from reviewer may be decisive. It is not sure that the reviewers understand their role (different than the research paper review). It can not ruled out malicious experts who want to eliminate competitors, as well as experts agreements. Because of that the projects should be evaluated only with approximate accuracy (e.g. 0.5 grade step within 5 grade scale) and the lottery or sports competition type contests should be avoided under the “institutional management” claim.
7. Similar to research papers, the obviously incompetent, inconsistent and malicious reviews should have possibility to be challenged. This is a basic requirement of a democratic society, an elementary requirement if the taxpayers' money is distributed.
8. It is clear that the 13-member Assessment Council is not able to provide competent and objective evaluation for all four main fields of R&D classification in Estonia. Democratic procedures would require the involvement of a greater number of people, including, for example, the professional associations and the parliament. To ensure the a credibility of decisions, the balanced representation of all four larger research universities is necessary. At that universities themselves should choose their representatives.
9. It is an elementary principle of system control that discrete two-level 0/1 feedback is a cause of instabilities and crisis situations. Human resources management should be based on the stimulation, not punishment methodology. Therefore, "soft" regulation of funding volumes on the basis of obtained grades should be used.
10. Present total funding of new IUT projects together with basic R&D funding is about 30 + 7 MEUR/y. (additionally the infrastructure funding is also about 7 MEUR/y.). This basis may assure basic wages about 1100-

1200 EUR/month for all 1800 researchers. The actual four major research university full-time research staff is smaller and close to 1,500. In addition, many researchers are funded by industrial projects and international projects. Therefore, to assure the minimum wages the funding of 10-15 MEUR/y. level is mostly needed and the other half of abovementioned 30 MEUR /y. may be used for competition-based stimulating funding through projects (e.g. increasing personal projects PUT part multiple times from present 8 MEUR/y. volume). Thereby the alternative stable funding model IUR (*Intitutsionaalse Uurimistöö Rahastus* - Institutional Research Funding) together with enhanced stimulating personal research funding PUR (*Personaalne Uurimistöö Rahastus* – Personal Research Funding) based on the principles of human resources continuity and preservation would be completely achievable already in the limits of the present state budget. Let us mention additionally that the R&D state budget funding about 1% GNP (180 MEUR/y.) together with industry and international funding about 2.4% GNP (430 MEUR/y.) are the very large numbers and if those can not be used to preserve the high quality human resources (science doctors – typically considered the elite in statistics), then we are dealing with extreme incompetence in the management of science.

11. Estonian research classification includes only 4 major research fields. Taking into account the better R&D management by the future governments and R&D reviewing quality, it is reasonable to go over to a more detailed classification, e.g. to the 5-field Common European Research Classification Scheme CERCS ( 1. Humanities; 2. Social sciences; 3. Physical sciences; 4. Biomedical sciences; 5. Technological sciences). During the present poll, the consultations with several “Universitas” partners led to the following possible new 6-field proposal: 1. Bio and environmental sciences; 2. Humanities; 3. Natural sciences; 4. Health sciences; 5. Technological sciences; 6. Social sciences).

12. Tallinn University of Technology is deploying the model of Finland wage matrices (see [www.ttyalo.ee](http://www.ttyalo.ee) Collective Agreement Appendices). This allows to determine the basic salary level for each academic post plus additional contributions in accordance with individual efficiency by a factor up to 1.46. Wage matrices make easier to go to the human resources and researcher numbers based planning for both the university and state level. This is in accordance both with the Estonian R&D and Innovation Strategy and with the European Union demand to go over to the continuous employment contracts already in 2014. The extreme instability caused by the present science funding reform does not allow to meet those requirements.

Let us do not wait when “sometimes we win anyway”, let us do it now and establish the knowledge-based Estonia!



## 5. RESULTS OF THE POLL 2013

Table 1: The final summary of the Research Funding Reform Poll by "Universitas" (in Estonian). From the researchers and teachers in three institutions the 156 filled answer lists were obtained by Dec. 17<sup>th</sup> of 2013 to the formulated 12 questions (see section 2 "Questionnaire" above).

Universitas teadusrahastuse küsitlus - lõplik kokkuvõte (17.12.2013 andmed)									
Küsimus	JAH	Pigem JAH	Ei oska öelda	Pigem EI	EI	Kokku	JAH%	EI%	
KOKKU kõik asutused (TTÜ - TU + EMÜ) - 156 vastanut									
1. Praeguse reformi toetus	2	4	7	42	101	156	3,8		91,7
2. Toetus põhimõttele "kogu raha vaid osale uurimisgruppidest"	0	5	8	32	111	156	3,2		91,7
3. Kooskõla TA&I strateegiaga "1000 teadlast ja inseneri juurde"	3	4	21	52	76	156	4,5		82,1
4. Kooskõla põhiseadusega "kultuuri säilimine"	4	3	27	61	61	156	4,5		78,2
5. Kooskõla institutsionaalse planeerimisega	1	10	19	45	81	156	7,1		80,8
6. Kas usaldate retsenseerimise protseduuri	2	14	23	55	62	156	10,3		75,0
7. Kas retsensioonid peavad olema vaidlustatavad	89	43	14	10	0	156	84,6	6,4	
8. Kas hindamisnõukogu piisavalt suur ja kompetentne	6	6	27	57	60	156	7,7		75,0
9. Kas peaks rahastuse reguleerimine olema sujuvam	82	59	11	3	1	156	90,4	2,6	
10. Kas vaja reform peatada ja teha uus "baas tagatud" mudel	85	42	18	9	2	156	81,4	7,1	
11. Kas toetate valdkondade 6 põhijaotusega klassifitseerimist	74	45	33	2	2	156	76,3	2,6	
12. Kas toetate palgamaatriksite süsteemi	62	55	32	2	5	156	75,0	4,5	
Tallinna Tehnikaülikool - 130 vastanut									
1. Praeguse reformi toetus	1	4	5	34	86	130	3,8		92,3
2. Toetus põhimõttele "kogu raha vaid osale uurimisgruppidest"	0	4	7	28	91	130	3,1		91,5
3. Kooskõla TA&I strateegiaga "1000 teadlast ja inseneri juurde"	3	3	11	46	67	130	4,6		86,9
4. Kooskõla põhiseadusega "kultuuri säilimine"	2	2	24	50	52	130	3,1		78,5
5. Kooskõla institutsionaalse planeerimisega	1	8	15	37	69	130	6,9		81,5
6. Kas usaldate retsenseerimise protseduuri	2	11	18	47	52	130	10,0		76,2
7. Kas retsensioonid peavad olema vaidlustatavad	76	36	9	9	0	130	86,2	6,9	
8. Kas hindamisnõukogu piisavalt suur ja kompetentne	5	6	21	50	48	130	8,5		75,4
9. Kas peaks rahastuse reguleerimine olema sujuvam	69	48	9	3	1	130	90,0	3,1	
10. Kas vaja reform peatada ja teha uus "baas tagatud" mudel	70	38	14	7	1	130	83,1	6,2	
11. Kas toetate valdkondade 6 põhijaotusega klassifitseerimist	64	41	23	1	1	130	80,8	1,5	
12. Kas toetate palgamaatriksite süsteemi	50	50	24	2	4	130	76,9	4,6	
Tartu Ülikool (koos Tartu Observatooriumiga) - 10 vastanut									
1. Praeguse reformi toetus	1	0	1	3	5	10	10,0		80,0
2. Toetus põhimõttele "kogu raha vaid osale uurimisgruppidest"	0	1	0	0	9	10	10,0		90,0
3. Kooskõla TA&I strateegiaga "1000 teadlast ja inseneri juurde"	0	1	0	2	7	10	10,0		90,0
4. Kooskõla põhiseadusega "kultuuri säilimine"	2	0	1	3	4	10	20,0		70,0
5. Kooskõla institutsionaalse planeerimisega	0	1	0	4	5	10	10,0		90,0
6. Kas usaldate retsenseerimise protseduuri	0	1	1	3	5	10	10,0		80,0
7. Kas retsensioonid peavad olema vaidlustatavad	7	2	1	0	0	10	90,0	0,0	
8. Kas hindamisnõukogu piisavalt suur ja kompetentne	1	0	0	3	6	10	10,0		90,0
9. Kas peaks rahastuse reguleerimine olema sujuvam	5	4	1	0	0	10	90,0	0,0	
10. Kas vaja reform peatada ja teha uus "baas tagatud" mudel	6	2	1	0	1	10	80,0	10,0	
11. Kas toetate valdkondade 6 põhijaotusega klassifitseerimist	4	2	3	0	1	10	60,0	10,0	
12. Kas toetate palgamaatriksite süsteemi	2	3	4	0	1	10	50,0	10,0	
Eesti Maaülikool - 16 vastanut									
1. Praeguse reformi toetus	0	0	1	5	10	16	0,0		93,8
2. Toetus põhimõttele "kogu raha vaid osale uurimisgruppidest"	0	0	1	4	11	16	0,0		93,8
3. Kooskõla TA&I strateegiaga "1000 teadlast ja inseneri juurde"	0	0	10	4	2	16	0,0		37,5
4. Kooskõla põhiseadusega "kultuuri säilimine"	0	1	2	8	5	16	6,3		81,3
5. Kooskõla institutsionaalse planeerimisega	0	1	4	4	7	16	6,3		68,8
6. Kas usaldate retsenseerimise protseduuri	0	2	4	5	5	16	12,5		62,5
7. Kas retsensioonid peavad olema vaidlustatavad	6	5	4	1	0	16	68,8	6,3	
8. Kas hindamisnõukogu piisavalt suur ja kompetentne	0	0	6	4	6	16	0,0		62,5
9. Kas peaks rahastuse reguleerimine olema sujuvam	8	7	1	0	0	16	93,8	0,0	
10. Kas vaja reform peatada ja teha uus "baas tagatud" mudel	9	2	3	2	0	16	68,8	12,5	
11. Kas toetate valdkondade 6 põhijaotusega klassifitseerimist	6	2	7	1	0	16	50,0	6,3	
12. Kas toetate palgamaatriksite süsteemi	10	2	4	0	0	16	75,0	0,0	

Table 1 presents (in Estonian) the final results for the given 12 questions from 3 institutions. At that first part of the table shows summary results for three institutions together. The poll was organized by “Universitas” but participation (anonymous, only faculties/departments were asked to mark on the lists) was possible for all staff of involved institutions.

In summary by December 17<sup>th</sup> of 2013 the poll got 156 answer lists from three institutions:

130 lists from Tallinn University of Technology;

10 lists from University of Tartu (incl. 1 list from Tartu Observatory in Tõravere);

16 lists from Estonian University of Life Sciences in Tartu.

Table 1 answer section includes the following columns:

JAH = YES

Pigem JAH = Fairly YES

Ei oska öelda = Can't tell

Pigem Ei = Fairly NO

EI = NO

Kokku = Total

JAH% = Summary percentage YES + Fairly YES

EI% = Summary percentage NO + Fairly NO

Below Fig. 2 summarizes the overall results in English.

Answers: Total 156 (130 Tallinn UT + 16 Eston. Univ. Life Sci. + 10 Tartu Univ.)									
<b>Research Funding Reform Poll by "Universitas" - final results (17.12.2013)</b>									
Question	YES	Fairly YES	Can't tell	Fairly NO	NO	Σ	YES%	NO%	
1. Your support to the present reform?	2	4	7	42	101	156	3,8	91,7	
2. Your support to the "Money to few R&D groups"?	0	5	8	32	111	156	3,2	91,7	
3. Reform agrees w. R&D Strategy "+1000 R&D staff"?	3	4	21	52	76	156	4,5	82,1	
4. Reform agrees w. Constitution "preservation of culture"?	4	3	27	61	61	156	4,5	78,2	
5. Reform agrees w. institutional planning?	1	10	19	45	81	156	7,1	80,8	
6. Your trust in reviewing procedure?	2	14	23	55	62	156	10,3	75,0	
7. Must reviews be contestable?	89	43	14	10	0	156	84,6	6,4	
8. Adequacy of decision-making council?	6	6	27	57	60	156	7,7	75,0	
9. Your support to more smooth funding amounts?	82	59	11	3	1	156	90,4	2,6	
10. Cancel the reform and go to "base guaranteed" model?	85	42	18	9	2	156	81,4	7,1	
11. Your support to more research fields?	74	45	33	2	2	156	76,3	2,6	
12. Your support to salary matrix system?	62	55	32	2	5	156	75,0	4,5	

Fig. 5. Translation of the overall Poll 2013 results in English. The given 12 questions were explained in section 2 of the present report. Final “YES%” summarizes here “YES” and “Fairly YES”, final “NO%” summarizes “NO” and “Fairly NO”. In total 156 answer lists were obtained from the teachers and researchers of the three member institutions of the “Universitas”.

## 6. PRELIMINARY RESULTS OF THE POLL 2017

In December 16th 2017 the new survey was launched by UNIVERSITAS considering the oncoming 11-12 Jan. 2018 seminar and necessity of deepening cooperation with international partners over the Europe.

In order to facilitate answering by people, the new questionnaire contained the same number (12) of questions. The questions 1-3 and 10-12 remained essentially the same as in previous 2013 survey. The questions 4-9 ask personal opinion of staff about scientific and structural reforms on the state level and on the institution level. The questions are explained in Table 2 below.

By Jan 10<sup>th</sup> 2018 UNIVERSITAS had received correctly filled questionnaire lists from the 41 persons in Tallinn University of Technology (the biggest member institution of UNIVERSITAS).

Table 2: The intermediate summary of the new 2017 opinion poll.

	Küsimused/Questions	JAH YES	Pigem JAH Fairly YES	Ei oska Can't tell	Pigem EI Fairly NO	EI NO	Σ Σ	JAH% YES%	0% 0%	EI% NO%
1	1. Toetus praeguse teadusreformile Your satisfaction with R&D reform 2013...?	0	1	2	22	16	41	2,4	4,9	92,7
2	2. Toetus "raha vaid osale gruppidest" Your agreement with "money to few groups"	0	0	6	18	17	41	0,0	14,6	85,4
3	3. Kooskõia TA&I strat. "+1000 R&D staff" Reform agrees with R&D strategy?	0	2	12	13	14	41	4,9	29,3	65,9
4	4. Reform soodne high-tech ettevõtlikele Is reform supporting high-tech economy?	0	1	10	11	19	41	2,4	24,4	73,2
5	5. "Tasuta kõrghariduse" kasulikkus Usefulness of "Free High.Ed." slogan?	0	3	14	10	14	41	7,3	34,1	58,5
6	6. Rahulolu asutuse ümberkorraldustega Satisfied w. your institution rearrangements?	0	5	6	15	15	41	12,2	14,6	73,2
7	7. Valiksite teadlase-õppejõu eluk. Eestis? Choose again teacher/researcher in Estonia?	9	11	7	9	5	41	48,8	17,1	34,1
8	8. Rahulolu riigi tead. ja kõrgh. poliitikaga Satisfaction with state R&D-HE policy?	0	3	13	14	11	41	7,3	31,7	61,0
9	9. Rahulolu oma asutuse üldjuhtimisega Satisfaction with your inst. management?	0	4	6	23	8	41	9,8	14,6	75,6
10	10. Nõus mõõduka baasfin. palgamudeliga Agree w. moderate but stable salary model?	9	17	7	5	3	41	63,4	17,1	19,5
11	11. Toetus UNESCO/OECD 6-os. jaotusele Agree w. UNESCO/OECD 6-div. R&D system?	21	8	11	0	1	41	70,7	26,8	2,4
12	12. Kas õj./tead. riigiteenistujad? Your support to civil servant status?	8	17	12	3	1	41	61,0	29,3	9,8

## 7. CONCLUSIONS

It can be seen that the opinion of people concerning the questions 1-3 and 10-12 has not been changed substantially during the 4 years.

People disagree clearly with policy of concentrating R&D funding (Q1-Q2). Also the dominating wish written in supporting remarks to questionnaire was “the stability”.

People state that performed reforms are contradicting with R&D and Innovation Strategy and reforms are not supporting the development of high-tech industry (Q3-Q4)..

People do not see the benefit from “Free High Education” political program announced in 2011. Before that self-paid studies were possible in addition to the quota financed by state and financing of HE system was higher (Q5).

People are not satisfied with rearrangement of internal structure of Tallinn Univ. of Technology (approximately two-fold reduction of number of faculties, departments and study programmes, reforming the system of academic positions, cancelling of the chairs as smaller teaching units) (Q6).

Still nearly half of R&D and HE is satisfied with personal selection of working field (Q7).

People are clearly unsatisfied with the state level R&D and HE policy. Thus professional working in the field think that Ministry of Research and Education together with the Estonian Research Council are clearly unable to implement the policy acceptable to the state and the people (Q8).

People are clearly unsatisfied also with the management on the university level that is indication of fact that the people miss the social dialogue that was reduced by the introduction of the new top-down management legislation approximately 3 years ago (Q9).

People are tired from unclear and unreasonable reforms and express wish to agree even with lower salary level if only stability would be guaranteed (Q10).

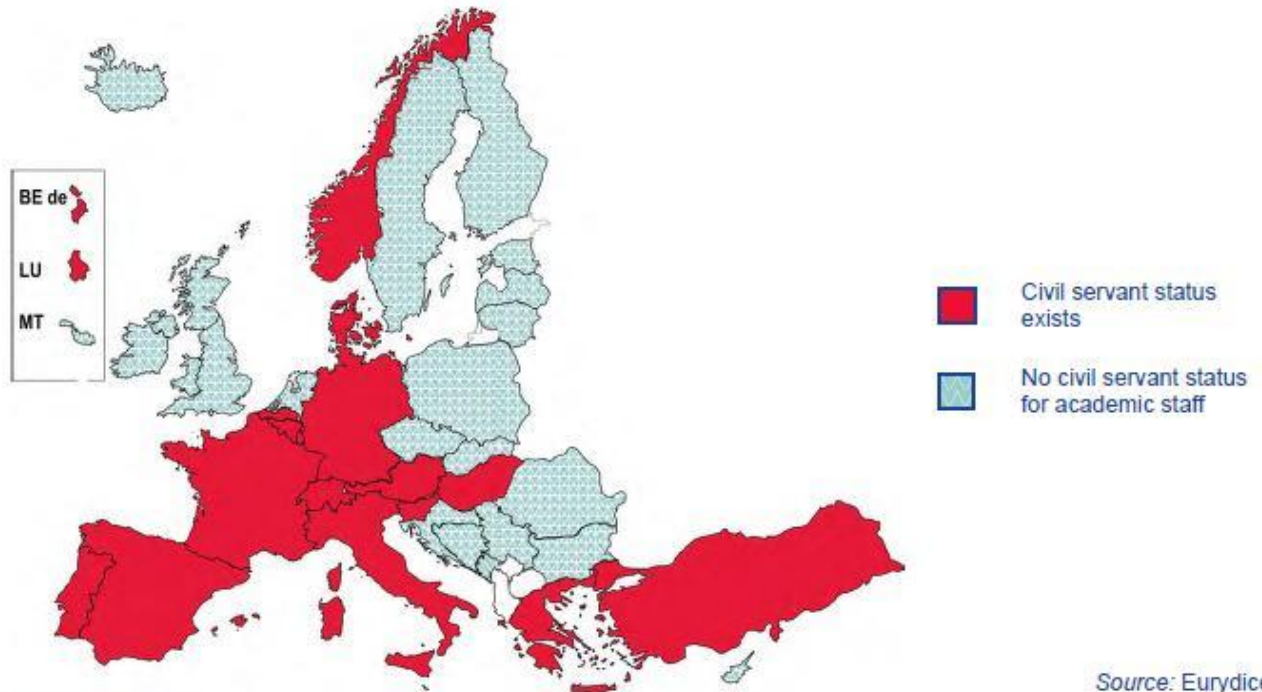
People of the University of Technology very clearly support transfer to the international UNESCO/OECD Frascati R&D system where *Technology* is a separate field (Q11). This transfer could support development of industry-related applied research thus supporting the general goals stated by EU and the R&D and Innovation Strategy 2014-2020 of Estonia as well.

Surprisingly remarkable majority of people support the introduction of the civil servant status for R&D and HE staff (Q12). This result shows the need for stability expressed by the people (see civil servant status map in Appendix).

## APPENDIX. Civil servant status for academic staff in Europe

Modernisation of Higher Education in Europe: Academic Staff – 2017

Figure 4.3: Existence of civil servant status for academic staff, 2015/16



Source: Eurydice.

### Explanatory notes

Across Europe, the term 'civil servant' is not defined in the same way and the status does not bring the same benefits. When referring to 'civil servants', the figure refers to staff employed by the public authority/administration, usually following an open competition. The employment/appointment is in accordance with legislation regulating the functioning of public administrations, distinct from the one governing contractual relations in the public or private sector. In some countries, academic staff may be appointed with the expectation of a lifelong career as career civil servants. Usually, mobility from one institution to another does not affect the contractual status. Common synonyms: 'public official', 'official', 'functionary'.

Fig. A1. Availability of civil servant status for academic staff in European countries.

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