

Survey response for Poland

OECD database of governance of public research policy

This document contains detailed responses for Poland 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

BGK	National Development Bank Bank Gospodarstwa Krajowego
ERC	European Research Council
ERDF	European Regional Development Funds
FNP	Foundation for Polish Science Fundacja na rzecz Nauki Polskiej
HEIs	Higher Education Institutions
KEJN	Committee for Evaluation of Scientific Units Komitet Ewaluacji Jednostek Naukowych
MNiSW	Ministry of Science and Higher Education Ministerstwo Nauki i Szkolnictwa Wyższego
NCBiR	National Centre for R&D Narodowe Centrum Badań i Rozwoju
NCN	National Science Centre Narodowe Centrum Nauki
NRP	National Research Programme
PARP	Polish Agency for Enterprise Development Polska Agencja Rozwoju Przedsiębiorczości
PFR	Polish Development Fund Polski Fundusz Rozwoju
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
<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 and b) In Poland, the Ministry of Science and Higher Education (Ministerstwo Nauki i Szkolnictwa Wyższego, MNiSW) and Ministry of Development (Ministerstwo Rozwoju, MR) are in charge of setting scientific, sectoral and/or thematic priorities of public funding for HEIs and PRIs.</p> <p>The ministries prepare strategic thematic areas for the national research and innovation programmes. In 2016 new strategy for innovativeness and competitiveness was prepared ("Strategy for Responsible Development" – "Strategia na rzecz Odpowiedzialnego Rozwoju", SOR) and accepted in February 2017 by the Polish government (the Council of Ministers). SOR define new sectoral and thematic priorities. Additionally, MR in cooperation with other ministries and stakeholders, prepared in 2016 the National Smart Specialisation Strategy ("Krajowa Inteligentna Specjalizacja, KIS), which define national priorities in research and development. These priorities take into account the scientific priorities define in the National Research Programme ("Krajowy Program Badań, KPB) prepared in 2011. The priorities define in SOR take into account the priorities defined in KIS and KPB (there is coherence and link between priorities define in SOR, KIS, and KPB).</p> <p>c) Missing answer.</p> <p>d) <i>Changes over 2005-2016</i> The Ministry of Development was established in 2015 due to the merger of two ministries: economy and regional development (http://isap.sejm.gov.pl/DetailsServlet?id=WDU20150002076).</p>
<p>References:</p> <p>https://www.mr.gov.pl/strony/aktualnosci/strategia-na-rzecz-odpowiedzialnego-rozwoju-z-akceptacja-rzadu/</p> <p>https://www.mr.gov.pl/strony/zadania/wsparcie-przedsiębiorczości/innowacyjność/krajowe-inteligentne-specjalizacje/</p> <p>http://www.bjp.nauka.gov.pl/krajowy-program-badan/</p> <p>EC/OECD STI Policy Survey 2016 for Poland. Responses B4 and B7.</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 and b) The MNiSW allocates institutional funding to HEIs and PRIs.

c) Regarding competitive funding, MNiSW together with the former Ministry of Economy (current Ministry of Development) transferred responsibilities for budget allocations to research and innovation to the National Science Centre (Narodowe Centrum Nauki, NCN) and the National Centre for R&D (Narodowe Centrum Badań i Rozwoju, NCBiR) (EC/OECD STI Policy Survey 2016, **responses B4 and C6**). Project-based funds for research and innovation, i.e. open calls, are allocated by the national agencies National Science Centre and the National Centre for R&D, the Foundation for Polish Science (Fundacja na rzecz Nauki Polskiej, FNP), the Polish Development Fund (Polski Fundusz Rozwoju, PFR), and the Polish Agency for Enterprise Development (Polska Agencja Rozwoju Przedsiębiorczości, PARP). Project-based funds are also allocated by the Ministry Development.

The NCN is responsible for the allocation of funding for basic research from the Ministry of Science and Higher Education to HEIs and PRIs. It is subordinated to the Ministry of Science and Higher Education. It is envisaged that public research and innovation funding will rely mainly on competitive allocation by the NCN and the NCBiR until 2020 (EC/OECD STI Policy Survey 2016, **response B7**).

The National R&D Centre is responsible for the allocation of funding to applied research and innovation; it is subordinated to the Ministry of Science and Higher Education (OECD STI Policy Outlook 2014, **reform of public research**).

The Foundation for Polish Science is non-governmental organisation established in 1991 and responsible for funding basic and applied research (responsible for implementation some instruments co-funded by ERDF).

The Polish Development Funds was established in 2016 as an organisation responsible for venture capital funding and coordination of other agencies supporting innovation in Poland such as PARP.

d) HEIs and PRIs are eligible for additional funding from the European Research Council (ERC) and the European Commission. European Regional Development Funds (ERDF) are distributed by MR and agencies: NCBR (research instruments) and PFR (innovation instruments)

e) Taking into account the research budget the share of ERDF funding in 2015-2016 was about 20% and higher education budget less than 10%.

f) *Changes over 2005-2016*

Creation of NCN in 2010 and NCBiR around in 2007; strengthening of competitive funding based on the Act on Principles of Funding Science (2010). The parametric evaluation (linked to institutional funding) for period 2013-2016) will be carried out in 2017.

References:

EC/OECD STI Policy Survey 2016 for Poland. Responses B4, B7 and C6.

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.)

References:

Claeys-Kulik, A.-L., Estermann, T. (2015), *Performance-based funding of universities in Europe*, Define Project Report, p. 29, Brussels, European University Association, Available at: http://www.eua.be/Libraries/publications-homepage-list/define-thematic-report_-_pbf_final-version (Accessed 19 January 2017).

Q.1.4. Who decides on the following key evaluation criteria of HEIs and PRIs?

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?

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?

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?

References:

EC/OECD STI Policy Survey 2016 for Poland. Response B12d and C6.

Ministry of Science and Higher Education (2017), *Committee for Evaluation of Scientific Units*, website, Available at: <http://www.nauka.gov.pl/en/committee-for-evaluation-of-scientific-units/> (Accessed 19 January 2017).

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?

a to f) Funding of HEIs and PRIs is not subject to performance agreements between national ministry and institutions.

g) 60% of HEI funds for teaching are distributed based on a historical allocation scheme. The remaining 35% are allocated based on a formula, i.e. a weighted sum of the overall number of students (weight 0.35); the number of academic staff (weight 0.35), the students-per-teacher ratio (weight 0.10), the number of research grants (weight 0.10), the number of disciplines in which the university awards doctoral degrees (weight 0.05), and the number of international and domestic exchange students (weight 0.05).

h) *Changes over 2005-2016*

Since 2017 the allocation algorithm has been modified to take into account in higher extent the aspects quality of educational activities

(<http://isap.sejm.gov.pl/DetailsServlet?id=WDU20160002016>).

The rules of institutional funding has been also modified since 2015. The link between the results of institutional evaluation and institutional funding was strengthened: research organisations with higher rating received higher public support via institutional funding than other organisations (<http://www.nauka.gov.pl/aktualnosci-ministerstwo/nowy-system-finansowania-jednostek-naukowych.html>). In 2017 there will be carried out institutional evaluation for period 2013-2016.

a and d) The Committee for Evaluation of Scientific Units (Komitet Ewaluacji Jednostek Naukowych, KEJN) at the Ministry of Science and Higher Education is responsible setting criteria of performance evaluations of HEIs and PRIs. Institutional funding is allocated based on those evaluations. First performance criteria were established in 1991 (EC/OECD STI Policy Survey 2016, **response B12d**).

b, c and e, f) KEJN also conducts performance monitoring and evaluations of HEIs and PRIs.

h) *Changes over 2005-2016*

The assessment of HEIs and HEIs affects the allocation of funds, with the following categories introduced in 2010: Category A, which is eligible for institutional funding, includes leading at the national level; category B, which is eligible for institutional funding, covers institutions with average performance; category C, which includes institutions not eligible for institutional funding. PRIs and universities are encouraged to compete for the status of leading institutions, which gives them access to additional funding for enhancing scientific and research excellence (EC/OECD STI Policy Survey 2016, **response C6**).

Creation of NCN in 2010 and NCBiR in 2007; strengthening of competitive funding based on the Act on Principles of Funding Science (2010)

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>References: <i>EC/OECD STI Policy Survey 2016 for Poland. Response B4 and C6.</i> <i>Ministry of Science and Higher Education (2017), Committee for Evaluation of Scientific Units, website, Available at: http://www.nauka.gov.pl/en/committee-for-evaluation-of-scientific-units/ (Accessed 19 January 2017).</i> https://bip.kprm.gov.pl/kpr/bip-rady-ministrow/organy-pomocnicze/organy-pomocnicze-rady/3466,Rada-do-spraw-Innowacyjnosci.html https://www.premier.gov.pl/en/news/news/pm-beata-szydlo-appoints-council-for-innovation.html https://bip.kprm.gov.pl/kpr/bip-rady-ministrow/organy-pomocnicze/organy-pomocnicze-rady/3467,Miedzyresortowy-Zespol-do-spraw-Innowacyjnosci.html</p>	<p>a and b) The Council of Innovation is the main research and innovation council in Poland. It was established in January 2016 to strengthen coordination in research and innovation activities carried out in different ministries and governmental agencies.</p> <p>The activities of the Council is supported by the Inter-ministerial Committee for Innovation, which consists of representatives of ministries, agencies and experts.</p> <p>c) The Inter-ministerial Committee for Innovation, which supports the Council of Innovation. It was also established in 2016.</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>a to e) The Council is in charge of policy coordination across ministries and agencies, evaluation of policies' implementation, and policy advice.</p>
<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</p>	<p>a to j) The members of the Council are high-level government representatives, notably ministers.</p>
<p>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.</p> <p>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?</p>	<p>a and b) The Council does not have its own staff and budget.</p> <p>c) The Council and Inter-ministerial Committee were established in January 2016.</p>

Table 3. Questions on national STI strategies

Question	Response
<p>Q.2.5. a) Is there a national non-sectoral STI strategy or plan? b) What is the name of the main national STI strategy or plan?</p>	<p>a and b) Strategy for Responsible Development (2017) National Research Programme (NRP, 2015) The Strategy for Responsible Development is the main STI strategy in Poland. It was prepared in 2015/2015 and passed in February 2017.</p>
<p><i>References:</i> <i>EC/OECD STI Policy Survey 2016 for Poland. Response A2 and B1.</i></p>	
<p>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 public research etc.) f) From 2005-16, was any STI strategy introduced or were any changes made existing STI strategies?</p>	<p>a) The Strategy for Increasing the Innovativeness of the Economy has identified the following societal challenges for Poland: Demographic change, global and regional integration, climate change, and changing approaches towards innovation (EC/OECD STI Policy Survey 2016, responses A2 and B1). b) The National Research Programme (NRP) addresses specific scientific, economic and thematic fields (no order of preference): 1. New energy-related technologies, 2. Diseases of affluence, new medicines and regenerative medicine, 3. Advanced information, telecommunications and mechatronic technologies, 4. New materials technologies, 5. Natural environment, agriculture and forestry, 6. Poland’s social and economic development in the context of globalising markets, 7. State security and defence. c) National Smart Specialisation Strategies and 16 Regional Smart Specialisation Strategies d) The Strategy Europe 2020 addresses transnational objectives. e) The NRP also includes quantitative targets, among others, the objective to raise R&D expenditures as a share of GDP from 1% in 2015 to 1.7% by 2020 (EC/OECD STI Policy Survey 2016, responses A2 and B1; European Commission, 2016). f) The Strategy for Responsible Development was introduced in 2017</p>
<p><i>References:</i> <i>European Commission (2016), National Reform Programme: Europe 2020, p. 32, Available at: http://ec.europa.eu/europe2020/pdf/csr2016/nrp2016_poland_en.pdf (Accessed 20 January 2017).</i> <i>EC/OECD STI Policy Survey 2016 for Poland. Response A2 and B1.</i></p>	
<p>Q.2.7. What reforms to policy co-ordination regarding STI strategies and plans have had particular impact on public research policy?</p>	<p>The establishment of the Council for Innovation has led to better coordination of research and innovation activities at the governmental level.</p>

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 joint programming is in place.</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) The Polish Development Fund is as an umbrella organisation that coordinates activities carried out by PARP and the National Development Bank (Bank Gospodarstwa Krajowego, BGK). The Council for Innovation coordinates activities of governmental agencies.</p> <p>b) Missing answer.</p>
<p>Q.2.10. What reforms of the institutional context have had impacts on public research policy?</p>	<p>Missing answer.</p>

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. Formal membership as provided by statutes of Council)</p> <ul style="list-style-type: none"> – Private Sector – Civil society (citizens/ NGOs/ foundations) – HEIs/PRIs and/or their associations 	<p>a) The Council of Innovation does not include stakeholder representatives from outside government. Its members are high-level government representatives.</p> <p>However, the Inter-ministerial Committee includes representatives from enterprises (BCC, Lewiatan, ZPRP), private investors (PSIK), clusters and NGOs.</p>
<p>b) Do stakeholders participate as formal members in council/governing boards of HEIs? (i.e. Formal membership as provided by statutes of Council)</p> <ul style="list-style-type: none"> – Private Sector – Civil society (citizens/ NGOs/ foundations) 	<p>b) According to the art 61 and 63 of the Law of Higher Education, universities may established convents. More than half of the members of the convent should represent private sector and civil society.</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 and b) The National Congress of Science – www.nkn.gov.pl. It addresses all aspects related to the reform of science and higher education in Poland. Legislative proposals concerning innovation, which were prepared in 2016, were also consulted on-line (as a part of the preparation of the White Paper on Innovation).</p> <p>c) Entrepreneurial Discovery Process, White Paper on Innovation: In 2016, the Ministry of Development and the Polish Agency for Enterprise Development introduced the Entrepreneurial Discovery Process. This initiative aims to include non-state stakeholder during the development process of the National Smart Strategy. In 2016, the MNiSW initiated the process of public consultation concerning the reforms of science and higher education i.e. through the National Congress of Science.</p> <p>The aim of the Entrepreneurial Discovery Process is broader stakeholder participation during the development of the National Smart Specialisation Strategy. Smart strategies are a prerequisite for receiving European Regional Development Funds (ERDF). Stakeholder involvement is based on interviews with entrepreneurs and so-called smart labs which are focus groups consisting of representatives from business and academia.</p> <p>The Ministry of Science and Higher Education initiated in 2016 work on the preparation of a new law on higher education. This process is also based on wide consultation. Three independent expert groups were selected in open competition to develop and propose the assumptions for the new law on higher education – called as Act 2.0. These projects were presented on the MNiSW website in February 2017. Parallel to this, there is a debate with academia and other stakeholders about challenges facing higher education and science in Poland (i.e. including discussion on the three presented projects). Debates and public consultations take place within the series of conferences - the National Congress of Science, culminating in a final conference in Cracow in September 2017. Detailed information on these conferences and expert discussions on challenges and proposed solutions can be found at: https://nkn.gov.pl/</p>

Q.3.3. Which reforms to consultation processes have proven particularly important?

One of the other tasks that have been put forward before the Council of Innovation is to develop the draft of the law on support for innovation. The legislative changes have been preceded by extensive public consultations, the results of which contributed to the formulation of the assumptions of the White Paper on Innovation.

The work on the preparation of the White Paper on Innovation and proposals for legislative changes was carried out by the Interdepartmental Innovation Team, set up on 18 January 2016. The first stage of work on the White Paper on Innovation was a review of strategic papers, analyses and expert reports on innovation issues. On that basis the barriers and problems of the national innovation system were identified. Then, from 16 March to 15 April 2016, online consultations were held, during which stakeholders were able to present challenges and barriers in terms of innovativeness in Poland and proposals for solutions to address these challenges and barriers. 340 proposals were received, which were analyzed and discussed during the workshops and meetings with representatives of academia, business and non-governmental organizations. Basing on the above public consultation, the White Paper on Innovation was prepared. The draft of this document was consulted with key stakeholders in August and September 2016, especially business representatives and investors. The White Book of Innovation includes 58 legislative and non-legislative proposals, which will be used to prepare the assumptions for the act on innovation, as well as other medium and long-term actions aimed at increasing the innovativeness of the Polish economy.

Based on the White Paper on Innovation, in the first quarter of 2017 a draft of the so-called the second law on innovation was prepared. The main changes planned under the second law on innovation concern:

- Raising the level of R&D tax credits from the current 50% to a higher level;
- Increase the attractiveness of the R&D Centers, especially through simplification of the rules concerning the establishment of R&D Centres and raising the level of R&D tax credits for them;
- Facilitating the National Centre for Research and Development (governmental agency) the investment in innovative start-ups, including through its own Venture Capital fund;
- Allowing companies operating in the Special Economic Zones to take advantage of R&D tax credits for activities carried out outside the Zones (currently excluded from the use of these incentives);
- Streamlining the process of creating the Polish Road Map of Research Infrastructure, in particular by simplifying administrative procedures;
- Introducing a 1% CIT deduction for research units (i.e. the funds should be used for development of human references and young researchers);
- Allowing attorneys and legal advisers to represent clients before the Patent Office of the Republic of Poland (this proposal will translate into lower costs and speed up intellectual property protection proceedings);
- Increasing openness and transparency of self-government of patent attorneys;
- Enabling universities and research institutions to set up companies to carry out research infrastructure projects.

Due to the large scope of the topics mentioned in the White Book of Innovation, the additional legislative proposals have been prepared:

- Introduction of the Industrial Ph.D. Programs - the law was passed by Sejm of the Republic of Poland, so the Industrial Ph.D. Programs will start in October 2017;
- Establishment of the National Institute of Technology - draft law is currently being developed by the Ministry of Science and Higher Education in cooperation with the Ministry of Development and other interested ministries; the goal of the law is to enable the restructuring and consolidation of Polish branch institutes;
- Introduction of the simple joint stock company (coordinated by the Ministry of Development);
- Creation of patent courts (intellectual property) as separate divisions in appellate courts (work is coordinated by the Ministry of Justice, proposals should be prepared in the first half of 2017);

Changes in industrial property rights (work is coordinated by the Ministry of Development, and legislative proposals are prepared by the Patent Office of the Republic of Poland to be presented in the mid of 2017).

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 and b) HEIs and PRIs themselves allocate funds internally to teaching, research and innovation. The MNiSW allocates a block grant for teaching and research infrastructure. HEIs themselves decide about allocations of institutional these funds for teaching, research and innovation activities, although some minor restrictions apply. Institutional funding for research is based on a formula (see response 1.3). Before reforms in 2010 (Act on Principles of Funding Science), institutional funding for research was allocated directly to the faculties based on recommendations of the Science and Higher Education Advisory Councils (EC/OECD STI Policy Survey 2016 for Poland, response C6).</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). Claeys-Kulik, A.-L., Estermann, T. (2015), <i>Performance-based funding of universities in Europe, Define Project Report, p. 29</i>, Brussels, European University Association, Available at: http://www.eua.be/Libraries/publications-homepage-list/define-thematic-report-pbf-final-version (Accessed 19 January 2017). 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. Ministry of Science and Higher Education (2010), <i>Act on Research Institutes, website</i>, Available at: https://www.nauka.gov.pl/q2/original/2013_05/f930c8016d670fa6d95998b35e82b689.pdf (accessed 19 January 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) Recruitment of academic staff is decided by institutions themselves. With the passing of the Law on Higher Education of 2005, HEIs became free to promote or reassign their academic staff. They can decide how they employ academic staff, e.g. on the basis of short term contracts or long-term fixed contracts. b) PRIs are autonomous with regard to hiring and promoting personnel since autonomy reforms in 2010 (Act on Research Institutes, see Ministry of Science and Higher Education, 2010).</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>c and d) Salary bands for academic staff at HEIs and PRIs are prescribed at the national level. e) HEIs are free to reassign and promote staff. Regarding dismissals, only full-time permanent academic staff enjoys special protection at HEIs.</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>	<p>f) PRIs are autonomous with regard to hiring and promoting personnel since autonomy reforms in 2010 (Act on Research Institutes, see Ministry of Science and Higher Education, 2010).</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?

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

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. However, universities are only allowed to create entities whose scope of activity complies with the mission of the university.

Changes over 2005-2016

The 2005 Law on Higher Education Law and the 2010 Act of Research Institutes gave independent legal status to HEIs and PRIs.

Regarding HEIs, the Law on Higher Education of 2005 stated that each university should develop its own rules and policies concerning commercialisation of its technologies. HEIs can establish academic incubators of entrepreneurship and technology transfer offices. Since 2011, HEIs can create spin-offs. Ownership of IP stemming from public funded research was devolved to institutions. With regard to the creation of legal entities and industry partnerships, HEIs are free to create non-profit and for-profit organisations as long as their activities do not conflict with the university's mission (EC/OECD STI Policy Survey 2016, responses C19).

PRIs are autonomous with regard to industry relations since 2010. PRIs have the right to create capital companies, purchase shares and stock in spin-offs and attain income from them. Ownership of IP stemming from public funded research was devolved to institutions. Before autonomy reforms, the Ministry of Economy (today's Ministry of Development) took decisions to create legal entities and to enter industry partnerships.

a and b) HEIs and PRIs set their own schemes. Revenue sharing is regulated at the university level and varies from institute to institute, e.g., University Wrocław – 60% researcher, 10% department, 30% university; Technical University Wrocław and Technical University Poznań – 60% researcher, department and university each 20%; and Technical University Łódź – 60% researcher, 30% department, 10% technology transfer unit.

Changes over 2005-2016

Before 2011, IP ownership and revenues from commercialisation went entirely to HEIs and PRIs. The Amendment to the Law on Higher Education (2011) changed these arrangements with the aim of increasing technology transfer. HEIs became obliged to define rules for IP revenues from IP and commercialisation of scientific research. The Amendment stipulates that, for the period of three months from the date of invention disclosure, the university is the owner of the rights to commercialise their employees' research results, but if no steps to commercialise the research results are taken within that time, the IP ownership is transferred to the inventor.

c) Law on Higher Education (2005); Act on Research Institutes (2010)

Law on Higher Education (2005); Act on Research Institutes (2010)