

Survey response for Australia

OECD database of governance of public research policy

This document contains detailed responses for Australia 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

ARC	Australian Research Council
CGS	Commonwealth Grant Scheme
CSTACI	Commonwealth State and Territory Advisory Council on Innovation
DET	Department of Education and Training
DIIS	Department of Industry, Innovation and Science
FoR	Fields of Research
HEIs	Higher Education Institutions
IAF	Institution Assessment Framework
IPPIC	Institutional Performance Portfolio Information Collection
ITRP	Industrial Transformation Research Programme
NHMRC	National Health and Medical Research Council
NISA	National Innovation and Science Agenda
PELTHE	Promotion of Excellence in Learning and Teaching in Higher Education Programme
PMSEIC	Prime Minister's Science, Engineering and Innovation Council
PRIs	Public Research Institutes
RDCs	Rural Research and Development Corporations

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
Q11 Who mainly decides on the scientific sectoral	a) For universities, the Department of Education and
and/or thematic priorities of budget allocations for a) HEIs and b) PRIS?	Training sets policies in consultation with institutions, i.e. their representative bodies such as Universities Australia
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	b) Missing answer.
describe who is involved and who decides on the priorities (e.g., government, research and innovation councils, sector-specific platforms including industry and science,	c) Missing answer.
etc.). (This question does not refer to who sets overall science, technology and industry priorities. This is usually done by	d) No major reforms made.
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.	
 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)?	
Q.1.2. Who allocates institutional block funding to a) HEIs and b) PRIs? (Institutional block funds (or to general university funds)	a and b) The Department of Education and Training (DET) allocates institutional block funding to HEIs, while the Department of Industry, Innovation and Science (DIIS)
support institutions and are usually transferred directly from the government budget.)	allocates institutional block funding to PRIs.
Who allocates project-based funding of research and/or innovation for c) HEIs and PRIs?	c) The Australian Research Council (ARC) and the National Health and Medical Research Council (NHMRC) allocate competitive research grants (i.e. project-based funding).
(Project-based funding provides support for research and innovation activities on the basis of competitive bids.)	The ARC supports fundamental and applied research and research training through open calls across all disciplines except clinical and other medical and dental research, for
d) Is there a transnational body that provides funding to HEIs and PRIs (e.g. the European Research Council)?	which the NHMRC is primarily responsible. NHMRC is the Australian Government's funding body for bealth and medical research. The NHMRC invests in research
e) What is the importance of such funding relative to national funding support?	through a variety of funding schemes and supports research across the four pillars of health research – biomedical, clinical, public health and health services research.
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	d and e) There is no transnational body that provides funding to HEIs and PRIs.
programme management from ministries to agencies)?	
Department of Education and Training (2017). Research Blo	ock Grants, webpage, Available at:
https://www.education.gov.au/research-block-grants (access	sed 27 February 2017).
Department of Industry Innovation and Science (2017) Science	ence, Research and Innovation Budget Tables, webpage

Available at: <u>https://www.industry.gov.au/innovation/reportsandstudies/Pages/SRIBudget.aspx</u> (accessed 27 February 2017).

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) Performance agreements ("compacts") between the Australian Government and higher education institutions were introduced in 2011. Entering into a performance agreements is a prerequisite that a university must meet as a condition for receiving a public higher education grant. The objective of the performance agreements is to support universities in pursuing their distinctive missions while contributing to the Australian government's objectives for higher education (De Boer et al., 2015, p. 35).

b) While HEIs are required to have a performance contract in order to receive funding (100%), no actual funding is determined or allocated through the performance contracts.

c and d) Performance agreements include performance targets for universities that are set jointly with the DET and each institution; they serve to assess and monitor performance. A set of compulsory indicators is part of all performance agreements, including:

- Aboriginal and Torres Strait Islander access and outcomes as measured by the number of all Aboriginal and Torres Strait Islander student enrolments, completions, general staff, and academic staff;
- Innovation as measured by the number of patent and plant breeder's rights families filed, issued and held by the university; the number of all active licences, options or assignments executed and income derived; the number and value of research contracts and consultancies executed; the sum of investment in spin-off companies during the reporting year; the nominal value of equity in spin-offs; and income derived from the above mentioned innovation activities;
- Engagement as measured by the number of active collaborations with industry and other partners
- Enrolment and quality of teaching as measured by the number of projects supported by the Promotion of Excellence in Learning and Teaching in Higher Education (PELTHE) programme; the number of awards for teaching excellence; and the number of awards for programs that enhance excellence;
- Equity and social inclusion in teaching as measured by the proportion of domestic undergraduates who are from a poor family background; and the proportion of domestic undergraduates who are from another underrepresented group;
- Research performance as measured by the number of disciplines, as defined by two-digit and four-digit Fields of Research (FoR), performing at world standard or above (3, 4 or 5); income received from programmes listed on the Australian Competitive Grants Register that are highly competitive and have a strong element of peer review; income from both state and local government; the number of joint research grants; the number of jointly supervised PhD students;
- Research training as measured by student loans, student completions by Master's degree, and student completions by PhD's degree.

e and f) Yes, performance agreements are set jointly with the DET and the institutions. g) The main source of public research and development (R&D) funding for HEIs are the research block grants (RBGs). The RBGs are allocated to 100% based on performance measures (past performance): Research performance as measured by R&D income received from competitive and non-competitive References; Research training as measured by completions by master's and doctorate degree students; Aboriginal and Torres Strait Islander (indigenous) outcomes as measured by completions by master's and doctorate degree students. h) Performance agreements ("compacts") were introduced in 2011 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. 35-38, Enschede, CHEPS, http://doc.utwente.nl/93619/7/jongbloed%20ea%20performance-based-funding-and-performanceagreements-in-fourteen-higher-education-systems.pdf (accessed 07 March 2017). Department of Education and Training (2017), Research Block Grants, webpage, Available at: https://www.education.gov.au/research-block-grants (accessed 27 February 2017). Department of Education and Training (2017), Research Block Grants New Arrangements: Allocation Calculation Methodology, webpage, Available at: https://www.education.gov.au/research-block-grants-new-arrangements-allocationcalculation-methodology (accessed 27 February 2017). Department of Education and Training (2017), Mission based compacts, webpage, Available at: https://www.education.gov.au/mission-based-compacts Q.1.4. Who decides on the following key evaluation a - c) DET sets criteria for evaluations of HEIs' performance. It criteria of HEIs and PRIs? Who is responsible for setting also evaluates and monitors HEIs' performance. HEIs are criteria to use when evaluating performance of a) HEIs? evaluated against a set of annual key performance indicators, Who is responsible for b) evaluating and c) monitoring which for 2017-18 include: HEIs' performance? Number of higher degree by research student completions; Growth in the number of higher degree by research Who is responsible for setting criteria to use when completions by Indigenous students as a proportion of evaluating performance of d) PRIs? Who is responsible for domestic completions; e) evaluating and f) monitoring PRIs' performance? Proportion of research rated as world standard or above in Excellence for Research in Australia process; - Proportion of high degree by research students in full time g) From 2005-16, was any institution created for evaluating HEIs and PRIs or were any changes made to employment within four months of completing their degree. criteria applied for evaluations of HEIs and PRIs? d - f) Missing answer. g) No major reforms made. References: Department of Education and Training (2017), Research Block Grants, webpage, Available at: https://www.education.gov.au/research-block-grants (accessed 27 February 2017). Q.1.5. Which recent reforms to institutions that are in No major reforms made. charge of priority setting, budget allocations, and evaluations of HEIs and PRIs were particularly important?

Topic 2: Policy co-ordination mechanisms

Question	Response
Question 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? – 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 crossministry preparation of budgetary allocations)? b) What is the name of the main research and/or innovation Council/Committee? Are there any other	Response a and b) Yes, the Commonwealth Science Council. c) There are no other research and innovation councils in place.
research Councils/Committees?	
c) Are there any other research Councils/Committees?	
References:	
EC/OECD STI Policy Survey 2016 for Australia. Response E	34.
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); and e) provision of policy advice?	a – e) The provision of policy advice.
References: EC/OECD STI Policy Survey 2016 for Australia. Response E	84.
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 - j)The Commonwealth Science Council is chaired by the Prime Minister of Australia and brings together representatives from the government (the Minister for Industry, Industry and Science, the Minister for Education and Training, the Minister for Health), Australia's Chief Scientist, five representatives from business, and five from academia. However, the business and academia representatives are not appointed as representatives of their organisations but in a personal capacity.
References:	
EC/OECD STI Policy Survey 2016 for Australia. Response E	34.
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) No, the Council does not have its own budget or staff. c) No major reforms made.
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?	
References: EC/OECD STI Policy Survey 2016 for Australia. Response E	34.

Table 2. Questions on research and innovation councils

Table 3. Questions on STI strategies

Question	Response
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?	a and b) The National Innovation and Science Agenda (NISA) is the main national STI strategy in Australia. NISA aims to transform Australia into a leading innovation nation with a generous social welfare safety net; it addresses the challenges of the digital transformation (EC/OECD STI Policy Survey 2016, response B4).
References:	
EC/OECD STI Policy Survey 2016 for Australia. Response	B4.
 COUCLUS STITPOICY Survey 2016 for Australia. Response 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) Health and life sciences (e.g. biotechnology, medical technologies) 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 Horizo 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? 	 a - b) NISA specifically addresses biomedical research and the digital economy, notably data sharing, data science research, cyber security, and quantum computing technology (EC/OECD STI Policy Survey 2016, responses B4). Moreover, the Industrial Transformation Research Programme (ITRP) of the ARC supports university-industry collaboration in selected key priority areas. For funding beginning in 2016, these areas are advanced manufacturing, food and agribusiness, oil, gas and energy reReferences, mining equipment, technology and services, medical technologies, and pharmaceuticals. Growth Centres are being established and funded by the ARC in six sectors of competitive strength and strategic priority for the Australian government: Advanced manufacturing, cyber security, food and agribusiness, medical technologies and pharmaceuticals, mining equipment, technology and services, and oil, gas and energy reReferences (EC/OECD STI Policy Survey 2016, responses F3). c) Regarding regional objectives and strategies, Rural Research and Development Corporations (RDCs) are partnerships between the Australian Government and the locc agriculture, forestry and fisheries industries, which commissio and manage targeted research and foster uptake and adoption based on the identified needs and priorities of both industry and the Australian Government (EC/OECD STI Policy Survey 2016, responses F3). d) NISA does not include transnational objectives. e) Missing answer. f) No major reforms made.
References:	
EC/OECD STI Policy Survey 2016 for Australia. Response	B4 and F3.
Q.2.7. What reforms to policy co-ordination regarding STI strategies and plans have had particular impact on public research policy?	No specific reforms to cite, however, policy coordination with HEIs occurs through peak bodies such as Universities Australia and their Deputy Vice Chancellor (DVC) networks such as the DVCs-Research Reference Group.

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? (<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>	Inter-agency joint programming is not in place.
 Q.2.9. a) Is co-ordination within the mandate of agencies? 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? 	 a) Australian Government agencies routinely coordinate on research policy formulation and implementation. Coordination is enhanced through mechanisms such as Interdepartmental Committees and joint policy forums. b) No major reforms made.
Q.2.10. What reforms of the institutional context have had impacts on public research policy?	No major reforms made.

Topic 3: Stakeholders consultation and institutional autonomy

Table 5. Questions on stakeholder consultation

Question	Response
 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) Private Sector Civil society (citizens/ NGOs/ foundations) HEIs/PRIs and/or their associations b) Do stakeholders participate as formal members in council/governing boards of HEIs? (i.e. Formal membership as provided by statutes of Council) Private Sector Civil society (citizens/ NGOs/ foundations) 	 a) The Commonwealth Science Council is chaired by the Prime Minister of Australia and brings together representatives from the government (the Minister for Industry, Industry and Science, the Minister for Education and Training, the Minister for Health), Australia's Chief Scientist, five representatives from business, and five from academia. However, the business and academia representatives are not appointed as representatives of their organisations but in a personal capacity. b) University Councils include external stakeholders from civil society, business, and foreign experts, e.g. the public University of Melbourne includes representative of the DET, representatives from civil society (Federal court of Australia), large firms (Commonwealth Bank of Australia, Questgates Limited) and foreign experts (British novelist).
References:	
Government of Australia (2017), Commonwealth Science Council	l, webpage, Available at:
University of Melbourne (2017), University Council, webpage, Ava	ailable at:
http://www.unimelb.edu.au/governance/structure/committees/univ	versity-council#membership (accessed 07 March 2017).
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)?	a and b) DET conducts a range of online consultations in relation to its research programs and uses multiple platforms to conduct these consultations.
c) From 2005-16, were any reforms made to widen inclusion of stakeholders and/or to improve consultations, including online platforms?	c) The Commonwealth Science Council was established in 2014 to broaden stakeholder participation in national STI policy making.
References: EC/OECD STI Policy Survey 2016 for Australia. Response B4. Department of Education and Training (2017), National Research	Infrastructure Roadmap, webpage, Available at:
<u>https://www.education.gov.au/2016-national-research-intrastructu</u> Department of Education and Training (2016) Consultation on ner universities, webpage, Available at: <u>https://www.education.gov.au</u>	<u>ire-roadmap</u> (accessed 27 February 2017). w program guidelines for Research Block Grants for <u>i/rbgconsultationpaper</u> (accessed 27 February 2017).
Q.3.3. Which reforms to consultation processes have proven particularly important?	There were no major changes made to consultation processes.

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) HEIs face national constraints on using their block funds for research. HEIs can only spend research block funding on activities related to the conduct of research and development and training of higher degree by research students, i.e. funds cannot be moved between categories such as teaching, research, infrastructure, operational costs, etc. b) Missing answer.
Q.3.5. Who decides about recruitment of academic staff at a) HEIs and b) PRIs? (<u>National/regional level</u> : 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. <u>Institutions themselves</u> : 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.)	a – f) HEIs are responsible for academic matters. Missing answer for PRIs.
Who decides about salaries of academic staff at c) HEIs and d) PRIs? (<u>National/regional level</u> : 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. <u>Institutions themselves</u> : If HEIs are free to set salaries, 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 staff freely.)	

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?	a – d) HEIs are responsible for academic matters. Missing answer for 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. spin-offs) 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. <u>Institutions themselves</u> : 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	a) HEIs decide themselves. Current policy settings allow HEIs to assert ownership rights over publicly-funded IP.
publicly funded research at a) HEIs and b) PRIs?	
 HEI Research unit / laboratory within HEI Researchers 	NHMRC requires that HEIs and PRIs adhere to an Intellectual Property policy, approved by their governing body, which has as one of its aims the maximisation of benefits arising from research. The funding agency NHMRC makes no claim on the
c) From 2005-16, were any reforms introduced that affected the institutional autonomy of HEIs and PRIs?	ownership of Intellectual Property brought into being as a result of the research activities (including the research material). Institutions grant to NHMRC, or procures for NHMRC, a permanent, irrevocable, free, world-wide, non- exclusive licence (including a right of sub-licence) to use, reproduce, communicate, modify and adapt the research material (including any copyright in the research material) for the public purposes.
	b) Missing answer.
	c) No major reforms made.

http://www.pc.gov.au/inquiries/completed/intellectual-property/report (accessed 27 February 2017). Q.3.8. Which reforms to institutional autonomy have been important to enhance the impacts of public research?