

NTEU Submission to the Productivity Commission's
Inquiry into Intellectual Property Arrangements

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Introduction

The National Tertiary Education Union (NTEU) represents the professional and industrial interests of some 28,000 staff working in Australian universities and research institutes. As an organisation committed to advancing the professional and industrial interests of our members we have an ongoing interest in the character of university intellectual property rights (IPR) and appreciate the opportunity to contribute to the Productivity Commission's *Inquiry into Australia's Intellectual Property Arrangements*.

The university sector plays a pivotal role in Australia's capacity for innovation. In our submission, we will address the implications of Australia's existing intellectual property (IP) arrangements upon the university sector and will propose recommendations necessary to encourage innovation in light of the government's *Boosting Commercial Returns from Research* (2015), with its focus on the commercialisation of publicly-funded research. Noting that the academic literature continues to debate the positive and negative implications of IPR regulation on national innovation systems (such as through their approaches to patents and licence enforcement) (Koch, Rafiquzzaman and Rao 2004; Carlin and Soskice 2006; Blind 2012), we will focus upon the balance of legal protection necessary to underpin the breadth of knowledge creation purposes being encouraged within Australian universities.

The OECD's *Commercialising Public Research* report (OECD 2013: 58) includes explicit recommendations around enhancing IP arrangements and strategies specific to universities as strategic actors within innovation systems. This includes:

- Legislative and administrative reforms to provide certainty and clarity in the legal framework and to encourage public research institutions and universities to file for and commercialise their IP,
- Mechanisms to facilitate the flow of knowledge and research data (such as "open science" and "open research data" initiatives), and
- Recognition of researcher participation in the commercialisation process (through monetary and non-monetary incentives to researchers to disclose results).

The NTEU view on how IP arrangements should shape the capacity for knowledge creation is consistent with Monotti and Rickertson (2003: 547) who argue that, "*The most significant issue for universities and originators of IP is to ensure that any decision on ownership and distribution of rights provides maximum potential for all parties to obtain access to IP for their specific purposes and at reasonable cost*".

Universities, academics, researchers, research teams, faculties, departments, professional associations and academic disciplines are simultaneously creators and users of IP. The daily business of these actors within communities of practice is defined by the conditions that create, reproduce, circulate and advance knowledge. Whether in the Humanities, Arts and Social Sciences (HASS) or in Science, Technology, Engineering and Mathematics (STEM), academics rely upon both

formal and tacit intellectual freedoms embodied not only by free intellectual *inquiry*, but also free intellectual *exchange*.

There are key public policy challenges in relation to capturing and retaining the distinctive character of the Australia's university system, and that in seeking to fulfil its review obligations, the Productivity Commission must take seriously that:

"The challenge for governments is to support the principle that academic freedom and integrity of research are worth preserving, and that such protection carries with it wider benefits for the community as a whole" (Monotti and Ricketson 2003: 548).

Our submission also references arguments about the checks necessary to ensure Australia sustains the capacity to modify its IP laws in light of global competition in Research and Development (R&D), as well as the regulatory constraints that are now frequently established through international trade agreements.

Distinctiveness of universities in the R&D ecosystem

As the Commission will appreciate university staff are a major source of research output and IP created in Australia. The latest Higher Education Research Data Collection (HERDC) shows that employees of Australian universities produced 943 books, 6,542 book chapters, 8,719 conference papers and 45,582 journal articles in 2013. Table 1 summarises the latest available Research and Development (R&D) data for Australia and illustrates that the higher education sector accounted for about one quarter (24.2%) of the total expenditure and almost half (44.9%) of all the human resources devoted to R&D.

Table 1

R&D Australia 2008-09

Sector	Gross Expenditure		Human Resources	
	\$'000	% Share	Person Year Equivalents (PYE)	% Share
Business	16,858,477	60.8%	53,556	39.2%
Government	3,420,468	12.3%	17,042	12.5%
Higher education	6,717,113	24.2%	61,310	44.9%
Private non-profit	743,907	2.7%	4,788	3.5%
Total	27,739,965	100.0%	136,696	100.0%

Source: ABS Research and Experimental Development, All Sector Summary,

Despite being a critical part in generating Australian IP, the Commission's Issues Paper makes no specific to unique role or importance of universities. The NTEU would contend that this is a major oversight.

Australia's national innovation effort is made up of diverse stakeholders, each of whom perform a necessary role, and contribute to fulfilling government's economic goals through maximising their specific institutional capabilities (OCED 2003: 7, 15-18; DIISR 2011: 13-14). This approach is

reflected in the academic literature about the role of IP systems in national innovation. Take, for instance, the OECD's *National Intellectual Property Systems, Innovation and Economic Development* (2014) report which states that IP systems are optimised when they support innovation activities and access to knowledge for different types of IP users in the production sector, distinguishing between universities and public research institutions, traditional and informal actors, "catching-up" firms and leading "frontier" firms. Publicly-funded university research and the academic cultures they sustain are effectively an incubator of innovation possibilities.

Monotti and Ricketson (2003: 46) provide some formative insight into how knowledge-creation within the university (as a special purpose statutory corporation) can be understood as distinct from private, for-profit commercial entities, arguing that university-created IPR is critical linked to academic freedom, "*In the context of our present inquiry, academic freedom can be viewed as a critical forcing mechanism, a means by the community's store of learning and knowledge can be continually enhanced and communicated*".

Monotti and Ricketson (2003: 450) highlight that the features which make universities distinctive and special (with respect to IP creation) include:

- Their autonomous status (though this is not unique to universities alone),
- Their role as guardian of the 'intellectual commons' (however, there is no evidence to suggest that knowledge generated within a university has ever been treated by the law as being in the public domain),
- Defence of academic freedom, where they argue, "*Independence, objectivity, systematic investigation, and scientific rigour are all aspects of this freedom, and have become firmly linked to each of their traditional functions of teaching, training, research, and community service*".

In effect, they argue that without academic freedom the capacity for knowledge creation is fundamentally undermined, "*Freedom to research, teach and publish, and disseminate might suggest an ever-growing commons into which university knowledge is fed... Closer consideration, however, suggests that a public domain conceived in this fashion would have a series of adverse consequences for the very activities that are critical to its existence and may well lead to its reduction or disappearance*" (Monotti and Ricketson 2003: 460).

This approach to the distinctiveness of university-created IP is also asserted in common law as evident in the *UWA vs Gray* case, where on 3 September 2009 the Full Bench of the Federal Court dismissed an appeal by UWA against a judgement by the now Chief Justice Robert French. French found that UWA did not automatically own the intellectual property in an invention to treat cancer, which was developed while its creator, Dr Bruce Gray, was an academic employee of the University. The Bench considered that while in reality all universities are engaged in some form of commercial activity, they could not characterise a university "*as a commercial enterprise pursuing commercial*

purposes". The Grey case found universities to be defined as institutions with public purposes, including expectations around the obligation to create and disseminate new knowledge.

While the Gray case clearly noted that any finding in relation to ownership of intellectual property developed by an academic employee of the university should be considered on a case-by-case, the appeal decision indicated that the findings may have broader implications, "*Above all, they (universities) remain, at their core institutions that foster free and open intellectual inquiry. Universities respect and promote a highly developed concept of 'academic freedom'*" (545) and that "... *this concept requires that academics remain free from external controls to do the following: (a) determine what and how they teach and research; and (b) to publish their work in the manner and time that they chose*" (545-6).

Implications for the Intellectual Property (IP) system

Australia's public universities are distinct from commercial private firms including in relation to the perception and widely-held values amongst the public and university staff about why knowledge is created. The provision of public funding to support research in our universities is based on the assumption that creation and dissemination of new knowledge (and therefore IP) is in the public good. Therefore, unless reserved or appropriated through specific contractual obligation, the expectation is that publicly funded research outcomes should be exchanged, published and made public. The argument for open access however needs to be weighed against the incentives to research, innovate and create IP.

In this distinct context, commercialisation of IPR in our universities depends upon a framework that balances the rights of creators and the (monetary commercial) motives of universities. At a system-wide level, it is critical that policy makers understand that encouraging IP creation in universities is distinctive, because it must:

- promote and protect research excellence and quality;
- provide sufficient incentives for researchers and academics to create IP in the first place;
- support and promote institutional processes for IP commercialisation that are cognisant of the interests of creators; and
- ensure that the principles of the system remain committed to the public good.

We need a system that explicitly recognises that:

"Building up knowledge and research capacities must be a constant objective so as to increase the number of potential users of IP." (OECD 2014)

Public protections for university IP creators and users

Public research underpins and drives national innovation systems, especially in Australia. Public research is the predominant source of new knowledge and the fuel of innovation, especially for basic science, which businesses are neither well equipped nor motivated to invest in. Basic research is a

driver of economic development. Vannevar Bush, the first director of the US Office of Scientific Research and Development, wrote in 1945, "*Basic research leads to new knowledge. It provides scientific capital... A nation which depends upon others for its new basic scientific knowledge will be slow in its industrial progress and weak in its competitive position in world trade, regardless of its mechanical skill*".

The NTEU would contend that the federal government's push to create more opportunities for universities to collaborate with business, through a stronger set of incentives to promote industry-research collaborations presents risks around the capacity of individual researchers to exercise academic freedom as well as the impact of commercial investment on the integrity of research and its publication. Considering that a priority of the review is to consider incentives for innovation and investment, such a goal requires that at the front end of IP creation, public protections are enhanced for academics and researchers as both creators and users of IP.

The capacity for innovation is lost when talented creators are not encouraged to create new knowledge. At an institutional and public policy level IPRs must ensure that the basic rights of university creators are protected, particularly since their mode of knowledge-production is in and for the public good unlike the research undertaken by private firms. To ignore the rationale put forward by the likes of Monotti and Ricketson (2003) about the significance of academic freedom, to sideline arguments that may otherwise strengthen IPR vested in the employer (university) and not provide stronger legislative protections for academics and researchers to make decisions about how, when and where results are published, potentially undermines publicly-funded innovation.

The NTEU proposes a range of specific recommendations to enhance public protections for university-creators and users.

Moral Rights

Any derogation of moral rights as defined under Part IX of the *Copyright Act 1968* could have serious counterproductive effects on research capability for the Australian university sector. We note that moral rights are one of the few positive rights intended to protect the reputation of creators and the bargaining power creators often lack in negotiating commercial transactions. We highlight that the non-economic rights about potential harm to the reputation of the author, be it through fair attribution for authorship or performance, right of integrity of authorship, and the right not to have authorship or performance falsely attributed, are crucial tacit values within academic culture. The kinds of principles captured by moral rights protections are often more important to the careers and professional identity of university researchers and academics than the processes for remuneration in the commercialisation of IP.

NTEU notes, as does the Australian Copyright Council (ACC), that the rights of attribution and integrity of authorship are not found elsewhere in Australian law. While there are very few cases involving moral rights and where such cases have been successful, the award for damages has often been limited, this is not really the point. Moral rights are an important symbolic and legal protection

for researchers working in our universities and must be maintained to protect academic freedom and academic integrity.

Copyright exception for academics

The NTEU believes a specific provision on university researchers and academics could create greater recognition and certainty of the unique employment circumstances experienced within the university sector. The Act should be amended so that the ownership of all IP generated by university academic staff and researchers remains with creators and not with their employer as is the case in most other circumstances. A precedence for such an exception already exists in Section 35(4) of the *Copyright Act 1968* which provides a special provision around the ownership of copyright to employees who work at a newspaper or magazine, including journalists, photographers and cartoonists. This is not to say that university generated research should not be commercialised. Any decision to commercialise research and what form that commercialisation would take would be a joint decision between the creator and their employer. While the creator, as owner of the IP, would have an effective veto, any process needs to be efficient, transparent and fair to all parties.

Fair dealing exception for education

The NTEU supports the view put forward by the Australian Law Reform Commission (ALRC) (2013) that the *Copyright Act* should be amended to include a new 'fair dealing for education' exception that can adapt to new technologies and teaching practices, irrespective of whether the concept of fair use is being considered as an option for Australian copyright law.

Student ownership of IP

The NTEU is wary of regulatory reforms which may undermine the ownership of IP of students involved in higher education, who are explicitly outside of the employment relationship, who are unlikely to be compensated for appropriations of IPR, and whose IPR should be respected both by the relevant educational institution and by other parties who may assist in the provision of work-integrated learning during the completion of studies. Regulatory changes or reforms that undermine student IP ownership will have cumulative negative implications upon the pipeline of future researchers and the future research-capable workforce.

IP and Traditional Ownership

In addition to being critical that the Issues Paper made no specific reference to universities in relation to IP arrangements, we are equally surprised and critical of the lack of any discussion in relation to the lack of current IP arrangements to recognise and deal with communal ownership of traditional Aboriginal and Torres Strait Islander knowledges. As the Parliamentary Library Research Paper on *Indigenous Peoples and Intellectual Property Rights* concluded:

There is a conceptual gap between existing intellectual property systems and the protection and recognition of Indigenous peoples' rights to their cultural knowledge, products and expressions. Indigenous peoples consider their intellectual property rights are an integral component of a 'holistic' cultural heritage, which includes a wider range of subject matter than can be accommodated within existing intellectual property laws.

It goes on to recommend:

*Given this, it becomes apparent that a different system is necessary to protect Indigenous peoples' rights, and it is for this reason that reforms to existing laws are best accompanied by the formulation of a new **sui generis** legislative arrangement that provides for community controlled decision-making, and financial benefits to Indigenous communities for the use by the wider community of their cultural products, expressions and knowledge.*

The NTEU endorses a position in which a *sui generis* legislative arrangement is created to account for community control of IP decision-making.

We would also urge the Productivity Commission to consider how exceptions to the broader use of copyright interact with the protection of traditional knowledges. Considering the fair dealings exception over IP used for education and research purposes, we are conscious of instances where the use of traditional knowledges contained in teaching materials has been claimed by institutions as university IP.

Australia's international obligations

We note that an increasing host of international free trade agreements (FTA) contain binding IP chapters, including chapters which provide the capacity for international arbitration where nation-states 'expropriate' various kinds of tangible and intangible modes of property, including licences and legal rights. As previously found by the Productivity Commission (2010) and by Chief Justice French (2014) it is clear that modern trade agreements extend well beyond the reduction of tariff walls and in agreements now commonly seek to mutually constrain legislative discretion and judicial oversight, as evident in the Investor State Dispute Settlement (ISDS) clauses contained in the Japan, South Korea and China FTAs, as well as in the final text of the Trans Pacific Partnership (TPP) agreement.

According to Weatherall (2015), leaked IP chapters from the TPP may have removed or watered down the most extreme elements of the original US IP proposals, but the Chapter still contains too few safeguards for defendants and third parties. Weatherall also has concluded that the TPP blocks copyright reform by locking in internet retransmission provisions.

In this light, the NTEU agrees with the Harper Review that, "*IP rights can help to break down barriers to entry but, when applied inappropriately, can also reduce exposure to competition and erect long-lasting barriers to entry that fail to serve Australia's interests over the longer term. This risk is especially prevalent in commitments entered into as part of international trade agreements.*"

Future principles in relation to Australia's international IP obligations should be guided by reform to Commonwealth treaty-making processes that introduce greater transparency as well as greater democratic accountability. In lieu of such reforms, it is fundamental that all trade agreements with implications for Australia's IP framework and which include an ISDS clause must first acquire some kind of demonstrable public mandate from the Australian people. All trade agreements that deal with IP should include carve-outs and protections for defendants and third parties legitimately involved in study, research and education.

In conclusion, there are numerous risks in any proposal to reform Australian IP arrangements to shape or meet the needs of:

- a. research and innovation, including freedom to build on existing innovation
- b. access to and cost of goods and services
- c. competition, trade and investment.

We are especially concerned about how proposed reforms may in fact dis-incentivise the creation of university IP, particularly through favouring the interests and rights of commercial research partners over the interests of creators, and over the necessity to protect the exercise of academic freedoms in the university sector, such as through the freedom to investigate, exchange and communicate research. We would welcome any opportunity to discuss our submission with the Productivity Commission.

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