



Australian Government
Department of Education,
Skills and Employment

DESE update on Australian Government research policy: priorities and initiatives

Dan Donegan, Assistant Secretary, Research Policy and Programs Branch |

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Australian Government research policy: priorities and initiatives

What are the Australian Government's national research policy priorities?

- Priority driven programs and funding
- Generating incentives for more and stronger university-industry engagement
- Better translating and commercialising university research outputs

How are we achieving these objectives?

- University Research Commercialisation Scheme
- 2021 National Research Infrastructure Roadmap
- National Collaborative Research Infrastructure Strategy
- Strategic research investment programs
- Research Training Program industry internship weighting

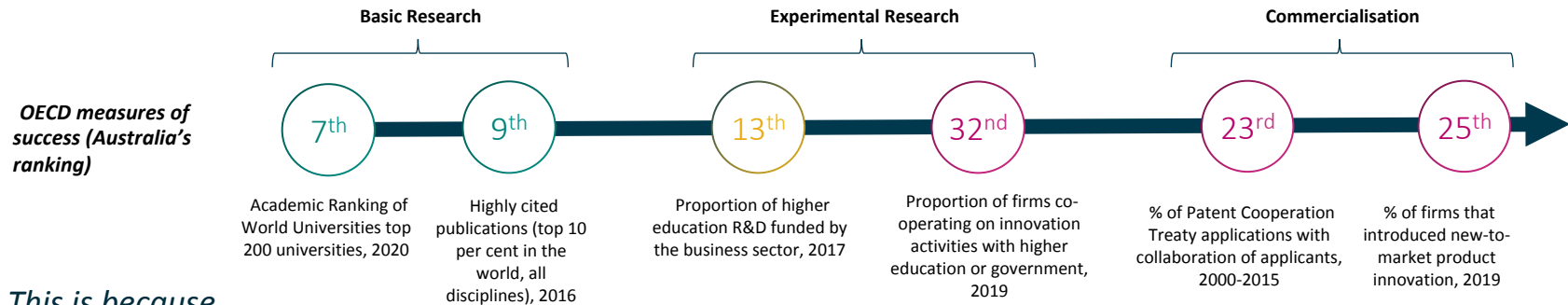
University Research Commercialisation Scheme

“

“We want to provide a platform and a pathway for our talented researchers to partner with you, with businesses all around the country and to apply their intellectual firepower as research entrepreneurs.”

- The Hon Scott Morrison MP, Prime Minister, Business Council of Australia AGM, 19 November 2020

While Australia has a strong foundation of basic research, we struggle to translate this research into commercial and social research outputs



This is because...

●
Australia spends relatively little on experimental research (non-basic research)

●
Most incentives target publications and citations, not commercialisation

●
We have low levels of university-industry collaboration

●
Outside of health, our research expenditure is allocated on quality not impact

University Research Commercialisation Scheme

To achieve this aim, the Australian Government...



Appointed an Expert Panel of Industry and University Leaders



Committed \$5.8 million on a scoping study



Established a Departmental Taskforce to provide policy expertise

have undertaken extensive **consultation and research**...

171

Written submissions to URCS consultation paper

80+

Over 80 Roundtables and other discussions

5

International bilateral discussions
(UK, Canada, New Zealand, Israel, and the United States)

15

Analytical studies commissioned

and are developing a **principled approach**, grounded in:



At scale investments



Industry led



Research institutions open and engaged with industry



Focused on specific priorities



Well-established collaboration between universities and industry

National Research Infrastructure Roadmap Cycle

Every five years the Australian Government uses a **Roadmap** process to identify Australia's research infrastructure capability and future areas of need

Every two years Australian Government releases a **Research Infrastructure Investment Plan** to support the Roadmap and ensure investment reflects researcher needs

The National Collaborative Research Infrastructure Strategy (**NCRIS**) Program manages the research infrastructure projects determined by the Roadmaps and Investment Plans

2016 Roadmap

2018 and 2020 Investment Plans

2021 Roadmap

2022 Investment Plans

NCRIS Program

Currently here

National Research Infrastructure Roadmap - survey overview

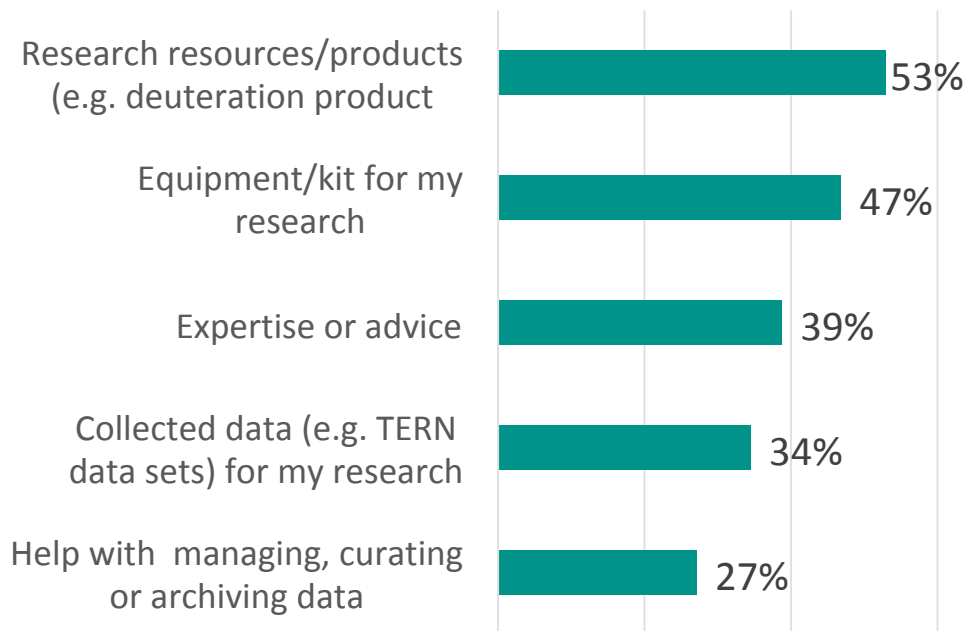
Nearly 3,000 survey respondents

77% Researchers
14% Research Support
9% University Administration (inc. Exec)
11% Public Service
7% Industry Professionals
5% NRI Staff

69% of survey respondents use NRI

55% felt NRI met all or most of their needs

Reasons for using NRI (top 5)



Note – multiple entries possible

National Research Infrastructure Roadmap - information so far

Emerging technologies and research areas

- AI and machine learning research
- Robotics
- Omics and synthetic biology
- Earth observation
- Climate modelling and prediction
- Critical minerals
- Water (marine, coastal, fresh and Blue Economy)
- Biodiversity and eDNA
- Quantum technologies
- Decarbonisation technologies
- Precision medicine

Changing research practices

- Global Open Research agenda and the globalisation of research
- Research is multidisciplinary and mission focussed
- Digital revolution blurring boundaries between traditional research domains
- Exponential growth in data generation

Domestic and global challenges

- Improving health outcomes
- Growing food productivity & resilience
- Environmental management & climate threats
- Transitioning to a zero-carbon economy
- Stewarding critical minerals & resources
- Keeping Australia secure
- Advancing space and astronomy
- Frontier technologies & manufacturing

Research infrastructure functions

- Observation and monitoring
- Compute and modelling
- Management of datasets and collections
- Fabrication and manufacturing
- Measurement and characterisation

These factors are changing how research is done and impact researchers' needs

National Collaborative Research Infrastructure Strategy

01



24 active projects

Two projects in development phase

02



1,900 jobs

1,900 researchers, academics, and support staff employed across all NCRIS projects

03



Supporting researchers

65,000 researchers supported per annum (aggregate)

04



Collaborative investment

Every \$1 of Government investment sees \$1.29 in co-investment from universities, research agencies, state and territory governments, and industry

Other Strategic Research Investment Programs



Strategic University Reform Fund

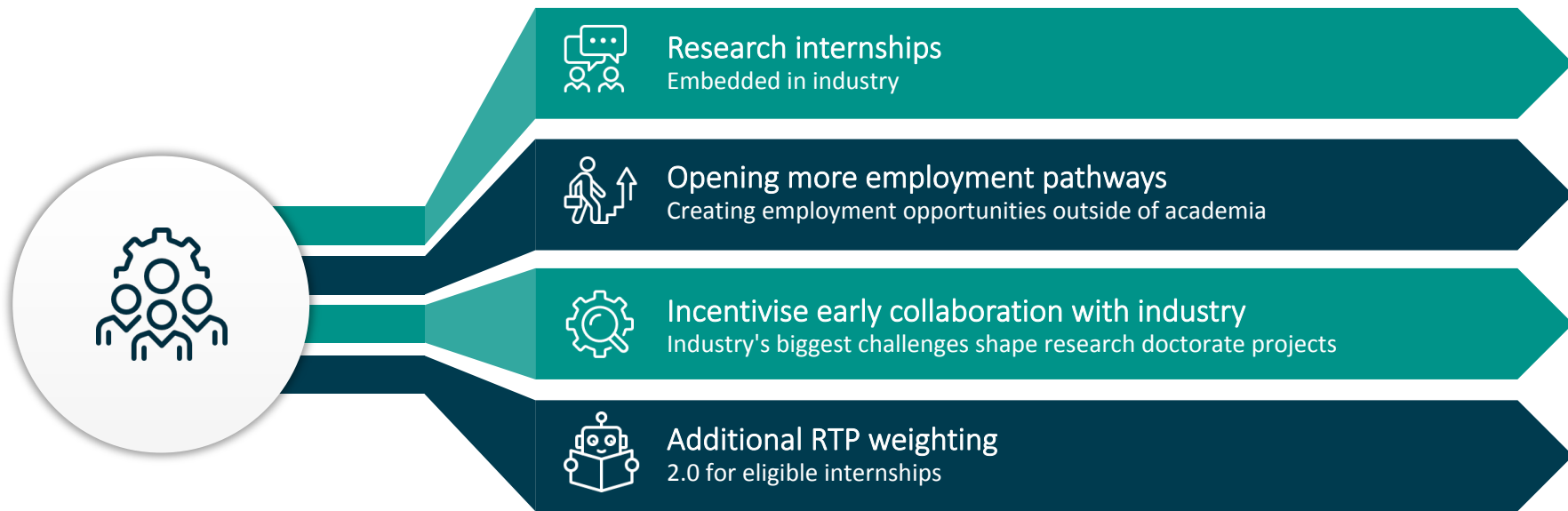
- \$40 million over four years
- Removing barriers to industry-university collaboration in local communities
- Focussed projects in areas of Government priority
- 10 projects approved in 2021 application round, for example:
 - NO WASTE Precinct (USQ)
 - Agri-food Innovation Centre (UQ)



Regional Research Collaboration Program

- \$48.8 million over four years
- Enhance research collaboration capacity of regional universities
- 6 projects approved in 2021 application round, for example:
 - Regional Australia Mental Health Research & Training Institute (UNE)
 - Research Institute for Northern Agriculture and Drought Resilience (CDU)

2021-2022 Budget measure *Growing industry internships for research PhD students through the Research Training Program*



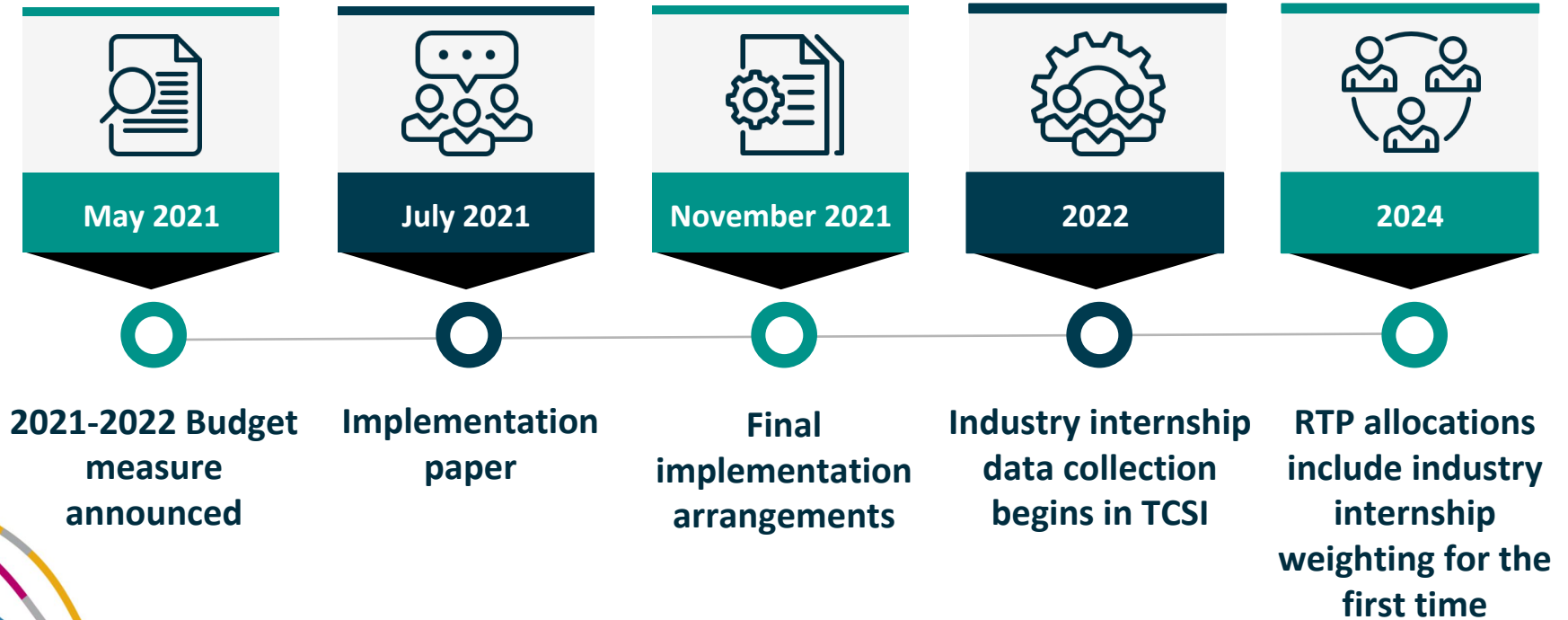
RTP industry internships weighting

- **Internship weighting** of 2.0 will be incorporated into the existing RTP higher degree by research student completion weightings
- **Eligible internships:** Government 2021-2022 Budget decision

RTP weightings with industry internship weighting for research doctorate students

HDR Type	Cost level	Research Internship	Non-Indigenous Student	Indigenous Student
Research Doctorate	High	no	4.70	9.40
		yes	6.70	11.40
	Low	no	2.00	4.00
		yes	4.00	6.00
Research Masters	High	n/a	2.35	4.70
	Low	n/a	1.00	2.00

RTP industry internships weighting



More information

- University Research Commercialisation Scheme: <https://www.dese.gov.au/urc>
- NRI Roadmap: <https://2021nriroadmap.dese.gov.au/>
- NCRIS: <https://www.dese.gov.au/ncris>
- SURF: <https://www.dese.gov.au/strategic-university-reform-fund>
- Regional Research Collaboration Program:
<https://www.dese.gov.au/regional-research-collaboration-program>
- RTP Internship weighting: (to be updated shortly):
<https://www.dese.gov.au/research-block-grants/research-training-program>