

Building the enabling legal framework in Australia for Open Access, Open Research and Research Sector – Industry Collaboration: a blueprint

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Australian policymakers have recognised that building a National Digital Research Infrastructure is critical to developing Australia’s digital and innovation economy. Australia has ambitious targets for building its digital research capacity and research infrastructure, including in machine learning and artificial intelligence, through to the digital humanities. This is reflected in numerous recent policy initiatives, such as the development of an Australian Data Strategy,² a National Digital Research Infrastructure Strategy,³ significant investments in Artificial Intelligence,⁴ and moves to open up government data.⁵ Australia has also recognised the need to improve industry building links between research and industry,⁶ and ease pathways from the research sector to commercialisation and application.⁷

Open Access to Australian research publications and enabling Australian participation in Open Research is a critical part of this picture: a fact recognised by the Chief Scientist’s initiative looking for ways to enable Open Access to Australian research⁸ and initiatives to support Open Data.⁹ Open Access and Open Research can play an important role in making Australia’s research and research infrastructure “more visible and accessible to industry” and promoting “the mutual benefits from closer collaboration,”¹⁰ as well as supporting strong links between research and teaching to support life-long learning, improving equity and access to education – another important contributor to an innovation economy.¹¹ Australia’s participation in global moves towards Open Access and Open Research will also help secure Australia’s role within global research networks and collaborations.

Australia is currently lagging in OA and Open Research: this needs to change. Based on our ARC-supported research over the past 3 years and consulting with experts overseas, we see two distinct paths to that goal. Taking the right path – one that enables OA while keeping downward pressure on the cost - requires coordinated action to build an **enabling legal and contractual framework**, which we outline below.

¹ This document represents the outcomes of research funded by the Australian Research Council: DP200110578, *Producing, managing and owning knowledge in the 21st century university*.

² The Australian Research Data Commons (ARDC) was formed under the Federal Government’s National Collaborative Research Infrastructure Strategy (NCRIS), <https://ardc.edu.au>

³ See 2021 National Research Infrastructure Roadmap (2021 Roadmap), <https://www.deese.gov.au/national-research-infrastructure/2021-national-research-infrastructure-roadmap>

⁴ Such as the creation of the National AI Centre and other initiatives.

⁵ See, *Data Availability and Transparency Act 2022* (Cth).

⁶ See, for example, 2021 National Research Infrastructure Roadmap (2021 Roadmap), above n 3, Recommendation 6.

⁷ Higher Education Research Commercialisation Intellectual Property Framework <https://www.deese.gov.au/hercip>.

⁸ EY Consultation, Australia’s National Strategy for Open Access (Strategy), Office of the Chief Scientist, June 2022.

⁹ *The State of Open Data 2021*, https://digitalscience.figshare.com/articles/report/The_State_of_Open_Data_2021/17061347.

¹⁰ 2021 National Research Infrastructure Roadmap (2021 Roadmap), above n 3, Recommendation 6.

¹¹ See eg. Committee for Economic Development of Australia, 'Lifelong Learning. How to Pass the Test', <https://www.ceda.com.au/ResearchAndPolicies/Research/Education/Lifelong-learning-How-to-pass-the-test>; DESE, National consultation: Australia’s progress against Sustainable Development Goal 4 (2022) <https://www.deese.gov.au/international-education/tes-national-consultation>.

Two scenarios for Open Access and Open Research in Australia

Fundamentally, to promote research, industry collaboration, and education, Australian universities, industry, and people need rapid access to the fruits of Australian research and teaching investments. That means Open Access to the products of Australian research; which will also promote global collaboration and equity in access to the fruits of research. We also need to improve our capacity to record, manage and assess Australia's investments in research, as well as test, analyse and replicate research – to support further insights and to strengthen what we know by further research, and to broadly disseminate research findings. The **policy goal is to make Australia a leader in this field**: which is possible, if we learn from – and improve on – developments overseas.

At the broadest level there are two pathways to Open Access:

1. **Scenario 1: Outsource Open Access publication, as well as research metadata management and archiving to multinational publishing houses.** In this scenario, Australia relies on the multinational publishing houses (Elsevier and others), who are also seeking to become full service research data management and research evaluation/data analytics providers. The universities, or the Australian government, pay the traditional publishers to make Australian researchers' publications open access, via university or national level 'Read and Publish' agreements.¹² Publishers in this system would claim – as they do now - ownership of publicly-funded research outputs, while benefiting from labour and research paid for by the Australian public and the university sector. The Australian government, universities, and researchers would need to negotiate with publishers for all access, and services required, noting that the terms could change over time as business models evolve. This future could likely involve further integration of university management systems for research reporting and research assessment with publisher systems. Any data mining by researchers, and any data about the publications will depend what publishers are willing to allow or provide.
2. **Scenario 2: A sector-managed system.** In this scenario, Australia invests in its Open Access infrastructure as part of an overall investment in its National Digital Research Infrastructure, and takes legal steps to maximise public ownership of the outputs of public investment in research. This enables rapid access to information and research publications for downstream use, including reuse in education. Australian researchers still publish in quality research outlets, which facilitates prestige, rankings, and gives profile and the stamp of credibility to Australian research, and universities continue to pay a fair price, to publishers for access to final published journal articles, reflecting the value publishers add in the publication process, likely through Read and Publish Agreements that ensure that final, copy-edited authoritative journal versions are made OA. But there is mandatory deposit of research outputs in open repositories,¹³ which gives Australian governments and universities an alternative publication and open access infrastructure, where the latest research is available to the research sector and to industry to mine for insights, ideas, and connections without having to seek permission from the traditional publishers. Most importantly, this publicly owned system and public ownership of research outputs keeps downward pressure on pricing for

¹² 'Read and Publish' agreements involve one payment that covers both the usual journal subscription for reading, and publication open access without the payment of a specific 'article processing charge' or APC. The Council of Australian University Libraries is trialling some Read and Publish Agreements in Australia.

¹³ In addition to institutional repositories there are numerous subject specific open repositories for author accepted manuscripts. Open Research Europe is no longer limited to EU members and is anticipated as becoming a central repository for international research. A national repository should also be supported.

all publication and associated research data analytics services, by giving universities and governments negotiating with traditional publishers the option of walking away without losing access to research.

Which scenario is most likely?

Scenario 1 is the future currently unfolding in Australia, and which would be suggested by some proposals from the Chief Scientist. It is likely to be convenient in the short term, but **very expensive**, especially over time. We could see the Australian government paying through CAUL and institutional level agreements or, via a central system as suggested by the Chief Scientist, for open access to Australian research outputs. In addition, both governments and universities will pay separately for research data management and analytics services, having already paid academics to research, to edit journals and to undertake peer review. Importantly, with no alternative means of access to research, and with all ownership of outputs held by publishers, there is no way to keep downward pressure on prices charged by publishers, and no way to know what prices should be (since publisher costs are not transparent).¹⁴ Australian universities could also continue to pay for educational use of research publications via the existing statutory licence, where dependency on publisher data about actual use continues to increase, with new short courses and targeted diplomas and degrees facing the challenge of additional copyright licence fees.

Scenario 2 is the direction research sectors, working with governments in comparable countries are actively pursuing. Europe, the UK and Australia share similar values about the importance of public education and the role of government in supporting an innovation infrastructure to improve research and education outcomes and provide value for money for the taxpayer. European initiatives create an opportunity for Australia, as a second mover, to learn from the European experience and improve on existing frameworks. Australia has the opportunity to act in concert with partner countries in Europe, supported too by the heft of both the significant European investment in research and initiatives like Plan S and Open Research.¹⁵

Interviews conducted with key UK and Swedish University and Library personnel in June-July 2022 highlighted significant sector co-operation around collective management of University IP to improve OA performance without charges and to reduce journal subscription costs. Strong rights retention by universities to support research and education creating downward pressure on charges is the lynchpin.¹⁶ Interviewees also noted the value of copyright exceptions we do not yet have in Australia. Open Research rights include a quotation right; text and data mining right; a “Hargreaves exception”¹⁷ used in conjunction with RapidILL,¹⁸ to facilitate interlibrary loans. In many EU nations there is a non-waivable right of secondary publication which allows for publication of derivative versions of publicly funded research publications after a one year embargo.¹⁹

¹⁴ It is important to note that these costs have always been vulnerable to Australian currency variation against the USD and Euro in particular.

¹⁵ <https://open-research-europe.ec.europa.eu/>

¹⁶ Industrial law differs greatly. In the UK, in addition to UKRI open access requirements for research assessment, the most likely model to achieve rights retention will be the Edinburgh model <<https://www.ed.ac.uk/information-services/research-support/publish-research/open-access>>. In EU nations it is implemented by mandatory terms in EU funding agreements and through national legislation.

¹⁷ <https://www.sconul.ac.uk/news/copyright-briefing-paper-on-the-hargreaves-exceptions>

¹⁸ <https://exlibrisgroup.com/products/rapidill-interlibrary-loan/>

¹⁹ See legislative summary in Roberto Caso et al, ‘Secondary Publishing Right. Creating Opportunities and Limitations’ (2021), 9 < <https://zenodo.org/record/5771593#.Yt8yxuxBwUo>>

Outcomes achieved, according to interviewees, include a 27% reduction achieved in the UK/JISC Elsevier Read and Publish agreement and full transparency in sector subscription/read and publish agreements in the UK and many EU countries. International researchers do not need to negotiate as many copyright licences and seek permission to conduct and disseminate research as Australian researchers do. Appropriate exceptions also created flexibility and strengthened bargaining positions in negotiations with multinational publishers.

Developments overseas are continuing. In terms of future directions, there is support for Unsub²⁰ to reduce reliance on proprietary data about publications, a strong push to link research assessment to acceleration of Open Science²¹ and UNESCO has now begun working on a new treaty to promote OA.²² Several interviewees also sought advice on best practice to enhance open access and open data internationally so that new initiatives are implemented in ways that acknowledge Indigenous rights. (See Appendix 2).

What we need to do

There is a need to improve open access infrastructure, as older infrastructure based in individual universities is no longer fit for purpose.²³ And there is a need to invest effort in an enabling legal infrastructure. Together these investments are needed to ensure that Australian research is not entirely subject to the ownership of, and conditions imposed by, the multinational publishers in particular. We note that overseas, Open Research is not only pursued through higher education research policy, it is being **legislated**. There is also a strong investment in infrastructure to support open science and open publication.²⁴

What does an enabling legal framework look like?

As of now, Australia's legal framework for open research and lifelong learning is significantly behind what we see overseas, and will rapidly fall further behind as further reform occurs in Europe. Professor Kathy Bowrey's recent research visit to Europe and discussion with people involved in those efforts confirms that rights retention – retaining ownership of research outputs - is the foundation of the shift to Open Research and freeing up resources to support lifetime learning. Australian industrial laws also mean Australia is **better** placed even than comparable jurisdictions to assert university ownership of the fruits of research, and use that ownership for public ends.

The two core elements of an enabling legal framework for OA and Open Research are outlined in detail in the Appendices. But in summary, they are:

- 1. Partial retention of copyright ownership by universities in author accepted manuscripts:** University ownership of the copyright rights necessary for open access publication of, and research and education use of, author-accepted manuscripts (ie, research outputs in final

²⁰ <https://unsub.org/>

²¹ Council of the EU, Pact for Research and Innovation (R&I) in Europe, Council Recommendation (EU) 2021/2122 of 26 November 2021; Conclusions On Research Assessment And Implementation Of Open Science, (EU) 9515/22, 25 May 2022.

²² This initiative develops from Unesco Recommendation on Open Science 2020
<<https://unesdoc.unesco.org/ark:/48223/pf0000374837>>

²³ This is based on fieldwork interviews conducted with Libraries and Research Managers throughout 2021. QUT Human Research Ethics Committee Reference Number 2000000609 (2020).

²⁴ In the course of our ARC-funded research we have consulted with experts involved in developments overseas, in particular in Europe.

form prior to copy-editing for publication). This can be achieved with small but significant internal legal changes across the 39 public universities, to pre-empt and prevent publishers from obtaining full copyright ownership. It requires relatively simple changes to university IP policies and employment contracts. See Appendix 1 for essential terms.

2. **Reforms to copyright legislation** to secure key rights to engage in data-driven research and to publish the results of research: further securing the ability to walk away from publisher contractual offers that restrict research or impose undue costs on text or data mining, or quotation in research publications. More detail on overseas copyright reforms is included in Appendix 2.

Next steps

Delivery of Open Access, Open Research and creating a more inclusive educational ecosystem **requires strong leadership by Vice Chancellors and DVCs, and strategic investment by government, both in the National Digital Research Infrastructure and legal and contractual reforms.**

Rights retention: Our research team is available and willing to assist individual public universities to revise relevant policies to maximise opportunities to promote Open Research and lifelong learning in a cost-effective and ethical way. Concerted action and collaboration through Universities Australia is also essential to minimise workloads and transaction costs in making the shift happen.

Legal reform: Open Research would be further supported by Australia adopting reforms to copyright law similar to, and improving on, those which have been tried and tested overseas. Coordination at the University level would be useful to enable the sector to strongly advocate for the required enabling infrastructure and legal framework to the Albanese Government and industry stakeholders.

5 August 2022.

APPENDIX 1. KEY COMPONENTS OF EFFECTIVE RIGHTS RETENTION

The Model

Our model in a nutshell involves the University **retaining partial ownership of the rights in research publications: specifically those which the University needs for use in teaching and Open Research.** Academics would receive ownership of other copyright rights, including those necessary to license or assign the rights for publishers to publish their works in journals and disseminate those journal publications. The effect of the rights retention, however, is that academics *cannot* effectively assign away the rights the University needs to use publications in teaching without relying on the statutory licence, and to make preprints available green OA²⁵ via institutional repositories.

To give the model legal effect:

1. The Enterprise Bargaining Agreement & Employment contracts.

For Academic Employees: For maximum clarity and legal effect for university rights retention, IP and OA policies should be incorporated into the Academic Employment contract, with the EBA in express alignment with the IP Policy; the benefit of using the EB is that it prevails over the direct employment contract.

2. IP Policy: Rights retention through (i) ownership and (ii) licence provisions:

- (i) The University asserts its right to first ownership of research
- (ii) The University
 - (a) asserts ownership of the right to copy and disseminate all scholarly publications for the University's teaching and research purposes, and **to give effect to the University's OA policy**, including the right to sublicense publications to other University Australia members for their teaching and research purposes and to give effect to their OA policies; and
 - (b) asserts a perpetual, irrevocable, royalty-free, non-exclusive, licence over Research Outputs including books and journal articles, for the University's teaching and research purposes.

3. **Other employees:** Adjuncts, Emeritus, Education Focussed, Sessional staff, HDR students and Visitors need to have an additional clause in their appointment contract that allow for rights retention by the university in the same terms as above.

4. **Authorship Policy:** needs to explicitly make it the responsibility of the Lead author and institutional co-authors to comply with University IP & OA Policy on university rights retention.

5. **Indigenous research:** The University IP Policy needs to acknowledge Aboriginal and Torres Strait Islander research requires additional considerations and university first ownership may be set aside consistent with the Authorship Policy and the NHMRC *Ethical conduct in research with Aboriginal and Torres Strait Islander Peoples and communities: Guidelines for researchers and stakeholders 2018* and AIATSIS *Code of Ethics for Aboriginal and Torres Strait Islander Research 2020*.

6. **Open access policy:** This policy can be amended as needed to respond to sector developments without requiring revisiting the IP Policy.

²⁵ 'Green OA', also known as self-archiving, involves deposit of an author-accepted manuscript in an open access repository (usually an institutional repository or disciplinary repository such as arXiv). It contrasts with 'Gold OA' where the final published version of an output is made available open access by the publisher.

APPENDIX 2. COPYRIGHT LAW REFORMS ENACTED OVERSEAS

To be competitive with current international best practice required reforms are summarised in the table below, with examples drawn from overseas.

The exact legislative mechanism to achieve them in Australia could be a combination of an open-ended flexible fair dealing (fair use) defence as set out in existing evidence-based public inquiries,²⁶ and other specific legislative provisions. We refer to Morrison Government draft legislation (ie the *Copyright Amendment (Access Reform) Bill 2021*) as relevant.

Rights needed	Reasons	Overseas examples
The right to quotation	Needed so that researchers – and industry and policymakers relying on research – encompassing text, sound, images and film – to remove impediments to illustrative uses of primary research	<p>Mandatory exception in Art 10(1) <i>Berne Convention</i>.</p> <p>Eg. s30(1) <i>Copyright, Design and Patent Act 1988</i> (UK): (1ZA) Copyright in a work is not infringed by the use of a quotation from the work (whether for criticism or review or otherwise) provided that— (a) the work has been made available to the public, (b) the use of the quotation is fair dealing with the work, (c) the extent of the quotation is no more than is required by the specific purpose for which it is used, and (d) the quotation is accompanied by a sufficient acknowledgement (unless this would be impossible for reasons of practicality or otherwise).</p> <p>If s 113FA <i>Copyright Amendment (Access Reform) Bill 2021</i> was enacted Australia would <u>still</u> not be compliant with its international obligations under Art 10(1) and (3) of the Berne Convention.</p>
Education exceptions	Necessary to remove illustrative and marginal uses of copyright material to contain the scope of the educational statutory licence to commercially significant dealings	<p><i>Copyright, Design and Patent Act 1988</i> (UK): Education exceptions s 32 Illustration for instruction s 33 Anthologies for educational use. s 34 Performing, playing or showing work in course of activities of educational establishment. s 35 Recording by educational establishments of broadcasts s 36 Copying and use of extracts of works by educational establishments</p>

²⁶ Australian Law Reform Commission, *Copyright and the Digital Economy*, Final Report, ALRC Report 122, November 2013; Australian Government, Productivity Commission, Intellectual Property Arrangements, *Productivity Commission Inquiry Report*, No 78, 23 September 2016.

<p>The right to engage in text and data mining on published text</p>	<p>Necessary to enable all kinds of data-driven research without seeking permission from, or having conditions (or licensing costs) imposed by publishers. Necessary to support the development of AI/Machine Learning as well as to engage in research directed at reproducibility.</p>	<p>Digital Single Market Directive (EU) 790/2019, Art. 3. Mandatory exception for text and data mining for scientific research.</p> <p>Art. 4 and Recital 5: Mandatory exceptions or limitations for uses of text and data mining technologies, illustration for teaching in the digital environment and for preservation of cultural heritage. Per recital 11, implementing provisions may limit text and data mining to non-commercial use or contract out, subject to a mandatory exception text and data mining exception for universities and other research organisations.</p>
<p>Orphan works provision</p>	<p>Necessary for effective management of existing library resources.</p>	<p>See ALRC Recommendation 13.1</p> <p>ss 116AJA(1) & 116AJA(2) <i>Copyright Amendment (Access Reform) Bill 2021</i> are appropriate. The proposed s 116AJA(1)(e) is unnecessary and poorly drafted. The introduction of an attribution requirement for the use of an orphan work is redundant due to Part IX Moral rights.</p>
<p>Statutory expiration of the public domain</p>	<p>Necessary to remove acts of digitisation reviving copyright in public domain material eg. Old Masters paintings</p>	<p><i>Digital Single Market Directive</i> (EU) 790/2019, Art. 14, Recital 53 states that no new rights can be claimed in material generated during acts of reproduction <i>unless</i> the author’s own intellectual creation standard is met.</p> <p>Interview Subjects referred to draft Swedish legislation which reaffirms the expiration of the public domain following <i>Eva-Maria Painer v. Standard Verlags GmbH</i> CJEU, 1 December 2012, C-145/10</p>
<p>A “Hargreaves exception”:</p> <p>Any licences that libraries agree to cannot override the library’s or their users’ ability to enjoy copyright exceptions.</p> <p>No contracting out</p>	<p>Needed to ensure there is full effect of policy intention, greater efficiencies in use of public resources in times of crisis (eg. Covid) and lower transaction costs from harmonisation</p>	<p>ss 113KD & 113KE; 113KF <i>Copyright Amendment (Access Reform) Bill 2021</i> are potentially appropriate, subject to an additional amendment to explicitly clarify that provisions cannot be contracted out of (eg. s42A <i>Copyright, Design and Patent Act 1988</i> (UK):</p> <p>To the extent that a term of a contract purports to prevent or restrict the doing of any act which, by virtue of this section, would not infringe copyright, that term is unenforceable.</p> <p>Note: section 47H <i>Copyright Act 1968</i> is not fit for purpose.</p>
<p>Secondary publication right: 12 months from publication</p>	<p>Needed to ensure research can be translated for industry audiences</p>	<p>Eg. <i>Belgian Code of Economic law</i>, Art.XI.196</p> <p>A right to make the published manuscript of any scientific article based on research which is 50% or more publicly funded, and published in a periodical, available to the public free of charge, subject to a 6 month embargo (if determined in</p>

		contract) or 12 month embargo if not, regardless of any transfer or license of rights, with mandatory attribution of the first publication.
Appropriate OA licences for Aboriginal and Torres Strait Islander research authorship and collaboration	Needed for compliance with mandatory sector Ethics policies and Convention on Biodiversity to ensure patentability of related R&D and legal transfer of biological and cultural resources.	<p><u>In contracts</u> with Indigenous collaborators: refer to Terri Janke, True Tracks and AIATSIS on issues to consider in developing collaborations and contracts.</p> <p><u>In publications:</u></p> <ol style="list-style-type: none"> 1) Refer Indigenous collaborators and authors to Local Context TK and biocultural labels; and 2) As recognised under Ethics Policies and institutional Authorship policies promote stronger inclusion of Indigenous authorship as co-authorship, including as appropriate, communal authorship notices (authors as trustee for community interests); and 3) Include in ethics statements appropriate cultural inclusion information to allow readers to assess validity of research.²⁷

²⁷ Eg. Details as to who granted permissions and/or consent for the study; Deviations from the study protocol; Names of local collaborators; where the research was conducted or members of the community studied; If no authors from said communities, statement explaining why.