

Survey response for Finland

OECD database of governance of public research policy

This document contains detailed responses for Finland to the survey on governance of public research policy across the OECD. It provides additional background information to the OECD database of governance of public research policy as described in Borowiecki, M. and C. Paunov (2018), "How is research policy across the OECD organised? Insights from a new policy database", *OECD Science, Technology and Industry Policy Papers*, No. 55, OECD Publishing, Paris, <https://doi.org/10.1787/235c9806-en>. The data was compiled by the OECD Working Party on Innovation and Technology Policy (TIP). Data quality was validated by delegates to OECD TIP Working Party the in the period between March 2017 and May 2018. Additional references that were used to fill out the questionnaire are indicated.

The data is made freely available online for download at <https://stip.oecd.org/resgov>.

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Abbreviations and acronyms

EU	European Union
IP	Intellectual property
HEIs	Higher Education Institutions
MEC	Opetus- ja kulttuuriministeriö Ministry of Education and Culture
MEAE	Työ- ja elinkeinoministeriö Ministry of Economic Affairs and Employment
PRIs	Public Research Institutions
RIC	Tutkimus- ja innovaationeuvosto Finnish Research and Innovation Council
R&D	Research and Development
UAS	University of Applied Sciences

Survey of public research policy

Topic 1: Institutions in charge of priority setting, funding and evaluations

Table 1. Questions on institutions in charge of priority setting, funding and evaluations of universities and PRIs

Question	Response
<p>Q.1.1. Who mainly decides on the scientific, sectoral and/or thematic priorities of budget allocations for a) HEIs and b) PRIs?</p> <p>c) Which are the main mechanisms in place to decide on scientific, sectoral and/or thematic priorities of national importance, e.g. digital transition, sustainability? Please describe who is involved and who decides on the priorities (e.g., government, research and innovation councils, sector-specific platforms including industry and science, etc.).</p> <p><i>(This question does not refer to who sets overall science, technology and industry priorities. This is usually done by parliaments and government. The question refers to decisions taken after budgets to different ministries/agencies have been approved. Scientific priorities refer to scientific disciplines, e.g. biotechnology; sectoral priorities refer to industries, e.g. pharmaceuticals; and thematic priorities refer to broader social themes, e.g. digital transition, sustainability, etc.)</i></p> <p>d) From 2005-16, were any significant changes introduced as to how decisions on scientific, sectoral and/or thematic orientation of major programmes are taken (e.g. establishment of agencies that decide on content of programmes)?</p>	<p>a to c) Until March 2016, the Finnish Research and Innovation Council (Tutkimus- ja innovaationeuvosto, RIC) did set recommendations for strategic areas of research and innovation, e.g. Research and innovation Policy Guidelines (2010 and 2014) (http://minedu.fi/export/sites/default/OPM/Tiede/tutkimus-ja_innovaationeuvosto/julkaisut/liitteet/Review2015_2020.pdf).</p> <p>Beyond the RIC, the Ministry of Education and Culture (Opetus- ja kulttuuriministeriö, MEC) and the Ministry of Economic Affairs and Employment (MEAE) provide guidance for broad scientific, sectoral and thematic areas that funding agencies should cover (OECD Science, Technology and Industry Outlook 2014, response to question on national STI Strategies or Plans). Funding agencies have freedom to act within these strategic guidelines (Glennie, A., and Bound, K., 2016, 57-61).</p> <p>d) <i>Changes over 2005-16</i> The RIC that operated with the more or less similar STI policy related mandate from 1987 was renewed in March 2016 when the RIC was established in a new format. It is too early to estimate the role the new RIC will take on scientific, sectoral and/or thematic orientations, policies and major programmes. In addition please note that (the previous and the new) Council did/does not make any formal decisions about the orientation of the major programmes. It was/is an advisory body. The ministries and funding organisations are responsible players and decision-makers on these issues.</p>
<p>References:</p> <p>OECD Science, Technology and Industry Outlook 2014 for Finland. National STI Strategy or Plan. Retrieved from https://www.innovationpolicyplatform.org/content/finland, accessed 05.10.2016.</p> <p>Glennie, A., and Bound, K. (2016). <i>How Innovation Agencies Work: International Lessons to Inspire and Inform National Strategies</i>, p. 57-61. London: NESTA. Retrieved from https://www.nesta.org.uk/sites/default/files/how_innovation_agencies_work.pdf, accessed 05.10.2016.</p>	

Q.1.2. Who allocates **institutional block funding** to a) HEIs and b) PRIs?

(Institutional block funds (or to general university funds) support institutions and are usually transferred directly from the government budget.)

c) Who allocates **project-based funding** of research and/or innovation for HEIs and PRIs?

(Project-based funding provides support for research and innovation activities on the basis of competitive bids.)

d) Is there a transnational body that provides funding to HEIs and PRIs (e.g. the European Research Council)?

e) What is the importance of such funding relative to national funding support?

f) From 2005-16, were any changes made to way programmes are developed and funding is allocated to HEIs and PRIs (e.g. merger of agencies, devolution of programme management from ministries to agencies)?

a) The MEC allocates institutional block funding to HEIs.

b) PRIs receive their budget from their respective ministries (please note that there are 11 PRIs in Finland and they operate under the auspices of 7 ministries and one PRI is steered by the Parliament) and allocate funds to research and innovation activities themselves (EC/OECD STI Policy Survey 2016, **response B12 and C6**).

c) With regard to project-based funding, national funding agencies develop programmes supporting research and innovation at HEIs and PRIs and allocates budget to them. The Academy of Finland (under MEC) decides on basic research programmes and instruments. The National Technology Agency (Tekes, under MEAE) decide on programmes and instruments supporting R&D and innovation. The Finnish Innovation Fund Sitra predicts, analyses and assesses the forces of social change and their impacts on Finland. As an independent operator, Sitra has the opportunity to react quickly to major issues concerning society and accelerate changes that promote well-being. Sitra activities (that are funded from the returns of endowment capital and capital investments; no funding from state budget) promote new operating models and stimulate business that aims at sustainable well-being. Sitra reports directly to the Finnish Parliament (Glennie, A., and Bound, K., 2016, 57-61).

d) In Finland, HEIs and PRIs are also eligible for applying additional funding from the European Research and Innovation Framework Programme (Horizon 2020), including the European Research Council.

e) Missing answer

f) No major changes made.

References:

EC/OECD STI Policy Survey 2016. Responses B12 and C6.

Glennie, A., and Bound, K. (2016). *How Innovation Agencies Work: International Lessons to Inspire and Inform National Strategies*, p. 57-61. London: NESTA. Retrieved from

https://www.nesta.org.uk/sites/default/files/how_innovation_agencies_work.pdf, accessed 05.10.2016.

<p>Q.1.3. Do performance contracts determine funding of a) HEIs? <i>Institutional block funds can be partly or wholly distributed based on performance. (Performance contracts define goals agreed between ministry/agency and HEIs/PRIs and link it to future block funding of HEIs and PRIs.)</i></p>	<p>a) Performance contracts are in place. Performance agreements between the MEC and the institutions are agreed for every four years where objectives and specific targets for HEIs are set. In 2017, the MEC introduced a renewed funding formula. All institutional block funding of HEIs is allocated on the basis of performance agreements and the funding formula.</p>
<p>b) What is the share of HEI budget subject to performance contract?</p>	<p>b) 100%.</p>
<p>c) Do performance contracts include quantitative indicators for monitoring and evaluation?</p>	<p>c) Funding of HEIs is organised using block funding which is allocated between HEIs using a formula, which includes strategic development as well as indicators for education and research.</p>
<p>d) What are the main indicators used in performance contracts? Which, if any, performance aside from research and education is set out in performance contracts?</p>	<p>d) The funding formula for universities and for universities of applied science from 2017 can be seen in Error! Reference source not found. and Error! Reference source not found. of the Annex.</p>
<p>e) Do HEIs participate in the formulation of main priorities and criteria used in performance contracts?</p>	<p>e) The MEC agrees contracts with each HEI separately and HEI participate in the whole process. In general, they include indicators for education achievements (number of Master degrees, Bachelor degrees, and employed graduates) but also indicators related to research (number of PhD degrees, number of scientific publication) and external R&D funding (income from competitive research funding, industry funding) (see Error! Reference source not found. and Error! Reference source not found. of the Annex).</p>
<p>f) Do the same priorities and criteria set in performance contracts apply to all HEIs?</p>	<p>f) Different criteria apply to different HEIs.</p>
<p>g) Are any other mechanisms in place to allocate funding to HEIs and PRIs?</p>	<p>g) With regard to institutional funding of PRIs, the respective ministries allocate the public budgets to its PRIs¹ which then distribute the funds to its research and innovation activities. The boards of the Public Research Institutes decide on the direction of the state budgetary allocations to within the framework of performance targets agreed with the ministries.</p>
<p>h) From 2005-16, were any changes made to funding of HEIs and PRIs?</p>	<p>h) No major changes made.</p>
<p><i>(In case performance contracts are in place that bind funding of PRIs, please provide information about them.)</i></p>	

References:

De Boer, H., Jongbloed, B., Benneworth, P., Cremonini, L., Kolster, R., Kottmann, A., Lemmens-Krug, K., and Vossensteyn, H. (2015). *Performance-based Funding and Performance Agreements in Fourteen Higher Education Systems: Report for the Ministry of Education, Culture and Science. Center for Higher Education Policy Studies, No. C15HdB014I, p. 63-72.*
 Enschede: CHEPS. Retrieved from <http://doc.utwente.nl/936197/jongbloed%20ea%20performance-based-funding-and-performance-agreements-in-fourteen-higher-education-systems.pdf>, accessed 05.10.2016.
 EC/OECD STI Policy Survey 2016. Responses B12 and C6.

<p>Q.1.4. Who decides on the following key evaluation criteria of HEIs and PRIs?</p>	<p>a to c) The MEC sets performance criteria in coordination with representatives from HEIs. The MEC also conducts evaluations and monitoring of performance. HEIs are obliged to deliver information on their performance in a statistical database maintained by the MEC. The statistics are used in the negotiation and monitoring processes (De Boer et al., 2015, p. 63-72).</p>
<p>Who is responsible for setting criteria to use when evaluating performance of a) HEIs? Who is responsible for b) evaluating and c) monitoring HEIs' performance?</p>	<p>d to f) With regard to PRIs, each ministry that owns a PRI and is responsible for steering a given PRI (see Q1.2) sets performance criteria and evaluate the performance.</p>
<p>Who is responsible for setting criteria to use when evaluating performance of d) PRIs? Who is responsible for e) evaluating and f) monitoring PRIs' performance?</p>	<p>h) No major changes made.</p>
<p>h) From 2005-16, was any institution created for evaluating HEIs and PRIs or were any changes made to criteria applied for evaluations of HEIs and PRIs?</p>	<p>h) No major changes made.</p>

References: De Boer, H., Jongbloed, B., Benneworth, P., Cremonini, L., Kolster, R., Kottmann, A., Lemmens-Krug, K., and Vossensteyn, H. (2015). *Performance-based Funding and Performance Agreements in Fourteen Higher Education Systems: Report for the Ministry of Education, Culture and Science. Center for Higher Education Policy Studies, No. C15HdB014I, p. 63-72. Enschede: CHEPS. Retrieved from <http://doc.utwente.nl/93619/7/jongbloed%20ea%20performance-based-funding-and-performance-agreements-in-fourteen-higher-education-systems.pdf>, accessed 05.10.2016.*

Q.1.5. Which **recent reforms** to institutions that are in charge of priority setting, budget allocations, and evaluations of HEIs and PRIs were particularly important?

Performance agreements between HEIs and the MEC:
After the introduction of performance agreements in the 1990s, HEIs have developed internal strategies with regard to improvement of their performance. They changed their internal management structures accordingly. Performance steering by the Ministry has contributed to the dialogue between the Ministry and institutions. However, performance agreements do not sufficiently take into account the distinct profiles of institutions (e.g. art universities) (De Boer et al., 2015, p. 70).

References:

De Boer, H., Jongbloed, B., Benneworth, P., Cremonini, L., Kolster, R., Kottmann, A., Lemmens-Krug, K., and Vossensteyn, H. (2015). *Performance-based Funding and Performance Agreements in Fourteen Higher Education Systems: Report for the Ministry of Education, Culture and Science. Center for Higher Education Policy Studies, No. C15HdB014I, p. 70. Enschede: CHEPS. Retrieved from <http://doc.utwente.nl/93619/7/jongbloed%20ea%20performance-based-funding-and-performance-agreements-in-fourteen-higher-education-systems.pdf>, accessed 05.10.2016.*

¹ The biggest PRIs are the Technical Research Centre of Finland (VTT), Finnish Forest Research Institute, Agrifood Research Finland (MTT), and the National Institute for Health and Welfare.

Topic 2: Policy co-ordination mechanisms

Table 2. Questions on research and innovation councils

Question	Response
<p>Q.2.1. a) Is there a Research and Innovation Council, i.e. non-temporary public body that takes decisions concerning HEI and PRI policy, and that has explicit mandates by law or in its statutes to either?</p> <ul style="list-style-type: none"> – provide policy advice (i.e. produce reports); – and/or oversee policy evaluation; – and/or coordinate policy areas relevant to public research (e.g. across ministries and agencies); – and/or set policy priorities (i.e. strategy development, policy guidelines); – and/or joint policy planning (e.g. joint cross-ministry preparation of budgetary allocations)? <p>b) What is the name of the main research and/or innovation Council/Committee? Are there any other research Councils/Committees?</p> <p>c) Are there any other research Councils/Committees?</p> <p><i>References:</i> <i>EC/OECD STI Policy Survey 2016. Response B4.</i></p>	<p>a and b) The Research and Innovation Council is the only council in the research and innovation sector.</p> <p>The Research and Innovation Policy Council was established in 1987 (Please note: leaving the 'policy' word out of the name was a mistake back in the day; the R&I Council sounds more like a name of a R&D financing organisation). It did remain more or less the same until March 2016 when the composition and functioning of Council was renewed. The change was so big that it is a bit difficult to see the traditional and the new council operating under the same name/brand or that they form a continuum.</p> <p>c) No.</p>
<p>Q.2.2. With reference to Q.2.1, does the Council's mandate explicitly include a) policy coordination; b) preparation of strategic priorities; c) decision-making on budgetary allocations; d) evaluation of policies' implementation (including their enforcement); e) and provision of policy advice?</p> <p><i>References:</i> <i>EC/OECD STI Policy Survey 2016. Response B4.</i></p>	<p>a to e) The previous Council's mandate includes policy co-ordination, preparation of strategic priority setting, evaluation of policy implementation, and the provision of policy advice concerning HEIs and PRIs.</p> <p>The following holds true but only for the previous RIC, not necessarily the new one: Its scope included all relevant agendas for research and innovation policy as well as policies affecting framework conditions for innovation (e.g. finance, entrepreneurship, skills, etc.). It served as a coordination platform across ministries, and its mandate included policy advice, the evaluation of HEIs, PRIS, programme monitoring, policy coordination, and the drafting of strategic guidelines for future policies.</p> <p>The Council does not have decision-making power over the ministries or agencies, but it has had significant influence on policy through its regular policy guidelines. See also response 1.1. The Guidelines for Research and Innovation Policy (i.e. Policy Reviews published in 2010 and 2014) provided an analysis of past developments, drew conclusions and made proposals for future policies including levels and division of government research funding, and a selection of operational priorities. The policy guidelines were agreed by the Council and regularly recognised in policy documents of ministries and the Government programme. However, the Council's mandate did not include priority setting between research themes or technology areas (EC/OECD STI Policy Survey 2016, response B4).</p>

Q.2.3. With reference to Q.2.1, **who formally participates** in the Council? a) Head of State, b) ministers, c) government officials (civil servants and other representatives of ministries, agencies and implementing bodies), d) funding agency representatives, e) local and regional government representatives, f) HEI representatives, g) PRI representatives, h) private sector, i) civil society, and/or j) foreign experts

a to j) The current RIC has as members prime minister, Minister of Education and Science, Minister of Economic Affairs, Minister of Defence, Rector of a University, Professor of a University, CTO of a company, President of VTT and CEO of a start-up.

The following holds true for the previous RIC: The Council is chaired by the prime minister, ministers responsible for Education and Economic Affairs act as co-chairs, and ministers of Finance, Health, Defence, and Interior are members. It also includes 10 independent stakeholders from HEIs and PRIs, the private sector and civil society, and 5 permanent experts (from the Ministries of 'Education and Culture' & 'Economic Affairs and Employment' and Prime Minister's Office, in addition to the permanent secretariat (2–3 persons) (EC/OECD STI Policy Survey 2016, **response B4**).

References:

EC/OECD STI Policy Survey 2016. Response B4.

Q.2.4. With reference to Q.2.1.b., does the Council have its own a) **staff** and/or its own b) **budget**? If so, please indicate the number of staff and the amount of annual budget available.

a and b) The preparatory work is carried out by a group consisting of civil servants from the Ministry of Education and Culture (MEC), the Ministry of Economic Affairs and Employment (MEAE), the Prime Minister's Office, Tekes and the Academy of Finland.

c) From 2005-16, were any **reforms** made to the mandate of the Council, its functions, the composition of the Council, the budget and/or the Council's secretariat? Was the Council created during the time period?

There are limited reReferences for the preparatory work of the RIC. It is planned that external expertise from other R&I stakeholders will also be utilised.

c) The RIC was established in 1987. The previous RIC was established in 1987. It did serve as a coordination platform across ministries, and its mandate included policy advice, evaluation, PRIS, programme monitoring, policy coordination, and the drafting of strategic guidelines for future policies (EC/OECD STI Policy Survey 2016, **response B4**). (Please note: leaving the 'policy' word out of the name was a mistake back in the day; the R&I Council sounds more like a name of a R&D financing organisation). It did remain more or less the same until March 2016 when the composition and functioning of Council was renewed. The change was so big that it is a bit difficult to see the traditional and the new council operating under the same name/brand or that they form a continuum.

Pre-2016 Council

Before 2016, the Council changed twice its name, the mandate, the composition of the Council and its two subcommittees, the number of ministers, and the size of the secretariat (2005 and 2009). However, these changes were not at all that significant than the renewal in 2016.

- Government Decree on the Science and Technology Policy Council of Finland 847/2005

27 October 2005

http://minedu.fi/export/sites/default/OPM/Tiede/tutkimus-ja_innovaationeuvosto/julkaisut/liitteet/Review_2006.pdf (pages 52–54)

- Government Decree on the Research and Innovation Council of Finland 1043/2008

http://minedu.fi/export/sites/default/OPM/Tiede/tutkimus-ja_innovaationeuvosto/julkaisut/liitteet/Review2011-2015.pdf (pages 56-57).

The Research and Innovation Council was responsible for inter-government co-ordination and drafting national strategies in the field of research, innovation and framework conditions supporting innovation (EC/OECD STI Policy Survey 2016, **response B4**). Please see the Government Decrees concerning the remit/tasks and operations of the then-RIC.

In 2005, as a response to the increasing importance of internationalisation in education, research and innovation activities, the Finnish government took important stands concerning the development of the research and innovation system; this document was called "Government Resolution on the structural development of the public research system". This document – entirely prepared by the RIC – outlined the major reforms in the system that were then made in the 2000s and 2010s. So, one might say that it was the most powerful STI policy document of the 2000s. This document can be found in the annex of the RIC Policy Review 2006.

The renewal of the RIC in 2009 included: a new name; the remit was expanded to include the development and steering of broad-based innovation policy; the number of mandatory seats was reduced (there were 10 members in the RIC in addition to ministers and the permanent experts); science policy subcommittee was named as science and education subcommittee, and technology policy subcommittee as technology and innovation policy subcommittee; it was made possible the RIC secretariat could be strengthened temporarily (when needed, the RIC could invite experts to join the secretariat to carry out a specific mission). Sadly, the last point/possibility was never used: it could have opened up a new, network-based manner of preparing the Council issues.

In 2014, an evaluation of the RIC was conducted by VTT Technical Research Centre of Finland. The evaluation proposed changes, such as the creation of its own budget to make it less dependent on reReferences provided by stakeholders and ministers. The MEC together with the MEAE were responsible for the implementation of the evaluation (EC/OECD STI Policy Survey 2016, **responses B1**).

Post-2016 Council

The new Research and Innovation Council established in April 2016 differs the previous Council.

As it is described in the OECD draft report on the Finnish Innovation Policy (on-going work by you): "An important change in the STI governance system is the reform of the RIC which took place in 2016. It is now smaller; its independent secretariat was abolished and the preparatory work is now carried out by a group consisting of civil servants from the Ministry of Education and Culture (MEC), the Ministry of Economic Affairs and Employment (MEAE), the Prime Minister's Office, Tekes and the Academy of Finland."

References:

EC/OECD STI Policy Survey 2016. Responses B1 and B4.

Table 3. Questions on national STI strategies

Question	Response
<p>Q.2.5. a) Is there a national non-sectoral STI strategy or plan?</p> <p>b) What is the name of the main national STI strategy or plan?</p>	<p>a and b) Research and Innovation Policy Guidelines 2011-2015 by the RIC (2010); Reformativ Finland: Research and innovation policy review 2015–2020 (2014). PLEASE SEE [http://minedu.fi/export/sites/default/OPM/Tiede/tutkimus-ja_innovaationeuvosto/julkaisut/liitteet/Review2015_2020.pdf].</p> <p>The previous RIC decided on strategic policy guidelines and gave recommendations for education, research and innovation once during each term of office. The two most recent Research and Innovation Policy Guidelines were adopted for the period 2011-2015 and 2015-2020. (OECD Science, Technology and Industry Outlook 2014, response to question on national STI Strategies or Plans).</p>
<p><i>References:</i> OECD Science, Technology and Industry Outlook 2014 for Finland. National STI Strategy or Plan. Retrieved from https://www.innovationpolicyplatform.org/content/finland, accessed 05.10.2016.</p>	
<p>Q.2.6. Does the national STI strategy or plan address any of the following priorities?</p> <p>a) Specific themes and/or societal challenges (e.g. Industry 4.0; “green innovation”; health; environment; demographic change and wellbeing; efficient energy; climate action) - Which of the following themes and/or societal challenges are addressed?</p> <ul style="list-style-type: none"> – Demographic change (i.e. ageing populations, etc.) – Digital economy (e.g. big data, digitalisation, industry 4.0) – Green economy (e.g. natural reReferences, energy, environment, climate change) – Health (e.g. Bioeconomy, life science) – Mobility (e.g. transport, smart integrated transport systems, e-mobility) – Smart cities (e.g. sustainable urban systems urban development) <p>b) Specific scientific disciplines and technologies (e.g. ICT; nanotechnologies; biotechnology) - Which of the following scientific research, technologies and economic fields are addressed?</p> <ul style="list-style-type: none"> – Agriculture and agricultural technologies – Energy and energy technologies (e.g. energy storage, environmental technologies) – Health and life sciences (e.g. biotechnology, medical technologies) – ICT (e.g. artificial intelligence, digital platforms, data privacy) – Nanotechnology and advanced manufacturing (e.g. robotics, autonomous systems) 	<p>a and b) The Research and Innovation Policy Council published research and innovation policy reviews and policy guidelines in 2006, 2010 and 2014. All these reviews did address specific themes and societal challenges as well as specific scientific research, technology and economic fields.</p> <p>Furthermore, the RIC adopted two strategies (in 2004 and 2009) on the internationalisation of Finnish research, technology and innovation.</p> <p>For more info, please check out the RIC website at http://minedu.fi/OPM/Tiede/tutkimus-ja_innovaationeuvosto/erillisraportit/?lang=en</p> <p>The Research and Innovation Policy Guidelines introduced strategic areas for STI². Six Strategic Centres for Science, Technology and Innovation (these were the SHOKs) were established to support science-industry collaboration in the selected strategic areas. The Guidelines provide incentives for closer collaboration between HEIs, PRIs and industry within selected strategic areas (All this was introduced in the Council’s review in 2006; better check that out too!) (EC/OECD STI Policy Survey 2016, responses C5 and C17). Another objective was to raise the research profiles of HEIs and support institutions to specialise in their fields of strength. This was accomplished through the introduction of performance agreements. Moreover, the Guidelines aimed at reorganisation of the Public Research Institutions and the establishment of a national research infrastructure policy.</p> <p>Beyond the Research and Innovation Policy Guidelines, the RIC commissioned the MEC and the MEAE to prepare a joint Action Plan for Research and Innovation Policy. The Action Plan introduced stronger elements of centralised strategic priority setting for the allocation of competitive research funds to HEIs and PRIS; funding agencies were free to decide on research programmes as long as they are in line with overall strategic areas that are pre-defined by the Action Plan (OECD Science, Technology and Industry Outlook 2014, response to question on national STI Strategies or Plans).</p>

c) Specific regions (e.g. smart specialisation strategies)	c) Specific regions are addressed.
d) Supranational or transnational objectives set by transnational institutions (for instance related to European Horizon 2020)	d) Transnational objectives are not included. e) Quantitative targets are not set.
e) Quantitative targets for monitoring and evaluation (e.g. setting as targets a certain level of R&D spending for public research etc.)	f) Current policy guidelines were published in 2014.
f) From 2005-16, was any STI strategy introduced or were any changes made existing STI strategies?	
References: EC/OECD STI Policy Survey 2016. Responses C5 and C17. OECD Science, Technology and Industry Outlook 2014 for Finland. National STI Strategy or Plan. Retrieved from https://www.innovationpolicyplatform.org/content/finland , accessed 05.10.2016.	
Q.2.7. What reforms to policy co-ordination regarding STI strategies and plans have had particular impact on public research policy?	No such changes made (not at least officially/formally) to policy co-ordination.
References: About the impact of R&D and innovation, please see the RIC website at: http://minedu.fi/OPM/Tiede/tutkimus- ja_innovaationeuvosto/erillisraportit/?lang=en The Council's public statement (2007) on the development of impact assessment and foresight (pdf) .	

² Energy and the environment; metal products and mechanical engineering; the forest cluster; information and communication industry and services; health and well-being; and innovation in the built environment (no order of preference).

Table 4. Questions on inter-agency programming and role of agencies

Question	Response
<p>Q.2.8. Does inter-agency joint programming contribute to the co-ordination of HEI and PRI policy?</p> <p><i>(Inter-agency joint programming refers to formal arrangements that result in joint action by implementing agencies, such as e.g. sectoral funding programmes or other joint policy instrument initiatives between funding agencies.)</i></p>	<p>Inter-agency programming is not in place.</p> <p>In Finland, inter-ministry programmes exist, e.g. Change Agent Network since 2013. The Change Agent Network is an inter-ministerial network committed to introduce a change oriented working culture across ministries. Activities under the Change Agent Network include coordinated foresight and common target setting between ministries, joint conduct of policy experiments and joint learning from experiments (EC/OECD STI Policy Survey 2016, responses B7). However, these arrangements do not include joint programming at the agency level.</p> <p>In the end, the Change Agent Network is just a network of civil servants keen on experimentations and interested in adopting and disseminating new procedures, new ways of doing things. It's not an organisation or an entity that makes decisions (and no budget),</p> <p>The RIC commissioned in its review for 2011-2015 the MEC and the MEAE to prepare a joint Action Plan for Research and Innovation Policy. The Action Plan introduced stronger elements of centralised strategic priority setting for the allocation of competitive research funds to HEIs and PRIS; funding agencies were free to decide on research programmes as long as they are in line with overall strategic areas that are pre-defined by the Action Plan</p>
<p>References: EC/OECD STI Policy Survey 2016. Response B7.</p>	
<p>Q.2.9. a) Is co-ordination within the mandate of agencies?</p> <p>b) From 2005-16, were any changes made to the mandates of agencies tasked with regards to inter-agency programming? Were new agencies created with the task to coordinate programming during the time period?</p>	<p>a) No.</p> <p>b) No such agencies. No new agencies with regards to inter-agency programming issues.</p> <p>The Strategic Research Council (SRC; part of the Academy of Finland) is a new funding instrument established in 2015.</p>

Q.2.10. What reforms of the institutional context have had impacts on public research policy?

The passing of the Research and Innovation Policy Guidelines (2010) provided direction setting for research and innovation programmes (OECD Science, Technology and Industry Outlook 2014, **response to question on national STI Strategies or Plans**). Funding agencies, for instance, include the strategic priorities as set out by the Guidelines in their calls.

The Strategic Research Council (SRC; part of the Academy of Finland) is a new funding instrument (2015) aimed at funding high-quality research that has potentially great societal impact. The research should seek to find concrete solutions to grand challenges that require multidisciplinary approaches. An important element of such research is active collaboration between those who produce new knowledge and those who use it. Each year, the SRC prepares a proposal on key strategic research themes and priorities (at a rather general level) to be approved by the Finnish Government. The Government determines the research needs and decides the final themes, which the SRC then formulates into research programmes and funding calls. SRC programmes run for 3–6 years. The SRC's annual funding budget is around 56 million euros. SRC was established as part of the research funding reform. While the budget funding of Tekes and public research organisations was cut, the new instrument administrated by SRC has increased the funding authorities of the Academy since 2015.

As part of the public research organisations' reform, the Prime Minister's cabinet office has obtained a task to coordinate activities to commission studies to support governmental decision-making. A special allocation was entrusted to it for this purpose. The cabinet office launches competitive calls for studies, the knowledge needs of which it has coordinated with the various ministries and governmental agencies through an inter-ministerial working group. The funds that are allocated through these calls are, however, relatively modest, in 2016 some 11 million euro. As a coordinating mechanism this group has a very limited mandate, though it is a start to promote horizontal coordination among authorities in various sectors of the government

References:

OECD Science, Technology and Industry Outlook 2014 for Finland. *National STI Strategy or Plan*. Retrieved from <https://www.innovationpolicyplatform.org/content/finland>, accessed 05.10.2016.

Topic 3: Stakeholders consultation and institutional autonomy

Table 5. Questions on stakeholder consultation

Question	Response
<p>Q.3.1. a) Do the following stakeholders participate as formal members in Research and Innovation Councils? (i.e. <i>Formal membership as provided by statutes of Council</i>)</p> <ul style="list-style-type: none"> – Private Sector – Civil society (citizens/ NGOs/ foundations) – HEIs/PRIs and/or their associations <p>b) Do stakeholders participate as formal members in council/governing boards of HEIs? (i.e. <i>Formal membership as provided by statutes of Council</i>)</p> <ul style="list-style-type: none"> – Private Sector – Civil society (citizens/ NGOs/ foundations) 	<p>a) In the RIC, representatives from the private sector and HEIs/PRIs participate in the key consultation/advising processes as members of the RIC. Since the current RIC is much smaller, all relevant stakeholders of the Finnish innovation system are not that extensively represented any more.</p> <p>b) Representatives from HEIs and the private sector participate in governing boards of HEIs taking decisions on strategic issues informing thematic and scientific priorities of HEIs.</p> <p>Since 2010, the Law on Higher Education and Research provides that at least 40% of members of governing boards of HEIs must be from outside the institutions (EC/OECD STI Policy Survey 2016, responses C5 and C17).</p>
<p><i>References:</i> EC/OECD STI Policy Survey 2016. Response C5 and C17.</p>	
<p>Q.3.2. a) Are there online consultation platforms in place to request inputs regarding HEI and PRI policy? b) Which aspects do these online platforms address (e.g. e.g. open data, open science)?</p> <p>c) From 2005-16, were any reforms made to widen inclusion of stakeholders and/or to improve consultations, including online platforms?</p>	<p>a) Online consultations are frequently used to request inputs from stakeholders.</p> <p>b and c) The MEC has started in early 2017 the preparation of a vision for higher education and research in 2030. All stakeholders are invited to contribute to this process. Online consultation platforms will be utilised to collect as broadly as possible the views of all stakeholders. A company (Fountain Park oy) has been subcontracted by the MEC to carry out this online consultation.</p>
<p><i>References:</i> EC/OECD STI Policy Survey 2016. Response C5, C14 and C17.</p>	
<p>Q.3.3. Which reforms to consultation processes have proven particularly important?</p>	<p>No major reforms made.</p>

Table 6. Questions on autonomy of universities and PRIs

Question	Response
<p>Q.3.4. Who decides about allocations of institutional block funding for teaching, research and innovation activities at a) HEIs and b) PRIs? <i>(National/regional level: If HEIs face national constraints on using block funds, i.e. funds cannot be moved between categories such as teaching, research, infrastructure, operational costs, etc. This option also applies if the ministry pre-allocates budgets for universities to cost items, and HEIs are unable to distribute their funds between these.</i> <i>Institutions themselves: If HEIs are entirely free to use their block grants.)</i></p>	<p>a) HEIs themselves decide about internal allocations of institutional block funding to their teaching, research and innovation activities.</p> <p>Since reforms in 2009, universities are free to allocate their funds internally. The reforms aimed to facilitate the development of stronger research and education profiles by HEIs.</p> <p>b) PRIs themselves allocate funds internally to their research and innovation activities.</p>
<p>References: Data on institutional autonomy is based on a survey conducted by the European University Association between 2010 and 2011 across 26 European countries. The answers were provided by Secretaries General of national rectors' conferences and can be found in the report by the European University Association (Estermann et al., 2015). Estermann, T., Nokkala, T., and Steinel, M. (2015). <i>University Autonomy in Europe II The Scorecard</i>. Brussels: European University Association. Retrieved from http://www.eua.be/Libraries/publications/University_Autonomy_in_Europe_II_-_The_Scorecard.pdf?sfvrsn=2, accessed 19.09.2016. European University Association (2016). <i>University Autonomy in Europe (Webpage)</i>. Retrieved from http://www.university-autonomy.eu/, accessed 19.09.2016.</p>	
<p>Q.3.5. Who decides about recruitment of academic staff at a) HEIs and b) PRIs? <i>(National/regional level: If recruitment needs to be confirmed by an external national/regional authority; if the number of posts is regulated by an external authority; or if candidates require prior accreditation. This option also applies if there are national/regional laws or guidelines regarding the selection procedure or basic qualifications for senior academic staff.</i> <i>Institutions themselves: If HEIs are free to hire academic staff. This option also applies to cases where laws or guidelines require the institutions to publish open positions or the composition of the selection committees which are not a constraint on the hiring decision itself.)</i></p>	<p>a and b) Recruitment of academic staff is decided at the institutional level (both in HEIs and PRIs).</p> <p>c and d) Salary bands are negotiated in collective bargaining at the national level.</p> <p>Since reforms in 2009, universities are responsible for payroll of their staff. They can decide how they employ academic staff, e.g. on the basis of short term contracts or long-term fixed contracts. They have to do so in collective bargaining. Before autonomy reforms, university staff was employed by the State under civil-service employment relationships.</p>
<p>Who decides about salaries of academic staff at c) HEIs and d) PRIs? <i>(National/regional level: If salary bands are negotiated with other parties, if national civil servant or public sector status/law applies; or if external authority sets salary bands.</i> <i>Institutions themselves: If HEIs are free to set salaries, except minimum wage.)</i></p>	<p>e and f) Promotions of academic staff is decided at the institutional level (both in HEIs and PRIs).</p>
<p>Who decides about reassignments and promotions of academic staff at e) HEIs and f) PRIs? <i>(National/regional level: If promotions are only possible in case of an open post at a higher level; if a promotion committee whose composition is regulated by law has to approve the promotion; if there are requirements on minimum years of service in academia; if automatic promotions apply after certain years in office, or if there are promotion quotas.</i> <i>Institutions themselves: If HEIs can promote and reassign staff freely.)</i></p>	

Q.3.6. Who decides about the **creation of academic departments** (such as research centres in specific fields) and functional units (e.g. **technology transfer offices**) at a) HEIs and b) PRIs?

(National/regional level: If there are national guidelines or laws on the competencies, names, or governing bodies of internal structures, such as departments or if prior accreditation is required for the opening, closure, restructuring of departments, faculties, technology offices, etc.)

Institutions themselves: If HEIs are free to determine internal structures, including the opening, closure, restructuring of departments, faculties, technology offices, etc.)

Who decides about the creation of legal entities (e.g. **spin-offs**) and **industry partnerships** at c) HEIs and d) PRIs?

(National/regional level: If there are restrictions on legal entities, including opening, closure, and restructuring thereof; if restrictions apply on profit and scope of activity of non-profit organisations, for-profit spin-offs, joint R&D, etc.)

Institutions themselves: If HEIs are free to create non-profit organisations, for-profit spin-offs, joint R&D, etc.)

Q.3.7. Who earns what **share of revenues** stemming from IP (patents, trademarks, design rights, etc.) created from publicly funded research at a) HEIs and b) PRIs?

- HEI
- Research unit / laboratory within HEI
- Researchers

c) From 2005-16, were any reforms introduced that affected the institutional autonomy of HEIs and PRIs?

a to d) HEIs and PRIs themselves decide about internal (academic) structures and the creation of legal entities (spin-offs) and joint R&D partnership with industry.

a and b) HEIs and PRIs have the right to acquire IP stemming from public research. The researcher has the right to obtain a reasonable compensation. The amount of the compensation is not regulated at the national level.

c) The Universities Bill (2009) introduced changes to university autonomy with regard to organisational form, budget, and human resources policies. Since 2010, HEIs are free to allocate funds internally to strategic research. They are also free to hire academic staff and are only bound by national level collective agreements on salary bands. In 2013, changes were made to performance agreements between HEIs and the Ministry of Education and Culture (EC/OECD STI Policy Survey 2016, **response B12 and C6**).

The University of Applied Sciences (UAS) reform (2015)

The Finnish universities of applied sciences are independent in their decision-making enjoying autonomy guided by the Universities of applied sciences Act. Universities of applied sciences are independent legal persons. In the UAS reform (2015) universities of applied sciences and the organisations running them were merged into one legal person, and juridical all the UAS's became limited companies. UAS usually have multiple owners: the municipality, the region and/or private entities. Operating licenses of UAS determine their educational responsibilities.

In the reform the responsibility for core funding were entirely transferred to the state. The government allocates core funding (i.e. the direct government funding) to the universities and UAS's. The core funding covers about 88 % of universities of applied sciences' budgets. Public research funding is a separate part of the budget.

Fixed formula for core funding of UAS was implemented in 2014 as part of the reform. Performance indicators cover the pillars education (85%), research (15%), and strategic development. Indicators relate to degrees conferred, student progress, research productivity, external research funding (including the Academy of Finland and TEKES), contract income, and internationalisation (student mobility). For indicators used, see Figure 2 in the Appendix.

Each university of applied sciences and the Ministry conduct negotiations at the beginning of every four-year agreement term, in which they set operational and qualitative targets for the UAS and determine the references required. The agreement also provides for the monitoring and evaluation of target attainment and the development of operations.

References:

Act on the Right in Inventions made at Higher Education Institutions (369/2006). Retrieved from http://www oulu.fi/english/sites/default/files/content/Act%20on%20the%20Right%20in%20Inventions%20made%20at%20HEIs_0.pdf, accessed 07.03.2016.

Act on the Right in Employee Inventions (656/1967; amendments up to 1078/2000 included). Retrieved from <http://www.finlex.fi/fi/laki/kaannokset/1967/en19670656.pdf>, accessed 07.03.2016.

EC/OECD STI Policy Survey 2016. Response C6.

Q.3.8. Which reforms to institutional autonomy have been important to enhance the impacts of public research?

Universities Bill (2009); performance agreements between HEIs and MEC (every year)

Since 1994, funding of HEIs and PRIs is organised using block funding and performance agreements between the ministries and the institutions.

Since 2013, the MEC concludes new performance agreements with a changed funding formula HEIs. The MEC agrees with Higher Education Institutions on objectives and institution specific targets (joint working groups). All institutional block funding of HEIs is allocated on the basis of performance agreements. (EC/OECD STI Policy Survey 2016, **response B12 and C6**).

Since the introduction of the new funding formula in 2013 (and its renewal in 2017), the number of publications in international scientific literature and research personnel at HEIs has grown in strategic areas as set out by performance agreements (EC/OECD STI Policy Survey 2016, **response B12 and C6**).

References:

EC/OECD STI Policy Survey 2016. Responses B12 and C6.

OECD Science, Technology and Industry Outlook 2014 for Finland. National STI Strategy or Plan. Retrieved from <https://www.innovationpolicyplatform.org/content/finland>, accessed 05.10.2016.

Annex. Additional notes and performance contracts for HEIs

This annex provides additional information on indicators used in performance contracts for HEIs in Finland. It refers to question 1.3.c.

Do performance contracts determine funding of HEIs? (Question 1.3.c)

Figure 1. Universities core funding from 2017

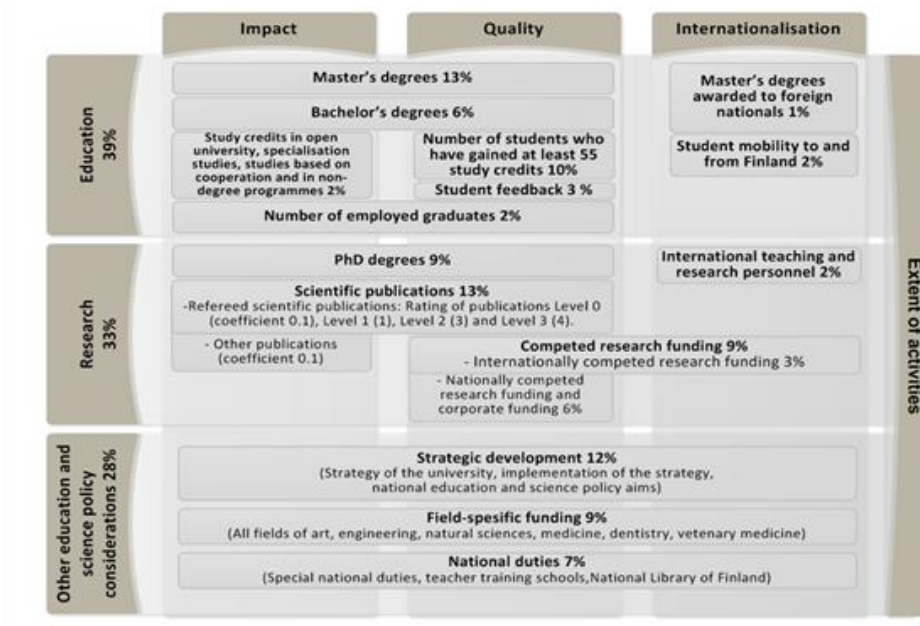


Figure 2. Universities of Applied Sciences core funding from 2017

