

Survey response for Denmark

OECD database of governance of public research policy

This document contains detailed responses for Denmark 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, <u>https://doi.org/10.1787/235c9806-en</u>. 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

ECTS	European Credit Transfer System
EU	European Union
IFD	Innovationsfonden
	Innovation Fund Denmark
IP	Intellectual property
HEIs	Higher Education Institutions
OECD	Organisation for Economic Co-operation and Development
PRIs	Public Research Institutes
R&D	Research and development

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
Q.1.1. Who mainly decides on the scientific, sectoral and/or thematic priorities of budget allocations for a) HEIs and b) PRIs?	a and b) The Ministry of Higher Education and Science decides on scientific, sectoral and/or thematic priorities of budget allocations to HEIs and PRIs.
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	c) Parliament decides on the priorities and allocates funds, and the funds are then mainly given out by the agencies (e.g. Innovation Fund Denmark).
(e.g., government, research and innovation councils, sector-specific platforms including industry and science, etc.).	The Research Catalogue ESEARCH2025 process has been updated this year. The objective of the process is to provide a consolidated overview of the most important research areas of the future as seen from the perspectives of businesses,
(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.)	organisations, ministries, Danish research institutions as well as a wide variety of other stakeholders from civil society (e.g. trade unions, foundations). This catalogue received 476 proposals from stakeholder and extensive public consultations (including public meetings) have been carried out. The RESEARCH2025-catalogue functions as a source of inspiration and knowledge and as a basis for prioritising research investments in various contexts such as political negotiations of the distribution of the research reserve,
 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. 	strategic considerations at Danish knowledge institutions and in relation to Danish participation in international research cooperation.
establishment of agencies that decide on content of programmes)?	d) 2014 Reforms to Danish STI governance resulted in a more distinct division between institutions that develop public research and innovation policy (Ministry of Higher Education and Science and Ministry of Business and Growth) and those institutions that allocate funding and implement programmes (i.e. Innovation Fund Denmark - IFD) (EC/OECD STI Policy Survey 2016, responses B1 and B4).
	The Ministry of Science, Innovation and Higher Education became the Ministry of Higher Education and Science in 2014 (EC/OECD STI Policy Survey 2016, response B4 and B7). The Ministry is responsible for investment in higher education and should ensure that research policy contributes to addressing social challenges.
	In 2014, the then Ministry of Science, Innovation and Higher Education established strategic priorities of STI policy as set out in the INNO+ Catalogue. In 2013-2014, public consultations led to the selection of six broad STI priority areas (INNO+ Catalogue). The priorities informed the thematic and scientific scope of public research programmes (EC/OECD STI Policy Survey 2016, responses B1). The INNO+ Catalogue is not in place anymore but the Danish Government has passed new Government's objectives for Danish research and innovation in 2018 that guide public investment.

References:

EC/OECD STI Policy Survey 2016 for Denmark. Responses B1, B4 and B7.

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 and b) The Ministry of Higher Education and Science allocates institutional block funding to HEIs. With regard to PRIs, the Ministry of Higher Education and Science is responsible for PRIs who themselves decide about the use of their institutional funds (Ministry of Science, Technology and Innovation, 2009). The main References of income for PRIs are revenues from industry and grants.

c) Funds for research and/or innovation projects, i.e. open calls, are allocated by a national agency Innovation Fund Denmark (IFD), the Independent Research Fund and the Danish National Research Foundation. The private foundations also develop their own programs.

d) In Denmark, HEIs and PRIs are also eligible for additional funding from the European Research Council and the Nordic Council.

Private funding from Danish foundations play a substantial role for funding of HEIs and PRIs.

e) The EU and Nordic funding amount to approximately 8.5% of public R&D expenditures in 2017.

f) IFD was established in 2014 as a result of reforms to the public research system in Denmark (EC/OECD STI Policy Survey 2016, response B4). The reforms merged the Danish Council for Strategic Research, the Danish National Advanced Technology Foundation and the Danish Council for Technology and Innovation into one funding agency, the IFD.

The IDF is responsible for allocating grants for research, technology development and innovation, which are based on societal and commercial challenges as laid out in national STI strategy documents (i.e. INNO+ Catalogue, new national STI strategy of 2018) (EC/OECD STI Policy Survey 2016, response B1). IFD allocates funds to HEIs and PRIs, as well as industry, and decides on awards policy and criteria.

References:

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

Ministry of Science, Technology and Innovation (2009), A Step Beyond: International Evaluation of the GTS Institute System in Denmark, Kopenhagen, <u>http://en.gts-net.dk/wp-content/uploads/2014/04/AStepBeyond_web_1.pdf</u> (accessed 01 March 2016).

4

Q.1.3. Do performance contracts determine funding of a) HEIs?

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.)

b) What is the share of HEI budget subject to performance contract?

c) Do performance contracts include quantitative indicators for monitoring and evaluation?

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?

e) Do HEIs participate in the formulation of main priorities and criteria used in performance contracts?

f) Do the same priorities and criteria set in performance contracts apply to all HEIs?

g) Are any other mechanisms in place to allocate funding to HEIs and PRIs?

h) From 2005-16, were any changes made to funding of HEIs and PRIs?

(In case performance contracts are in place that bind funding of PRIs, please provide information about them.)

 a) Funding of HEIs is subject to performance agreements (development contracts) between the Ministry of Higher Education and Science and institutions.

b) Since 20010, 8.9% of institutional funds are allocated based on performance of HEIs (EC/OECD STI Policy Survey 2016, *response B13*). However, the funding amount is not directly linked to performance agreements. See response g for further details on criteria for allocation.

c) They include indicators. Since 2012, development contracts have a maximum number of ten goals per institution.

d) These differ from institution to institution and include, among others, degree programme quality (as measured by student satisfaction surveys, and the transition to the labour market assessed through analyses of the job situation 4-19 months after graduating); better cohesion in the educational system (i.e. number of Master's degree students enrolled on the basis of a Bachelor's degree or a professional Bachelor's degree from other Danish educational institutions); faster completion rates (i.e. number of ECTS credits earned by students); knowledge exchange with society and increased innovation capacity (revenues from partnership agreements with industry, revenues from continuing and further education); research quality (top 10 per cent most cited publications which the university within the individual research fields, external funding from non-Danish References); talent development (PhDs' transition to the labour market assessed through analyses of the job situation 4-19 months after being awarded their PhD degrees); and interdisciplinary solutions to social challenges (annual investments in interdisciplinary centres at universities).

e) HEIs take part in formulating goals and indicators. In the goal evaluation the HEI's provide an evaluation but it is the ministry that performs the final goal evaluation.

f) They differ as the universities specify the goals since 2017. Before 2017, the goals applied to all universities.

g) Performance contracts are in place but they are not tied to institutional funding. There is an allocation system for block funding based on a number of parameters: The funding for teaching is allocated based on the number of a university students graduated at the end of the year. 50% of institutional funding for research is distributed on the basic of a historic fixed key, and 30% are allocated according to performance indicators; these include completion rates, the amount of research financed by external parties (25%), publications in international scientific literature (20%), and the number of graduated PhDs (10%). Changes in 2010 saw a shift in weights of indicators where publication output became more important relative to external funds acquired.

h) The Ministry of Higher Education and Science introduced developmental contracts with individual institutions in 2000. The aim was to introduce professional management tools, increase strategic capacities of HEIs and enhance concentration of funds in areas of competitive advantage of HEIS. Since 2008, the contracts include clear targets and methods for measuring and monitoring HEIs performance. Universities are required to use indicators when setting targets and formulating strategies for future activities.

The introduction of performance contracts was accompanied by other measures: A number of institutions were merged into bigger units while reforms were introduced to the internal governance system of universities. The public budget for research was increased from 0.75% of GDP in 2005 to 1.05% of GDP in 2011.

HEIs have to report annually on their performances as set out in the development contracts. The institutional report is discussed with the ministry and their performance is reported to the Danish parliament by the Minister of Higher Education and Science.

Since the introduction of performance contracts in 2000, universities have started to draft strategies with regard to their education and research objectives. External stakeholders are involved in establishing the development contracts as they make up a majority of HEIs boards in Denmark since autonomy reforms in 2003 (De Boer et al., 2015, pp. 53-62).

In 2017, the development contracts were replaced by "strategic framework contracts", which only include goals set by the universities and thus not "one-size fits all" mandatory goals for all universities. However, the contracts are not tied to funding.

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 CHEPS, No. C15HdB014I, pp. 55-62, Enschede, CHEPS, http://doc.utwente.nl/93619/7/jongbloed%20ea%20performance-based-funding-and-performanceagreements-in-fourteen-higher-education-systems.pdf (accessed 05 October 2016).

EC/OECD STI Policy Survey 2016 for Denmark. Response B13.

ECIDECE STIT Oncy Survey 2010 for Denmark. Response E	515.
Q.1.4. Who decides on the following key evaluation criteria of HEIs and PRIs?	 a) Concerning performance contracts, the Ministry of Higher Education and Science and the universities jointly set goals and evaluation criteria.
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?	The Danish Accreditation Institution deals with education quality.
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?	b and c) The Danish Agency for Institutions and Educational Grants monitors the performance and sends reports on their performance to the Ministry. This annual report is then discussed by the ministry and the universities.
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?	d to f) Missing answer.
	 h) The Danish Accreditation Institution was established in September 2007.
References:	

De Boer, H., Jongbloed, B., Benneworth, P., Cremonini, L., Kolster, R., Kottmann, A., Lemmens-Krug, K., and Vossenstevn, 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 CHEPS, No. C15HdB014I, pp. 53-56, Enschede, CHEPS, http://doc.utwente.nl/93619/7/jongbloed%20ea%20performance-based-funding-and-performanceagreements-in-fourteen-higher-education-systems.pdf (accessed 05 October 2016). EC/OECD STI Policy Survey 2016 for Denmark. Responses B12 and B13.

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 contracts between the Ministry of Higher Education and Science and HEIs were introduced in 2000 and reformed in 2008-2012. They include targets and indicators for monitoring and evaluation of institutional performance. The introduction of performance contracts in 2000 was accompanied by other measures: The public budget for research was increased from 0.75% of GDP in 2005 to 1.05% of GDP in 2011. A number of institutions were merged into bigger units while reforms were introduced to the internal governance system of universities after 2005. Denmark stated that these reforms were of importance for public research (EC/OECD STI Policy Survey 2016, response H4).
References: EC/OECD STI Policy Survey 2016 for Denmark. Response H	14.

Topic 2: Policy co-ordination mechanisms

Question	Response
 a) Is there a Research and Innovation Council, e. non-temporary public body that takes decisions oncerning HEI and PRI policy, and that has explicit nandates by law or in its statutes to either? provide policy advice (i.e. produce reports); and/or oversee policy evaluation; 	a and b) The Danish Council for Research and Innovation Policy is the main research and innovation council in Denmark; it decides on research programmes and related budgets, innovation programmes and related budgets, as we as policies supporting framework conditions of innovation.
 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- 	The Danish Council for Research and Innovation Policy was established in 2014. It succeeded the previous Danish Counc for Research Policy and the Danish Council for Technology and Innovation (EC/OECD STI Policy Survey 2016, respons B4).
ministry preparation of budgetary allocations)?	c) No other research and innovation councils are in place.
) What is the name of the main research and/or novation Council/Committee? Are there any other esearch Councils/Committees?	
) Are there any other research Councils/Committees?	
References: C/OECD STI Policy Survey 2016 for Denmark. Response E	34.
2.2. With reference to Q.2.1, does the Council's nandate explicitly include a) policy coordination; b) reparation of strategic priorities; c) decision-making on udgetary allocations; d) evaluation of policies' nplementation (including their enforcement); e) and rovision of policy advice?	a to e) The Council is responsible for policy advice to the Minister for Higher Education and Science and the Danish Parliament in the field of research, innovation and framework conditions supporting innovation. In comparison to its predecessors, its mandate has been widened to include polic advice with regard to the whole chain of the innovation process. Response 2.1.e changed accordingly after 2014 (EC/OECD STI Policy Survey 2016, response B4).
Q.2.3. With reference to Q.2.1, who formally participates in the Council? a) Head of State, b) ministers, c) overnment officials (civil servants and other epresentatives of ministries, agencies and implementing odies), d) funding agency representatives, e) local and egional government representatives, f) HEI epresentatives, g) PRI representatives, h) private sector, civil society, and/or j) foreign experts	 a to j) The Council consists of main research actors, including PRIs, HEIs, and representatives from the business sector. Its chairman and eight members are appointed by the Minister for Higher Education and Science. The composition of the Council has been adjusted to include perspectives from the business sector on the whole chain of the innovation process The Council has the following members: University of Southern Denmark/VELUX FOUNDATION (private foundation) Novo Nordisk Foundation (private foundation) Bang & Olufsen (large enterprise)/University of Aalborg FORCE Technology (Large RTO) University of Copenhagen University of Copenhagen
	 The Technical University of Denmark Aarhus University Villum Foundation (private foundation)

Table 2. Questions on research and innovation councils

References:

Schwaag Serger, S., Wise, E., Anrold, E. (2015), "National Research and Innovation Councils as an Instrument of Innovation Governance: Characteristics & challenges", VINNOVA Analysis, VA 2015:07, p. 40, Stockholm, VINNOVA, http://www.vinnova.se/en/Publications-and-events/Publications/Products/National-Research-and-Innovation-Counsils-as-an-Instrument-of-Innovation-Governance/ (accessed 30 September 2016).

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.

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? a and b) In 2017m the Council had a staff of three employees and a budget of USD 0.54 million (DKK 3.5 million).

c) The Danish Council for Research and Innovation Policy was established in 2014; it replaced the previous Danish Council for Research Policy and the advisory function of the Danish Council for Technology and Innovation. In comparison to its predecessors, its mandate has been widened and includes policy advice with regard to the whole chain of the innovation process The composition of the Council has been adjusted to include perspectives from the business sector (EC/OECD STI Policy Survey 2016, response B4).

References:

EC/OECD STI Policy Survey 2016 for Denmark. Response B4.

Table 3. Questions on national STI strategies

Question	Response
Q.2.5. a) Is there a national non-sectoral STI strategy or olan? b) What is the name of the main national STI strategy or olan?	Denmark – Ready to seize future opportunities: The Government's objectives for Danish research and innovation (2018)
 Q.2.6. Does the national STI strategy or plan address any of the following priorities? 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? 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) b) Specific scientific disciplines and technologies (e.g. ICT; nanotechnologies; biotechnology) - Which of the following scientific research, technologies and economic fields are addressed? 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) c) Specific regions (e.g. smart specialisation strategies) d) Supranational or transnational objectives set by transnational institutions (for instance related to European Horizon 2020) e) Quantitative targets for monitoring and evaluation (e.g. setting as targets a certain level of R&D spending for oublic research etc.) f) From 2005-16, was any STI strategy introduced or were any changes made existing STI strategy introduced or were any changes made existing STI strategy introduced or were 	 a) The strategy "Ready to seize future opportunities: The Government's objectives for Danish research and innovation" addresses the theme about digital economy. b) In relation to scientific research fields, the strategy mentions all the scientific fields mentioned below, but does not in specific terms address any challenges within the given field: 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. big data, digital platforms, data privacy) Nanotechnology and advanced manufacturing (e.g. robotics, autonomous systems) c) No regional issues included. d) The strategy does include specific supranational targets: Boost Danish participation in international research and innovation centres and an Action plan for Danish participation in the EU framework programmes for research and innovation. e) The strategy does not include specific quantitative targets. f) The strategy does not include specific quantitative targets. f) The strategy "Ready to seize future opportunities: The Government's objectives for Danish research and innovation" was introduced in 2018.
Q.2.7. What reforms to policy co-ordination regarding STI strategies and plans have had particular impact on public research policy?	Innovation Strategy: Denmark – A Nation of Solutions (2012); INNO+ Catalogue (2012); Ready to seize future opportunities: The Government's objectives for Danish research and innovation (2018) The passing of the National Innovation Strategy (2012) on the basis of a broad consultation process provided direction setting for research and innovation programmes (EC/OECD STI Policy Survey 2016, responses B1, C5 and C18).

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

Question	Response
Q.2.8. Does inter-agency joint programming contribute to the co-ordination of HEI and PRI policy?	The Danish system does not feature inter-agency programming, especially because the focus is on a single agency.
(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.)	
Q.2.9. a) Is co-ordination within the mandate of agencies?	a) Coordination is not in the mandate of the IFD but all agencies are expected to contribute to coordination.
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?	b) No major changes made.
Q.2.10. What reforms of the institutional context have had impacts on public research policy?	The Innovation Fund Denmark, set up in 2014 was in many ways a means to overcome overlaps between the Danish Council for Strategic Research, the Danish Council for Technology and Innovation and the Danish National Advanced Technology Foundation.

Topic 3: Stakeholders consultation and institutional autonomy

Table 5. Questions on stakeholder consultation

Response
 a) The Council has the following members from academia, industry (including foreign experts): University of Southern Denmark/VELUX FOUNDATION (private foundation) Novo Nordisk Foundation (private foundation) Bang & Olufsen (large enterprise)/University of Aalborg FORCE Technology (Large RTO) University of Copenhagen University of Copenhagen The Technical University of Denmark Aarhus University Villum Foundation (private foundation) b) HEIs boards have stakeholder from civil society and business (both domestic and foreign) represented. Furthermore, the universities have employers' panels to help them calibrate educations. 2003 reforms introduced a system where the governing board of HEIs consists of professional managers from academia and the business sector.
coard/ a and b) There is usually ad hoc hearing set up online but the main channel is the state administration's "Hearing Portal". c) In 2017, the Danish parliament introduced a reform of the governance of the universities with a new management model. The goal is to achieve a clear division of competence for university boards and to set competence criteria for university-external board members. No major reforms made.

Table 6. Questions on autonomy of universities and PRIs

Question	Response
Q.3.4. Who decides about allocations of institutional block funding for teaching, research and innovation activities at a) HEIs and b) PRIs? (<u>National/regional level</u> : 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. <u>Institutions themselves</u> : If HEIs are entirely free to use their block grants.)	a and b) HEIs and PRIs are free to move institutional funding internally between budget categories, e.g. research, education, personnel, operational costs, infrastructure, and equipment.
References:	
can be found in the report by the European University Associ Estermann, T., Nokkala, T., and Steinel, M. (2015), University University Association, <u>http://www.eua.be/Libraries/publicatio</u> <u>The Scorecard.pdf?sfvrsn=2</u> (accessed 19.09.2016). European University Association (2016), "University Autonom	ded by Secretaries General of national rectors' conferences and ation (Estermann et al., 2015). / Autonomy in Europe II The Scorecard, Brussels, European ns/University_Autonomy_in_Europe_II
(accessed 19.09.2016).	a and h) Depresitment and promotions of apademic staff is
 Q.3.5. Who decides about recruitment of academic staff at a) HEIs and b) PRIs? (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. 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.) Who decides about salaries of academic staff at c) HEIs and d) PRIs? (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. Institutions themselves: If HEIs are free to set salaries, 	 a and b) Recruitment and promotions of academic staff is decided by institutions themselves. Since reforms in 2003, universities can decide how they employ academic staff, e.g. on the basis of short term contracts or long-term fixed contracts. c and d) Salary bands are prescribed at the national level. HEIs must comply with the rules on salary and employment conditions which are agreed with the Minister of Finance. e and f) HEIs and PRIs decide themselves.
except minimum wage.) Who decides about reassignments and promotions of academic staff at e) HEIs and f) PRIs? (<u>National/regional level</u> : 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. <u>Institutions themselves</u> : If HEIs can promote and reassign	

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?

(<u>National/regional level</u>: 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.

<u>Institutions themselves</u>: 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. **spinoffs**) and **industry partnerships** at c) HEIs and d) PRIs? (<u>National/regional level</u>: 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 (e.g. spin-offs) and joint R&D partnership with industry.

Since autonomy reforms in 2003, HEIs themselves decide about internal academic structures, such as the creation of departments and technological transfer offices. With regard to internal structures, the University Act of 2011 strengthened the rector's power at the expense of department heads and deans. After 2011, the governing board of HEIs decide on internal structures of HEIs, whereas before 2011 deans and department heads had full autonomy in this regard.

a and b) At HEIs and PRIs, the researchers receive 33% of revenues. HEIs, PRIs and the research unit each receive 33% of revenues.

Since 2000, researchers at HEIs and PRIs are obliged to report inventions to their institution. The institution owns the IP right attached to the invention. The rules for calculation of the amount of compensation are laid down by the institution, but in practice all HEIs follow the following scheme: When the HEI acquires intellectual property for commercial purposes, any net income are shared in three equal parts (i.e. one third each) between the researcher, the department/laboratory where the researcher was employed at the time the invention was reported, and the Technology Transfer Office at the HEI. c) In 2006 a major process resulted in numerous mergers between universities and PRI's and between universities. This entailed new funds to the universities for public sector. In 2017, the Danish parliament introduced a reform of the governance of the universities with a new management model. The goal is to achieve a clear division of competence for university boards and to set competence criteria for universityexternal board members.

References:

Aarhus University (2016) "The Consolidate Act on Employees' Inventions 2012: Update of the Law Concerning Inventions at Public Research Institutions (L347) of June 1999", webpage, <u>http://tto.au.dk/en/for-researchers/act-on-inventions</u> (accessed 01.03.2016)

The 2003 University Law turned the universities from state institutions into self-owning, public institutions: HEIs themselves decide about internal academic structures, such as the creation of departments and technological transfer offices. With regard to internal structures, the University Act of 2011 strengthened the rector's power at the expense of department heads and deans. After 2011, the governing board of HEIs decide on internal structures of HEIs, whereas before 2011 deans and department heads had full autonomy in this regard (EC/OECD STI Policy Survey 2016, <i>response C4</i>).

References:

EC/OECD STI Policy Survey 2016 for Denmark. Responses C4, and H4.