

LEGAL FRAMEWORK FOR e-RESEARCH: REALISING THE POTENTIAL

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CREATING A LEGAL FRAMEWORK FOR COPYRIGHT MANAGEMENT OF OPEN ACCESS WITHIN THE AUSTRALIAN ACADEMIC AND RESEARCH SECTOR¹

**Professor Brian Fitzgerald, Professor Anne
Fitzgerald, Professor Mark Perry, Scott Kiel-
Chisholm, Erin Driscoll, Dilan Thampapillai,
Jessica Coates**

INTRODUCTION

There is an increasing recognition, in Australia and internationally, that access to knowledge is a key driver of social, cultural and economic development. The argument for greater access to, and reuse of, research outputs is reinforced by the fact that much research in Australia is funded by public money and, consequently, that there is a public benefit to be served by allowing citizens to access the outputs they have funded.² This recognition poses both legal and policy challenges, in

¹ This chapter is derived from the OAK Law Project Report No. 1 ‘*Creating a Legal Framework for Copyright Management of Open Access Within the Australian Academic and Research Sector*’ by Professor Brian Fitzgerald (QUT), Dr Anne Fitzgerald (QUT), Professor Mark Perry (UWO), Scott Kiel-Chisholm (OAKLaw), Erin Driscoll (OAKLaw), Dilan Thampapillai(VU) and Jessica Coates (CCi). Special thanks to Kylie Pappalardo for her assistance.

² Markus Buchhorn and Paul McNamara, *Sustainability Issues for Australian Research Data: The Report of the Australian e-Research Sustainability Survey Project* (2006) Australian Partnership for Sustainable Repositories <<http://www.aprs.edu.au>> and <http://dspace.anu.edu.au/bitstream/1885/44304/1/aeres_report.pdf> at 23 October 2006 (hereinafter, Buchhorn and McNamara, *Issues for Research Data*). At page 26 the report states that in 2002–2003, 45 per cent of the \$12.25 billion expended on research and development in Australia was funded by government and in 2004, 90 per cent of the

terms of existing legal frameworks such as copyright law and traditional business models.

With the rise of networked digital technologies our knowledge landscape and innovation system is becoming more and more reliant on best practice copyright management strategies and there is a need to accommodate both the demands for open sharing of knowledge and traditional commercialisation models. As a result, new business models that support and promote open innovation are rapidly emerging.

This chapter analyses the copyright law framework needed to ensure open access to outputs of the Australian academic and research sector such as journal articles and theses. It overviews the new knowledge landscape, the principles of copyright law, the concept of open access to knowledge, the recently developed open content models of copyright licensing and the challenges faced in providing greater access to knowledge and research outputs.

THE NEW KNOWLEDGE LANDSCAPE

There have been fundamental changes in the framework within which knowledge is generated, accessed, disseminated and reused. The digital, networked environment and, in particular the widespread availability of broadband Internet access, is democratising creativity and innovation and has made it possible to process and construct knowledge in ways that were unimaginable only two years ago.

These changes have provided researchers and the general community with enormous possibilities for new forms of collaborative and serendipitous innovation. It is now in the hands of millions of people to readily produce and disseminate their own creative works; research groups can share information and develop collaborative synergies in ways that were not previously feasible.³ For example, blogs (Web logs), wikis, VoIP (Voice over Internet Protocol), podcasts and vodcasts are now commonplace, as are digital repositories.⁴ There has also been a

\$4.3 billion expended on research and development by higher education institutions was funded by government.

³ See Eric Von Hippel, *Democratizing Innovation* (2006) <<http://web.mit.edu/evhippel/www/democ.htm>> at 22 July 2006.

⁴ Neil Jacobs believes that technologies such as blogs, wikis and peer-to-peer repositories often come into universities and colleges 'under the radar'. 'The PROWE project

rise in collaborative projects such as Wikipedia – an online peer produced encyclopaedia also available on CD – now contains more than 4 million articles in 229 languages.

The legal challenges to this evolving landscape rest in the fact that while much of this research output can be presented at the click of a button it is often subject to copyright law and can only be used with permission of the copyright owner or on the basis of some other authorising principle or provision. The great challenge for this evolving knowledge landscape is, therefore, to build more efficient copyright ownership, management and licensing models that can be used to allow access to knowledge and prosper the research sector.

OVERVIEW OF PRINCIPLES OF COPYRIGHT LAW

Providing better access to research and knowledge through best practice copyright management can only be achieved by appreciating and understanding the scope and limitations of copyright law.

What is Copyright?

Copyright is a type of intellectual property founded on a person's creative skill and labour. It allows the copyright owner to control certain acts (such as copying) and to prevent others from using protected material without permission, unless an exception applies. A copyright owner has the right to take action for copyright infringement in the event that a person uses all, or a 'substantial part', of their copyright material in one of the ways exclusively controlled by the copyright owner, without their express or implied permission and where no defence or exception to infringement applies.

<<http://www.prowe.ac.uk>> is asking whether blogs and wikis in particular can be used to support the huge distributed networks of tutors associated with the Open and Leicester Universities. The SPIRE project <<http://spire.conted.ox.ac.uk/cgi-bin/trac.cgi>> is installing the secure Lionshare <<http://lionshare.its.psu.edu/main/>> peer-to-peer system, to explore its potential in teaching and learning and, in part, to dispel the mistaken notion that peer-to-peer equals Napster equals insecure and probably illegal activity.' Neil Jacobs, 'Digital Repositories in UK universities and colleges' (2006) Issue 200 *FreePint* 13–15 <<http://www.freepint.com/issues/160206.htm>> at 23 February 2006 (hereinafter Jacobs, *Digital Repositories*).

A person or organisation can also be liable for copyright infringement if they have authorised someone else to infringe copyright, to the extent that they sanction, approve or countenance the infringing conduct. For example, allowing PhD students to provide online access to a thesis knowing that the student has not obtained the prior permission of all the underlying rights holders (such as owners of copyright in pictures, graphics included in the thesis or accompanying audiovisual material) to digitise and communicate the work could potentially result in a university being held liable for authorising copyright infringement.

What Type of Material Does Copyright Protect?

For copyright to subsist material must fall within a category recognised under the *Copyright Act 1968* (Cth) (*Copyright Act*): namely, original literary, dramatic, musical and artistic works, as well as sound recordings, films, sound and television broadcast and published editions. Therefore, copyright protects not only written material (such as books, theses and reports) and creative works such as photographs, paintings and multimedia works but also scientific and technical creations (for example computer software and datasets).

What Rights Does Copyright Protect?

The exact nature of the rights granted to copyright owners will depend on the nature of the material being protected. However, in general they will include the exclusive right of reproduction, publication, performance, communication and adaptation. As with all IP rights, the exclusive rights provided by copyright are intangible in nature, generally granted for a limited time (for example, either 70 years from the death of the creator of a work or 70 years from first publication of a film or sound recording), and are distinct from the physical property in which protected material is embodied.

Balancing the Interests of Copyright Owners and Users – Exceptions to Copyright

Most copyright laws have been structured to provide a balance between the provision of incentives in the area of innovation and creativity and achieving the public interest goal of encouraging education, research, the

free flow of information and freedom of expression,⁵ while also being careful not to restrict competition in the marketplace. To give effect to this balance, the *Copyright Act* contains a range of ‘free use’ or ‘blanket’ exceptions to copyright infringement which allow material to be used without the permission of, or a licence from, the copyright owner, together with a range of statutory licences which allow the making and communication of multiple reproductions of certain works for set licence fee, thereby reducing overall administration and transactional costs.

The copyright exceptions of relevance to the education and research sector include the fair dealing exceptions for research and study, criticism and review and reporting the news. These exceptions are necessarily limited in that the dealing must have been performed for one of these four purposes, and it must be considered to be ‘fair’. Thus, there is no open defence such as general fair dealing or fair use under Australian copyright law.

The statutory licences for the education sector enable educational institutions to copy television and radio programs off-air and to reproduce and communicate print copyright works and electronic versions of literary, dramatic, artistic and musical works for educational purposes, in return for payment to declared collecting societies.

Rights Related to Copyright — Moral Rights and Performers’ Rights

In addition to the traditional economic rights discussed above, the *Copyright Act* also bestows certain moral rights and performers’ rights.

Australian copyright law grants performers both economic⁶ and personal rights over audio (but not audiovisual) recordings of their performances. These rights consist of:

⁵ Copyright Law Review Committee, *Copyright and Contract* (2002) 24 <www.clrc.gov.au> at 22 July 2006.

⁶ The economic rights for performers in sound recordings became effective from 1 January 2005. Section 22(3A) of the Act provides that the performer and the owner of any sound recording of the performance own the copyright jointly, subject to any agreement to the contrary. Commissioned sound recordings for which the performer is paid a fee, or those made under an employment contract, are owned by the commissioner or employer (section 97(3)).

- the right to authorise the recording and communication of live performances (and distributions of recordings of live performances);⁷
- copyright in sound recordings;⁸ and
- moral rights in performances.⁹

The first two of these rights only apply to performances that took place after 1 October 1989. A performer's rights to authorise recording and communication of their performances or the reproduction or performance of recordings last for 50 years from the date of the performance. Rights to authorise communication of recordings or the use of a recording in a soundtrack last for 20 years from the date of recording.¹⁰

Individual creators of literary, dramatic, musical and artistic works and films¹¹ have the following moral rights in relation to works or films they have created: the right to be attributed (credited) for their work, the right not to have their work falsely attributed and the right not to have their work treated in a derogatory way.

Performers also have moral rights in relation to live performance, so far as the performance consists of sounds, or a sound recording of a live performance. These rights apply to live performances as defined in the *Copyright Act* which include expressions of folklore and musical, dramatic and dance performances.¹² The moral rights granted to performers mirror the moral rights in traditional works. Generally, they will last for the duration of the copyright in the sound recording, although the right of integrity in a recorded performance only lasts until the performer's

⁷ See *Copyright Act 1968* (Cth), pt XIA.

⁸ *Copyright Act 1968* (Cth) s22(3A). This right is subject to any agreement to the contrary, and does not apply to commissioned performances or performances conducted in the course of employment - s 97(3).

⁹ *Copyright Act 1968* (Cth), ss 195AXA, 195AXB and 195AXC.

¹⁰ *Copyright Act* sections 248CA(3), 248G(1) and (2)).

¹¹ In relation to a film, the director, producer and screenwriter all separately own moral rights in relation to a film and where there are multiple directors etc. it is only the principal director, screenwriter and producer who hold moral rights.

¹² *Copyright Act 1968* (Cth) s 22 (7).

death.¹³ The same reasonableness exemptions that apply to traditional moral rights also apply to performers' moral rights.¹⁴ Furthermore, to make the authorisation process efficient for performances involving multiple performers, the Copyright Act permits an agent acting for a group of performers to grant permission to reproduce etc any sound recordings.¹⁵

Technological Protection of Copyright Material

Digital technology has made it possible to easily reproduce and communicate copyright material in near perfect form. Copyright owners have, therefore, sought — as an alternative to traditional forms of legal protection — to rely on technology to prevent others from using their work without their permission. However, the *Copyright Act* also provides legal recognition for new mechanisms for copyright owners to protect and enforce their rights. For example, the *Copyright Act* provides legal protection for the use of electronic rights management information (ERMI) (such as digital watermarks) to described, identify, monitor and track digital copyright material. These rights, in effect, potentially enable a copyright owner to monitor every access and use of their copyright material.

The *Copyright Act* also contains specific provisions which reinforce the use of technology, in the form of digital locks (known as technological protection measures (TPMs)) to regulate access and further copying of copyright material. It is a civil infringement and/or a criminal offence (the level of liability depending on the circumstances of the infringement) under sections 116AO and 116AP and 132APD and 132APE of the *Copyright Act* to deal in circumvention devices or services, including the manufacturing, importing, distribution (including online), provision and offering to the public of circumvention devices and services. Under section 116AN(1) of the *Copyright Act*, a copyright owner or exclusive licensee of copyright in a work or other subject matter may bring an action against a person who does an act resulting in the circumvention of a TPM protecting the work or other subject

¹³ *Copyright Act 1968* (Cth), s 195ANA.

¹⁴ *Copyright Act 1968* (Cth), ss 195AXD and 195AXE.

¹⁵ See *Copyright Act 1968* (Cth), ss 113A and 191B.

matter, where that person knows or ought reasonably to know that their act would result in circumvention of the TPM. Criminal penalties may also apply under section 132APC(1) where the circumvention was done with the intention of obtaining a commercial advantage or profit. The *Copyright Act* contains a set of exceptions which allow the circumvention of TPMs for certain permitted purposes (such as security testing or error correction).

Copyright Licensing

Despite legal recognition of copyright owners' rights to embrace technology to better control access to, use and dissemination of copyright material in the digital environment, general principles of copyright law, through mechanisms such as licensing, can also support open access to knowledge.

While it is possible to either sell or give away copyright via either an assignment, transfer or through a bequeath, it is equally possible for copyright owners to share copyright between themselves and third parties under a licence. A licence is a 'permission' or form of authorisation from the copyright owner to use the copyright material in one or more of the ways which falls within the copyright owner's exclusive rights. A licence can be exclusive, non-exclusive or implied.

Under an exclusive licence the licensee (in other words, the recipient of the licence) is the only person who can use the works in the way or ways covered by the licence (even to the exclusion of the copyright owner). A non-exclusive licence merely provides a user/third party with the right to exercise one or more of the copyright owner's rights in the work but not to the exclusion of the copyright owner or other licensees. Therefore, a copyright owner may grant multiple and simultaneous non-exclusive licences.

It is also important to note that with both assignments and licences, copyright can be divided in a number of ways, including by territory, time and type of use. For example, a licence can give a person permission to reproduce a work, without giving permission to publish or communicate the work. Similarly, a licence may give a publisher the right to publish the material only in Australia, or only until a certain date. The various licensing models for managing access to research findings are outlined in 'Open Access and Open Content Licensing' below.

THE LEGAL PROTECTION OF DATABASES – A SPECIAL CASE

Open access can be pursued not only in relation to academic and research output in traditional forms (such as, research proposals, project plans, summaries of research results, conference papers, journal articles and books in published form) but also in relation to new forms of output such as data files, complex databases involving compilations of datasets and embedded software and multimedia works.

In developing systems designed to promote open access to knowledge in the Australian academic and research sector, and to data in particular, academics and researchers need to consider:

- the copyright status of the database and whether the data is protected by copyright
- whether third party copyright is affected by making a database available to the public
- the type of legal or technological measures that can be used to protect a database.

Whether Databases are Protected by Copyright

As a general principle, copyright law protects the expression of an idea and not the idea itself. To this end data, without more, is not protected by copyright law. The compilation of data, however, is protected to varying degrees by copyright law in different jurisdictions throughout the world. In the United States (US) and the European Union (EU) data compilation — selection and arrangement of the data — is protected where there is an element of intellectual creation. In addition to copyright protection available for databases, Europe also has a *sui generis* database right which may protect non-original databases that do not attract copyright protection but which are nevertheless valuable and have required substantial economic investment.¹⁶

In Australia, databases may attract copyright protection if the creation of the database has involved sufficient expenditure of time, money, skill or

¹⁶ On Europe, see the European Union Database Directive, available at <http://ec.europa.eu/internal_market/copyright/prot-databases/prot-databases_en.htm> at 8 July 2008.

effort to satisfy the threshold level of originality required in order for copyright to subsist in a literary work. In the recent case of *Desktop Marketing Systems Pty Ltd v Telstra Corporation Limited*¹⁷ (*Desktop Marketing*) the Full Court of the Federal Court held that the mere arrangement of names in alphabetical order in a phone book was sufficient to found copyright protection. As a result, the standard of originality for copyright protection in Australia is considerably lower than other jurisdictions.¹⁸ Thus, it is the case that where facts are compiled through industrious labour (in other words where the intellectual effort is very low or non-existent) they will receive a higher degree of protection in Australia than in other jurisdictions.

In addition to the broad scope of protection available for databases in Australia, the very narrowly defined nature of the fair dealing exceptions (as explained ‘Overview of Principles of Copyright Law’ above) confers further control for owners of copyright in databases.

Practical Measures for Database Compilers to Protect Their Copyright

From a practical standpoint, database compilers need to identify the uses of their database that they wish to allow. They then need to put in place the relevant agreements to facilitate those uses. This involves identifying and, where necessary, obtaining copyright permissions from third party copyright owners. It also involves preparing agreements that clearly set out the conditions of use of the database. In addition database owners could employ (TPMs) to regulate the use of a database, or they could seek to adopt a range of licensing models such as open content licensing like Creative Commons licences.

Third Party Content

When researchers develop databases containing information from a range of sources, copyright in some of the materials selected for inclusion will belong to third parties (in other words, commercial publishers, governments, individual authors and research institutes).

¹⁷ [2002] FCAFC 112.

¹⁸ See also *Nine Network Australia Pty Ltd v IceTV Pty Ltd* [2008] FCAFC 71.

However, when the researcher makes the database available for access by other researchers, it will be necessary to ensure that the researcher has the legal authority to do so, either under a recognised exception or through a licence.

Where a licence is used to obtain permissions by third party owners of copyright material included in the database, the licence should sufficiently permit the researcher to authorise other persons to use the material in the way in which the database compiler and database users wish to use the material. If the licence does not do so, release of copyright material owned by third parties will infringe their copyright.

OPEN ACCESS

With the growth of the new digital and virtual knowledge landscape, we have seen the potential for greater control over access and usage by copyright owners. The rising costs of subscriptions to key academic journals, in large part made possible by, and implemented through, the first generation of digital distribution and licensing models, has motivated a frustrated research community into finding new ways to disseminate knowledge. Faced with the enormous potential of the Internet and the increasing limitations presented by traditional journal licensing, researchers worldwide have united in the Open Access (OA) movement which aims to disseminate knowledge broadly and freely across the Internet in a timely fashion (especially that which is publicly funded).¹⁹ User lead movements such as Open Access (OA) and Free/Libre and Open Source Software (FLOSS)²⁰ have sought to utilise the great advances in information and communication technologies to

¹⁹ In 1991, the first free scientific online archive, arXiv, was created at Los Alamos but it is now hosted by Cornell University. The fields covered include physics, mathematics, non-linear science, computer science and quantitative biology. See <<http://www.lib.mtu.edu/eresources/eresearch/searchresults.aspx?publisherid=240>> and <<http://arxiv.org/>>.

²⁰ See further: Glyn Moody, *Rebel Code: Linux and the Open Source Revolution* (2001). See also: Lawrence Lessig, *The Future of Ideas: The Fate of the Commons in a Connected World* (2001) 50 ff; Sam Williams, *Free as in Freedom: Richard Stallman's Crusade for Free Software* (2002); Eric Raymond, *The Cathedral and the Bazaar* <<http://www.catb.org/~esr/writings/cathedral-bazaar>> at 22 July 2006; Brian Fitzgerald and Nic Suzor, 'Legal Issues For the Use of Free and Open Source Software in Government' (2005) 29 *Melbourne University Law Review* 412.

make research outputs more easily and immediately accessible and to promote a collaborative and participatory knowledge paradigm. This has resulted in the development of a worldwide network of institutional and disciplinary repositories containing numerous research outputs which use advanced Internet computing and Grid technologies to enable direct and shared collaboration amongst researchers in the form of e-Research. In Australia there are initiatives like E Print and Digital Theses Repositories and large supercomputing projects based around bio-informatics and geo-spatial data.²¹

Open Access Movement

Core Principles of OA

The core principle of OA is to open up access to research and scholarship, especially that which is publicly funded.²² This principle has been endorsed and further developed in the following declarations: Budapest Open Access Initiative (2002) (BOAI),²³ the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (2003) (Berlin Declaration),²⁴ and the Bethesda Statement on Open Access Publishing (2003) (Bethesda).²⁵

The Berlin Declaration's definition of Open Access contribution mirrors the definitions drafted in the BOAI and Bethesda Statement:

There are three main essentials: free accessibility, further distribution, and proper archiving:

Open access is real open access if:

²¹ The Australian Partnership for Advanced Computing (APAC) has been a key player in building this framework over the last six years <<http://www.apac.edu.au/>> at 31 July 2006.

²² Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (2003), <<http://www.zim.mpg.de/openaccess-berlin/berlindeclaration.html>>, and the Bethesda Statement on Open Access Publishing (2003), <<http://www.earlham.edu/~peters/fos/bethesda.htm>>.

²³ See <<http://www.soros.org/openaccess/read>>.

²⁴ See <<http://www.zim.mpg.de/openaccess-berlin/berlindeclaration.html>>

²⁵ See <<http://www.earlham.edu/~peters/fos/bethesda.htm>>.

1. The article is universally and freely accessible, at no cost to the reader, via the Internet or otherwise, without embargo
2. The author or copyright owner irrevocably grants to any third party, in advance and in perpetuity, the right to use, copy, or disseminate the article, provided that correct citation details are given
3. The article is deposited, immediately, in full and in a suitable electronic form, in at least one widely and internationally recognized open access repository committed to open access and long-term preservation for posterity.²⁶

Another significant document representing a major international step forward in promoting open access to knowledge, and more broadly the sharing of knowledge, is the Draft Treaty on Access to Knowledge (A2K Treaty).²⁷

The A2K Treaty is largely a result of the work of Brazil and Argentina who, in August 2004, discussed a possible treaty concerning access to knowledge as part of the development agenda for the World Intellectual Property Organisation.²⁸ Amongst many purposes and objectives, the A2K Treaty is seeking to enhance the sharing of the benefits of scientific advancement and to promote new incentives to create and share knowledge resources without restrictions on access.²⁹ Article 1–1 of the A2K Treaty provides that the main objectives of the treaty are to protect and enhance access to knowledge, and to facilitate the transfer of technology to developing countries. Key areas which the A2K Treaty covers are: provisions regarding limitations and exceptions to copyright and related rights; patents; expanding and enhancing the knowledge commons; the promotion of open standards; the control of anticompetitive practices; authors' and performers' rights; and the transfer of technology to developing countries.

²⁶ Open Society Institute, *Open Access Publishing and Scholarly Societies A Guide* (2005) 6 <www.soros.org/openaccess/scholarly_guide.shtml> at 19 December 2005.

²⁷ See <<http://www.access2knowledge.org/cs/a2k>>.

²⁸ See <<http://www.access2knowledge.org/cs/a2k>>.

²⁹ In the preamble.

Access to Knowledge as a Human Right

The principle of open access to knowledge can also find a legal basis in international human rights laws, some of which clearly provide that people should have the right to hold private property, including IP rights. For example, the clearest enunciation of the right to hold private property is found in Article (Art) 27(2) of the *Universal Declaration of Human Rights* (UDHR).³⁰

However, this obligation is not absolute and must be read in the context of international human rights law that supports access to knowledge; for example:

- Art 17 of the *Convention on the Rights of a Child*³¹
- Art 19 of the *Universal Declaration of Human Rights*³²
- Art 13 of the *International Covenant on Economic, Social and Cultural Rights*³³
- Art 1.1 of the *International Convention on Cultural and Political Rights*.³⁴

International declarations, conventions and covenants are important in that they may also act as an interpretative guide when courts are called on to define the ambit of IP rights.³⁵

³⁰ Art 27(2) provides: '[e]veryone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.' <<http://www.unhchr.ch/udhr/lang/eng.htm>>

³¹ See <<http://www.ohchr.org/english/law/pdf/crc.pdf>>.

³² See <<http://www.unhchr.ch/udhr/lang/eng.htm>>.

³³ See <http://www.unhchr.ch/html/menu3/b/a_cesocr.htm>.

³⁴ See <<http://www.ohchr.org/english/law/ccpr.htm>>.

³⁵ *Minister of State for Immigration and Ethnic Affairs v Ab Hin Teob* (1995) 183 CLR 273, [25]-[26] <<http://www.austlii.edu.au/au/cases/cth/HCA/1995/20.html>>. As at 27 June 2006, this case has been applied in 34 subsequent decisions. See also *Kruger v Commonwealth* (1997) 190 CLR 1; *Horta v Commonwealth* (1994) 181 CLR 183; *Newcrest Mining (WA) Ltd v Commonwealth* (1997) 190 CLR 513; *Kartinyeri v Commonwealth* (1998) 195 CLR 337. See also Bryan Horrigan and Brian Fitzgerald, 'International and Transnational Influences on Law and Policy Affecting Government' in Bryan Horrigan (ed), *Government Law and Policy: Commercial Aspects* (1998) 2; Brian Fitzgerald, 'International Human Rights and the High Court of Australia' (1994) 1 *James Cook University Law Review* 78.

Key Features of Open Access

Peter Suber of Earlham College, states that the OA movement:

- proposes that authors electronically publish (or 'archive') pre-prints of their papers, in a manner analogous to Departmental Working Papers series of bygone days
- recommends the establishment of ePrints Archives by universities and other research institutions (to provide a manageably small number of persistent, professionally-managed and readily-discoverable locations, rather than tens of thousands of ephemeral, personal web-sites)
- publishes software that enables such ePrints archives to be managed
- recommends use of the Open Archive Initiative metadata standard, in order to support cross-discovery services
- approaches journal publishers to sanction author self-archival (already with great success)
- communicates with governments, with a view to ensuring that government policy and amendments to copyright law support and not undermine open access to authors' pre-prints.³⁶

Support for Open Access

There has been significant support for the OA movement at the international level. As at 8 July 2008, 250 organisations around the world have signed the Berlin Declaration.³⁷ At the local level, various organisations have endorsed the principles of OA through developing organisation-specific declarations or policies on the topic. For example, some tertiary institutions recommend (or even mandate) that staff deposit their papers in the institutional repositories and many tertiary

³⁶ Roger Clarke, 'A proposal for an open content licence for research paper (Pr)ePrint' (August 2005) 10(8) *First Monday* <http://firstmonday.org/issues/issue10_8/clarke/index.html> at 22 November 2005.

³⁷ <<http://oa.mpg.de/openaccess-berlin/signatories.html>> at 8 July 2008..

institutions make the submission of post-graduate research papers and PhD theses into the institutional repository mandatory. For example, the world's two largest funders of medical researchers, the United Kingdom's Wellcome Trust³⁸ and the United States National Institutes of Health,³⁹ adopted, in 2005 and 2008 respectively, policies with a requirement to provide OA to the results of successful grantees. Such support of OA arguably benefits society by enabling access to medical research that can be used to save lives or enhance the quality of life.

NEW LICENSING MODELS

One of the most significant responses to the technological advances that have revolutionized the creation and distribution of copyright materials during the last decade has been the development of new systems for licensing (or authorising) others to obtain access to, and make use of, the protected material. These new forms of licences — usually referred to as 'open content' — are founded upon an acknowledgement of the existence of copyright in materials embodying knowledge and information. As mentioned in 'Overview of Principles of Copyright Law' above, copyright law makes it unlawful to reproduce and communicate copyright material unless the permission of the copyright owner or some other form of authorisation has been obtained. Therefore, while I might place an article in an institutional repository, if I say nothing more, the 'all rights reserved' default position will most likely apply, meaning that the end user's rights to engage in reproduction or communication of the material as an act of reuse will be unclear. Users may be able to read it online or print a copy but can they post an enhanced version on another website or make 30 copies for their students in class? In order to deal with these questions and to provide greater legal certainty and fluidity to the act of sharing knowledge, we have seen the rise of open content licensing (OCL). Running with the copyright material to which they are attached, open content licences identify materials that are available for reuse and grant permissive rights to users, thereby facilitating access and dissemination. In comparison to licences commonly used before the advent of the digital era they are

³⁸ See <<http://www.wellcome.ac.uk/>> and <http://en.wikipedia.org/wiki/Wellcome_Trust>.

³⁹ See <<http://www.nih.gov>> at 6 May 2006.

standardised, conceptually interoperable with other open content licences, machine (computer) enabled and they eliminate (or at least minimise) transaction costs (as they are automated). The best known of the open content licensing systems are those developed by the Creative Commons (CC) project and its associated Science Commons project.⁴⁰ Other projects employing open content licensing models include AEShareNet,⁴¹ a collaborative system designed to streamline copyright licensing to enable the more efficient development, sharing and adaptation of Australian educational materials.⁴²

Open Content Licensing

Open Content Licences are essentially voluntary IP licensing agreements, designed to provide an effective model for managing copyright in digital content. These agreements call on IP owners to consider sharing knowledge with the world through a legal mechanism that will allow a broad ambit of reuse. While OA aims to have research disseminated rapidly through the Internet, OCL aims to ensure that downstream user rights are clear. Therefore, OCL is not anti-copyright — it uses copyright as the basis for structuring open access.

A range of open content licences exist including:

- Creative Commons Licenses⁴³
- AEShareNet Instant Licences⁴⁴
- Design Science License⁴⁵
- GNU Free Documentation License⁴⁶
- Open Content License⁴⁷

⁴⁰ See <<http://creativecommons.org>> and <<http://sciencecommons.org>>.

⁴¹ <<http://www.aesharenet.com.au/>> at 22 July 2006.

⁴² See further Intrallect Ltd (Ed Barker, Charles Duncan) and AHRC Research Centre (Andres Guadamuz, Jordan Hatcher and Charlotte Waelde) *Final Report to the Common Information Environment Members of a study on the applicability of Creative Commons Licenses* (2005) Ch 3.6 <<http://www.intrallect.com/cie-study/>> at 22 July 2006.

⁴³ See <<http://creativecommons.org>>.

⁴⁴ See <<http://www.aesharenet.com.au/coreBusiness/#Instant>>.

⁴⁵ See <http://en.wikipedia.org/wiki/Design_Science_License>.

⁴⁶ See <http://en.wikipedia.org/wiki/GNU_Free_Documentation_License>.

- Open Directory Project License⁴⁸ used by Open Directory Project⁴⁹
- Open Game License⁵⁰ – Licence of the Open Gaming Foundation,⁵¹ as drafted by Wizards of the Coast⁵²
- Open Publication License⁵³ – Licence for the Open Content Project⁵⁴
- Open Game License⁵⁵ – Licence of the Open Gaming Foundation,⁵⁶ as drafted by Wizards of the Coast⁵⁷
- Open Publication License⁵⁸ – Licence for the Open Content Project⁵⁹
- The Commonwealth of Australia, represented by the Office of Spatial Data Management (OSDM), Spatial Data Licence used by Geoscience Australia.⁶⁰

As well as providing an effective model for managing copyright in digital content, OCL also has the added benefit of making copyright more active in the sense of enabling copyright material left inactive in archives (such as, government, public film or television authorities, museums) to be ‘licensed out’ and reused in an inexpensive and generic manner.

⁴⁷ See <http://en.wikipedia.org/wiki/Open_Content_License> and <<http://opencontent.org/opl.shtml>> at 6 May 2006.

⁴⁸ See <http://en.wikipedia.org/wiki/Open_Directory_Project_License>.

⁴⁹ See <http://en.wikipedia.org/wiki/Open_Directory_Project>.

⁵⁰ See <http://en.wikipedia.org/wiki/Open_Game_License>.

⁵¹ See <http://en.wikipedia.org/wiki/Open_Gaming_Foundation>.

⁵² See <http://en.wikipedia.org/wiki/Wizards_of_the_Coast>.

⁵³ See <http://en.wikipedia.org/wiki/Open_Publication_License>.

⁵⁴ See <http://en.wikipedia.org/wiki/Open_Content_Project>.

⁵⁵ See <http://en.wikipedia.org/wiki/Open_Game_License>.

⁵⁶ See <http://en.wikipedia.org/wiki/Open_Gaming_Foundation>.

⁵⁷ See <http://en.wikipedia.org/wiki/Wizards_of_the_Coast>.

⁵⁸ See <http://en.wikipedia.org/wiki/Open_Publication_License>.

⁵⁹ See <http://en.wikipedia.org/wiki/Open_Content_Project>.

⁶⁰ See <https://www.osdm.gov.au/osdm/docs/internet_licence.htm> and <https://www.ga.gov.au/products/servlet/controller?catno=63643&catno=63680&catno=63695&catno=63722&event=FILE_SELECTION>.

Open Content Licences can be also be seen to promote sustainable business models as they commonly adopt a dual licensing approach — in the sense that an OCL provides open access for non-commercial purposes but restricts reuse for commercial purposes. For example, the CC licences referred to above, provide that anyone can use the content subject to providing *attribution* to the author (BY) and any one or a number of the following optional conditions:⁶¹

- *non-commercial* distribution (NC)
- that *no derivative* materials based on the licensed material are made (in other words, all copies are verbatim) (ND)
- *share and share alike* (others may distribute derivative materials based on the licensed material under a licence identical to that which covers the licensed material) (SA).

Therefore, if a person writes an article on the legal aspects of downloading MP3s off the Internet, they might put that up on their website with an OCL licence such as a Creative Commons licence allowing the user to reproduce, recast and communicate the content so long as they provide attribution (BY), do not use it for a commercial purpose (NC) and share their innovations with the people of the world (SA). Thus a person can give permission in advance for their content to be used for non-commercial purposes before it can be used commercially.

CREATING LEGAL FRAMEWORKS FOR OPEN ACCESS TO ACADEMIC AND RESEARCH MATERIALS

As discussed throughout this chapter, there is increasing interest in ensuring that the output of publicly funded academic and research work is accessible and widely disseminated through open access channels.

It is essential to appreciate at the outset that, from the legal perspective, it is not possible to establish any kind of open access system simply by default. Rather, development of an open access system can only

⁶¹ Note that the ND and SA terms are mutually exclusive.

successfully occur through deliberate construction and active management.⁶²

In establishing the legal framework for a system of open access to academic and research materials, it is necessary for the key institutional players to:

- determine the degree of ‘openness’ required in relation to those materials⁶³
- understand the roles of, and relationships among, the relevant parties involved in funding, creating, publishing, distributing and using academic and research materials
- consider how best to manage the often complex inter-relationships among the various parties, especially with respect to their copyright interests in the materials, so

⁶² This point is reflected in Principle 1 of the Zwolle Principles (2003) which states:

1. Achievement of [the overall objective] requires the optimal management of copyright in scholarly works to secure clear allocation of rights that balance the interests of all stakeholders.

See

<<http://www.surf.nl/copyright/keyissues/scholarlycommunication/principles.php#Principles>> at 16 July 2006.

⁶³ There are various statements/declarations on open access in the context of academic materials, including: The Bethesda Statement on Open Access Publishing (2003) <<http://www.earlham.edu/~peters/fos/bethesda.htm>> at 16 July 2006; the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (2003) <<http://www.zim.mpg.de/openaccess-berlin/berlindeclaration.html>> at 16 July 2006; the Zwolle Principles (2003) <<http://www.surf.nl/copyright/keyissues/scholarlycommunication/principles.php>> at 16 July 2006; the Budapest Open Access Initiative (2002) <<http://www.soros.org/openaccess/view.cfm>> at 14 July 2006; and the Bermuda Principles (1996) <http://en.wikipedia.org/wiki/Bermuda_Principles> at 14 July 2006. In addition to the numerous articles and blogs dealing with open access, there is now an emerging literature. Recently published books include: Richard Jones, Theo Andrew and John MacColl, *The Institutional Repository* (2006); N Jacobs (ed), *Open Access: Key Strategic, Technical and Economic Aspects* (2006) (most of the chapters are self-archived at <http://www.earlham.edu/~peters/fos/2006_07_16_fosblogarchive.html#115325936391251995>, accessed 30 July 2006); John Willinsky, *The Access Principle: The Case for Open Access to Research and Scholarship* (2005) available in part at <<http://mitpress.mit.edu/catalog/item/default.asp?tid=10611&ttype=2>> at 30 July 2006.

that the relationships and copyright interests can be effectively managed to achieve the desired degree of open access in the system.

Developing and Publishing a Policy on Open Access

Before implementing a copyright management policy for the provision of access to and reuse of research outputs, each institution should develop and publish its policy on open access, clearly enunciating its objectives and interests in providing materials by this means.⁶⁴ This involves clearly identifying, articulating and observing the following:

- the categories of materials that are to be made available by open access
- the scope of open access which is to be afforded, in terms of the classes of persons who are to be allowed access and the extent of rights granted to access and reuse the materials.

Each institution should formally allocate responsibility to a suitability experienced and resourced office within the institution for implementation of the OA policy and for periodically reviewing its operation.

Mapping the Network of Legal Relationships

To ascertain who is permitted to use academic materials (in other words, that are available in a repository) and the extent of the permitted use of such materials, it is necessary to identify the various stakeholders and their respective roles, describe the legal relationships among them and understand how copyright interests are allocated.⁶⁵

⁶⁴ For example, the Zwolle Principles (2003) state the overall Objective as follows:

To assist stakeholders—including authors, publishers, librarians, universities and the public—to achieve maximum access to scholarship without compromising quality or academic freedom and without denying aspects of costs and rewards involved.

See: <<http://www.surf.nl/copyright/keyissues/scholarlycommunication/principles.php#Principles>> at 16 July 2006.

⁶⁵ This point is reflected in Principle 5 of the Zwolle Principles which states: ‘Copyright Management should strive to respect the interests of all stakeholders involved in the use

To date, much of the literature and research on copyright issues in open access systems has failed to adopt a sufficiently broad perspective which encompasses not only the full range of stakeholders involved but also the way the legal relationships among them impact upon the rights of repositories and end users. In particular, in considering rights to use materials deposited in repositories, much of the discussion has been overly focused on the Author-Publisher relationship, as defined in the Publishing Agreement (see below). Further, this already narrow focus has been channelled even more narrowly by the fact that much of the discussion has considered only those situations where copyright is assigned (or exclusively licensed) by the copyright owner (usually the author) to the publisher. The broader range of possible arrangements in relation to copyright ownership — including retention of copyright by the author — has received insufficient attention. To fail to adopt a broader perspective on the relationships between all the relevant stakeholders means a loss of the opportunity to achieve the most efficient and effective open access system by leveraging all the factors that can be brought to bear in pursuit of the open access objective.

The key stakeholders and relationships that will come into play in the structuring of an open access system are:

- A. **Funding organisation – Author:** the relationship between the organisation providing grants of funding for research and the author of outputs (such as, academic articles and research reports) of the funded research project, or the author’s university or research institution [*Funding Agreement*].
- B. **Author – Employer:** the relationship between the author of academic or research output and their employer (such as, university or research institution) [*Employment Agreement and IP Policy*].
- C. **Author – Publisher:** the relationship between the author (or another party who owns copyright in works produced by the author, such as, the author’s employer) and the publisher [*Publishing Agreement*].

and management of scholarly works; those interests may at times diverge, but will in many cases coincide.’ See: <<http://www.surf.nl/copyright/keyissues/scholarlycommunication/principles.php#Principles>> at 16 July 2006.

- D. **Author – Digital repository:** the relationship between the author (or another party who owns copyright in the author's works, such as, the author's employer or the publisher) and the digital repository in which a copy of the author's article is deposited [*Repository Deposit Licence*].
- E. **Digital repository – End users:** the relationship between the digital repository in which the author's article is deposited and persons who are authorised to access it (which may be the public at large or may be restricted to a particular group with defined access rights) [*Repository Distribution (End User) Agreement*].
- F. **Author/Publisher – End users:** the relationship between the author/publisher (or other owner of copyright, such as, the author's employer) and end users (in other words, persons authorised to access and use the material) [*Distribution Agreement*].
- G. **Copyright Collecting Society – Digital Repository and End Users:** Much of the administration of copyright in the educational context in Australia occurs pursuant to statutory licences administered by copyright collecting societies such as the Copyright Agency Limited (CAL), which collect fees from educational institutions as compensation for educational use of copyright materials. In establishing a system to enable access to academic and research materials in online repositories, it is necessary to consider how such materials will be treated under the statutory licence for reproduction and communication of works in electronic form under Division 2A of Part VB (ss 135ZMA to 135ZME of the *Copyright Act* [*Educational Statutory Licence*].

Each of these relationships and the particular copyright management issues they raise are considered, in turn, below.

A. Funding Organisation – Author / Research Institution (Funding Agreement)

Where research is being funded by an external source, that organisation may impose conditions on the researcher or recipient institution in relation to how the output of the funded research will be made available.

For example, it would not be unusual for a funding organisation to impose requirements relating to protection and/or ownership of intellectual property (IP) in research output and how the research output is to be disseminated.

The Australian Government now provides more than \$5 billion annually in funding science and innovation.⁶⁶ In some fields (for example, human health-related biotechnology), virtually all research carried out in Australia (whether in universities, research institutes, or government departments or agencies) is funded by the Australian Government. The Australian government understands that '[a]ccess is a critical issue in the drive to optimise Australia's research infrastructure'.⁶⁷ The Australian Government Department of Education, Science and Training's (DEST) *National Collaborative Research Infrastructure Framework – Strategic Roadmap* (2006)⁶⁸ states:

Consistent with the NCRIS principles, the Roadmap identifies those capabilities that will provide the most strategic impact in terms of delivering national benefit, producing world-class excellence in both discovery and application driven research, and/or enhancing the overall capacity of the research and innovation system by providing enabling research platforms and promoting accessibility and collaboration.⁶⁹

⁶⁶ Australian Government, Productivity Commission, *Terms of Reference for Economic, Social and Environmental Returns on Public Support for Science and Innovation in Australia* (March 2006) <<http://www.pc.gov.au/study/science/tor.html>> at 13 June 2006.

⁶⁷ Department of Education, Science and Training (DEST), *National Collaborative Research Infrastructure Strategy (NCRIS) Strategic Roadmap* (February 2006) 3 <<http://www.dest.gov.au/NR/rdonlyres/E2001074CDA2-4CEA-A1B4-775B4882A5F5/9519/NCRISStrategicRoadmap.pdf>> at 25 July 2006.

For a more recent indication of government policy see: The Hon Kim Carr Minister for Industry Innovation Science and Research, "There is More than One Way to Innovate" 7 Feb 2008 <<http://minister.industry.gov.au/SenatortheHonKimCarr/Pages/>>

⁶⁸ Department of Education, Science and Training (DEST), *National Collaborative Research Infrastructure Strategy (NCRIS)*, 28 February 2006, <http://www.dest.gov.au/sectors/research_sector/policies_issues_reviews/key_issues/n_cris/> at 25 July 2006.

⁶⁹ <<http://www.dest.gov.au/NR/rdonlyres/E2001074-CDA2-4CEA-A1B4775B4882A5F5/9519/NCRISStrategicRoadmap.pdf>> at 25 July 2006.

A critical issue is how to strike the appropriate balance between commercialisation and increased access.⁷⁰ It follows that research funding bodies need to review the terms of their funding agreements to ensure that the objective of providing open access to research results is not contradicted by obligations on funding recipients to protect and commercialise IP that is developed in funded projects.

Promoting Self-Archiving in Open Access Repositories

According to Stevan Harnad:

Articles made 'Open Access', (OA) by self-archiving them on the web are cited twice as much, but only 15% of articles are being spontaneously self-archived. The only institutions approaching 100% self-archiving are those that mandate it. Surveys show that 95% of authors will comply with a self-archiving mandate; the actual experience of institutions with mandates has confirmed this.⁷¹

Since surveys indicate that a majority of researchers favour research funding bodies mandating self-archiving⁷² and, as 95% of authors say

⁷⁰ See generally, Department of Education, Science and Training, *Knowledge Transfer and Australian Universities and Publicly Funded Research Agencies*, March 2006, available at <http://www.dest.gov.au/NR/rdonlyres/36818C20-9918-4729-A150464B662644B3/12630/Knowtran_FinalCompilation_005_web1.pdf> at 30 July 2006.

⁷¹ Stevan Harnad, 'Monitoring Research Impact Through Institutional and National Open-Access Self-Archiving Mandates' in Keith Jeffrey (ed), *Proceedings of CRIS2006. Current Research Information Systems: Open Access Institutional Repositories* (in press) (2006) <<http://eprints.ecs.soton.ac.uk/12093/>> at 16 July 2006; An example is CERN <<http://public.web.cern.ch/Public/Welcome.html>> which has an institutional self-archiving mandate and is close to providing open access to 100% of its own current published research article output in its institutional repository, see <<http://cdsweb.cern.ch/>> at 31 July 2006.

⁷² Sue Sparks, *JISC Disciplinary Differences Report*, Rightscom Ltd (2005) 7 <http://www.jisc.ac.uk/uploaded_documents/Disciplinary%20Differences%20and%20Needs.doc> at 31 July 2006. For a survey of public attitudes to access to publicly funded research output, see Alliance for Taxpayer Access, *Americans Support Free Access to Research*, 31 May 2006, Washington DC <<http://www.taxpayeraccess.org/media/Release06-0531.html>> at 16 July 2006.

they would comply with a self-archiving mandate,⁷³ it has been proposed that institutions and funding bodies should mandate that the author's final draft⁷⁴ must be deposited into the institutional repository immediately upon acceptance for publication.⁷⁵

In recent years, research funding bodies in the United States (US), the United Kingdom (UK) and Germany have adopted open access policies and guidelines calling upon researchers to publish in open access journals and to deposit materials resulting from funded research in an open access repository.⁷⁶

In the US, in February 2005 the National Institutes of Health (NIH), the world's largest non-military research funder, 'prodded by federal departments and Congressional committees', adopted an Open Access Policy⁷⁷ with the aim of increasing the availability of research that it funds. The policy requested all NIH-funded investigators to submit, from 2 May 2005, an electronic version of the author's final, peer-reviewed manuscripts to the PubMed Central⁷⁸ database, the NIH's free

⁷³ Alma Swan and Sheridan Brown, (2005) *Open access self-archiving: An author study*. Technical Report, External Collaborators, Key Perspectives Inc, Table 30, 64 <<http://eprints.ecs.soton.ac.uk/10999/01/jisc2.pdf>> at 13 September 2006.

⁷⁴ That is, the version that is commonly referred to as the 'PostPrint'.

⁷⁵ For the best up-to-date overview of the open access policies applied or being developed by funding bodies in the US, UK, Canada, South Africa and several European countries (including Sweden, France and Germany), focusing on whether open access is mandated or merely encouraged, see Peter Suber, 'Ten Lessons from the Funding Agency Open Access Policies', 2 August 2006, *SPARC Open Access Newsletter*, #100 <<http://www.earlham.edu/~7Epeters/fos/newsletter/08-02-06.htm>> at 3 August 2006; See also Stevan Harnad, 'Monitoring Research Impact Through Institutional and National Open-Access Self Archiving Mandates' in Keith Jeffrey (ed), *Proceedings of CRIS2006. Current Research Information Systems: Open Access Institutional Repositories* (in press) (2006), <<http://eprints.ecs.soton.ac.uk/12093/>> at 16 July 2006; Stevan Harnad, 'Opening Access by Overcoming Zeno's Paralysis' in Neil Jacobs (ed), *Open Access: Key Strategic, Technical and Economic Aspects* (2006) (forthcoming), Self-archived March 19, 2006 <<http://eprints.ecs.soton.ac.uk/12094/>> at 16 July 2006.

⁷⁶ For an overview of research funding bodies' policies on open access, see the European Commission, Directorate-General for Research, 69–70.

⁷⁷ National Institutes of Health, Office of Extramural Research, *Policy on Enhancing Public Access to Archived Publications Resulting from NIH-Funded Research* <<http://publicaccess.nih.gov/>> at 23 May 2006 and <<http://publicaccess.nih.gov/policy.htm>> at 23 May 2006.

⁷⁸ See: <<http://www.pubmedcentral.nih.gov/>> at 23 May 2006.

digital archive of journal literature in the biomedical and life sciences, upon acceptance for publication. The policy applied to any journal articles resulting from research supported wholly or partially with direct funds from NIH. However, in a survey conducted by Janice Hopkins Tanne in 2006,⁷⁹ it was found that less than 5% of NIH-funded researchers were acting in accordance with the NIH's policy.⁸⁰ On 11 January 2008, NIH announced a revision to its Open Access Policy that made its application mandatory rather than voluntary for all peer-reviewed articles arising in whole or in part from direct costs funded by NIH, or from NIH staff, that are accepted for publication on or after 7 April 2008.⁸¹ Funded researchers/institutions were given the responsibility for ensuring that any publishing or copyright agreements concerning submitted articles fully comply with the NIH Open Access Policy.⁸²

The Research Councils UK (RCUK) revised *Position Statement on Access to Research Outputs* of 28 June 2006 (2006 Position Statement)⁸³ endorsed the following principles:

- ideas and knowledge derived from publicly-funded research must be made available and accessible for public examination as rapidly as practicable
- published research outputs should be effectively peer-reviewed

⁷⁹ Janice Hopkins Tanne, 'Researchers funded by NIH are failing to make data available' (2006) 332 *BMJ* 684 (25 March).

⁸⁰ From Peter Suber, *Open Access News* <<http://www.earlham.edu/~peters/fos/fosblog.html>> at 24 March 2006.

⁸¹ See Peter Suber, "The mandates of January" 118 *SPARC Open Access Newsletter*, 2 February 2008 <http://www.earlham.edu/~peters/fos/newsletter/02-02-08.htm> at 25 March 2008; see also the NIH Public Access webpage: <<http://publicaccess.nih.gov/>>.

⁸² *Ibid*; see also Kylie Pappalardo, *Understanding Open Access in the Academic Environment: A Guide for Authors*, June 2008, OAK Law Project, available at <http://eprints.qut.edu.au/archive/00013935/01/Microsoft_Word_-_Final_Draft_-_website.pdf>.

⁸³ RCUK, *Position Statement on Access to Research Outputs* <<http://www.rcuk.ac.uk/access/2006statement.pdf>> at 30 July 2006.

- models and mechanisms for publication and access must be an efficient and cost-effective use of public funds
- outputs must be preserved and remain accessible for future generations.⁸⁴

While each of the eight Research Councils (representing diverse research disciplines)⁸⁵ were not directly required to mandate OA archiving for all RCUK-funded research, each were encouraged to develop specific guidelines for the communities it funded, relating to access to research outputs in the particular field/s of research. The intention was to ensure that each discipline was able to respond in ways best suited to its own needs. To date, all but one of the Research Councils have adopted a mandate requiring deposit of peer-reviewed research outputs in an OA repository.⁸⁶ The access policies of the RCUK, along with the policies of research funding bodies in other countries (such as Germany and the US), are included in the Juliet website established by SHERPA.⁸⁷

Similarly in Europe, the European Research Council (ERC) requires that all peer-reviewed publications resulting from funded research be deposited in an openly accessible repository within six months of publication.⁸⁸

⁸⁴ RCUK, News Release, 28 June 2006

<<http://www.rcuk.ac.uk/press/20060628openaccess.asp>> at 30 July 2006.

⁸⁵ There were originally eight Research Councils: Arts & Humanities Research Council (AHRC); Biotechnology & Biological Sciences Research Council (BBSRC); Council for the Central Laboratory of the Research Councils (CCLRC); Economic & Social Research Council (ESRC); Engineering & Physical Sciences Research Council (EPSRC); Medical Research Council (MRC); Natural Environment Research Council (NERC) and Particle Physics & Astronomy Research Council (PPARC). On 1 April 2007, PPARC and CCLRC merged to become the Science and Technology Facilities Council (STFC): see Wikipedia, "Particle Physics and Astronomy Research Council" <http://en.wikipedia.org/wiki/Particle_Physics_and_Astronomy_Research_Council> at 7 July 2008.

⁸⁶ Each of the Research Councils except the Engineering & Physical Sciences Research Council (EPSRC) have adopted OA mandates: see SHERPA-JULIET, Research funders' open access policies <<http://www.sherpa.ac.uk/juliet/>> at 7 July 2008.

⁸⁷ See <<http://www.sherpa.ac.uk/juliet/>>.

⁸⁸ Policy accessed via SHERPA-JULIET at: <<http://www.sherpa.ac.uk/juliet/>>; see also *ERC Scientific Council Guidelines for Open Access*, 17 December 2007,

In Australia, while 90 per cent of the \$4.3 billion expended on research and development by higher education institutions in 2004 was funded by government,⁸⁹ there is not as yet a policy mandating the archiving/depositing of researching articles in open access repositories. However, Australia's primary funding bodies, the Australian Research Council (ARC) and the National Health and Medical Research Council (NHRMC), moved in 2007 to encourage funded researchers to deposit their research results in open access repositories.⁹⁰ The ARC also requires researchers who are not intending to deposit their research publications in an OA repository to explain their reasons for refraining. This places a greater emphasis on researchers to consider the reasons for their decision and whether those reasons are justifiable.

Government reports by the Australian Law Reform Commission (ALRC): *Genes and Ingenuity: Gene Patenting and Human Health*,⁹¹ and DEST: *Review of Closer Collaboration between Universities and Major Publicly Funded Research Agencies* (2005)⁹² and *Analysis of the Legal Framework for Patent Ownership in Publicly Funded Research Institutions* (2003)⁹³ while not focusing directly on the question of imposition of conditions regarding

<http://erc.europa.eu/pdf/ScC_Guidelines_Open_Access_revised_Dec07_FINAL.pdf> at 25 March 2008.

⁸⁹ Buchhorn and McNamara, *Issues for Research Data*, 26.

⁹⁰ Australian Research Council (ARC), *Discovery Projects Funding Rules for funding commencing in 2009*, 13 <http://www.arc.gov.au/ncgp/dp/dp_fundingrules.htm> at 25 March 2008; National Health and Medical Research Council, *NHMRC Project Grants Funding Policy for funding commencing in 2009*, 23 <<http://www.nhmrc.gov.au/FUNDING/apply/granttype/projects/index.htm>> at 25 March 2008.

⁹¹ Australian Law Reform Commission, *Genes and Ingenuity: Gene Patenting and Human Health*, ALRC Report No 99 (2004) <<http://www.austlii.edu.au/au/other/alrc/publications/reports/99/>> at 30 May 2006.

⁹² Department of Education, Science and Training, *Review of Closer Collaboration between Universities and Major Publicly Funded Research Agencies* (2004) <<http://www.dest.gov.au/NR/rdonlyres/327F4C1D-99CC4F93-91FB-1A2DEA8F299E/3623/pub.pdf>>.

⁹³ Department of Education, Science and Training, *Analysis of the Legal Framework for Patent Ownership in Publicly Funded Research Institutions* (2003) <http://www.dest.gov.au/sectors/research_sector/publications_resources/other_publications/patent_ownership_in_publicly_funded_research_institutions.htm#6._Recommendations_for_Australia> at 23 May 2006.

OA to publications and other output resulting from funded research projects are significant in that they demonstrate that the issue of attaching conditions to funding grants to ensure that the project output is dealt with in the desired manner and, in particular, is consistent with the funding body's public benefit objectives.

A 2006 report to DEST titled *Research Communication Costs in Australia - Emerging Opportunities and Benefits* recognises the importance of conditioning grants in promoting access to research results:

Research evaluation is the primary point of leverage, influencing strongly the scholarly communication and dissemination choices of researchers and their institutions. A related secondary point of leverage is funding, and the conditions funding bodies put upon it. To attain the goals of accessibility articulated in the Accessibility Framework (Appendix III) and elsewhere, and realise the potential benefits of enhanced access, it will be essential to ensure that funding and grant assessment, research evaluation and reward take account of emerging possibilities and opportunities, and build in open access options.⁹⁴

The Accessibility Framework referred to is the Quality and Accessibility Frameworks for Publicly Funded Research⁹⁵ proposed by the Australian Government in May 2004 as part of the *Backing Australia's Ability – Building our Future through Science and Innovation*.⁹⁶ The Accessibility Framework is intended to provide a strategic framework to improve access to research information, outputs and infrastructure.⁹⁷

As part of the policy development process, universities and research funders need to closely consider the benefits of open access to knowledge. The Open Access to Knowledge (OAK) Law Project,

⁹⁴ John Houghton, Colin Steele and Peter Sheehan, *Research Communication Costs in Australia. Emerging Opportunities and Benefits*, (September 2006) 7 <http://www.dest.gov.au/NR/rdonlyres/0ACB271F-EA7D4FAF-B3F7-0381F441B175/13935/DEST_Research_Communications_Cost_Report_Sept2006.pdf> at 10 October 2006 (hereinafter Houghton, Steele and Sheehan, *Research Communication Costs*).

⁹⁵ See <http://backingaus.innovation.gov.au/2004/research/qual_pub_res.htm>.

⁹⁶ See <<http://backingaus.innovation.gov.au/>>.

⁹⁷ Houghton, Steele and Sheehan, *Research Communication Costs*, 132.

funded by DEST under the Systemic Infrastructure Initiative, is seeking to provide institutions and research funders with assistance in identifying these benefits and guidance to promote the adoption of effective and cutting-edge copyright management frameworks.⁹⁸

B. Author – Employer (Employment Agreement and IP Policy)

Universities and research institutes may require their academic and research staff to make their academic and research output available through OA institutional⁹⁹ or disciplinary (or subject-based)¹⁰⁰ repositories. The legal context in which this outcome is secured is the relationship between the university or research institute as employer and the academic or research project author as employee.¹⁰¹

Since the mid-1990s, the majority of Australian universities have developed IP policies addressing ownership of IP (patents, copyright, confidential information etc.) generated in the course of academic or research activities performed within the scope of the employment relationship. Intellectual Property policies are often part of the formal regulations approved by the governing body of the university for its administration and are generally published in the university handbook and on the institutional website. Such policies may also be incorporated

⁹⁸ See Professor Brian Fitzgerald et al, *The OAK Law Project Report No. 1 - Creating a legal framework for copyright management of open access within the Australian academic and research sector* <<http://www.oaklaw.qut.edu.au>> at 28 September 2006.

⁹⁹ See Harvard University Faculty of Arts and Sciences, *Faculty of Arts and Sciences Agenda* (February 2008) <http://www.fas.harvard.edu/~secfas/February_2008_Agenda.pdf> at 25 March 2008. Institutional repositories assist in raising the profile of institutions, making their research output more visible and accessible.

¹⁰⁰ Disciplinary, or subject-based, archives provide efficient and centralised access to full text articles in specific domains. Eight disciplines have successfully set up e-print archives: high-energy physics and mathematics (arXiv), economics (RePEc), cognitive science (CogPrints), astronomy, astrophysics and geophysics (NTRS and ADS), and computer science (NCSTRL).

¹⁰¹ For case law addressing the issue of whether an institution can enforce university policies (in the context of patent ownership) through a faculty member's employment contract (by reference, either specific or general, to the policies in the employment contract) see: *Victoria University of Technology v Wilson and Others* [2004] VSC 33 and *University of Western Australia v Gray* (No 20) [2008] FCA 498.

by reference into employment contracts between the university and its employees.

A range of approaches to the question of copyright ownership can be found in university IP policies. Most policies seek to balance the interests of the parties by reserving certain rights to the party which does not own copyright. In a review of university copyright policies, the Zwolle project identified the following three approaches taken by UK universities:¹⁰²

Scenario A: individuals own copyright with a licence to the institution
University College London, UK: ‘UCL recognises the rights of its staff to ownership of copyright in research publications, books and other similar academic publications in all format ... UCL will seek to secure, free, unconditional and perpetual, non-exclusive licence to use academic and teaching materials in all formats which are generated by members of staff arising out of employment by UCL.’ The policy is available at www.ucl.ac.uk/staff/resources/copyright-policy/

Scenario B: institution owns copyright but university agrees not to benefit from individuals’ work

University of Bristol, UK: ‘University policy adopts and imposes UK Statute [Copyright, Designs and Patents Act 1988]. University policy is set out in the Standing Orders of Council e.g. section 12.3 of the Standing Orders of Council governing the appointment of members of the Non-professorial Academic Staff. Normally, therefore, the University is the first owner of IP and IP rights generated by its employees ... The University will not in normal circumstances seek to benefit from any rights it may have as employer in the academic publications of members of the Academic Staff.’ The policy is available at

<<http://www.bris.ac.uk/research/ip/policy/ownership.html>>

¹⁰² Zwolle Group, ‘Implementing the Zwolle Principles: University Copyright Policies’
<http://www.surf.nl/copyright/keyissues/scholarlycommunication/implementing_policies.php>

at 16 July 2006 (hereinafter Zwolle Principles).

Scenario C: institution owns IP rights but publications excepted or rights waived

University of Oxford, UK: 'The University claims ownership of all IP ... devised, made or created ... by persons employed by the University in the course of their employment ... Notwithstanding section 6 of this statute, the University will not assert any claim to the ownership of copyright in ... artistic works, books, articles, plays, lyrics, scores, or lectures, apart from those specifically commissioned by the university.' The policy is available at

<<http://www.admin.ox.ac.uk/rso/policy/ip.shtml>>

The IP policies adopted by Australian universities typically vest ownership of copyright in some materials (e.g. course guides and handbooks) in the university while providing for copyright in a wide range of other materials (including published journal articles, books and reports) to be owned or controlled by the employee author/s.¹⁰³ This splitting of copyright according to the nature and purpose of the material is apparent in many university IP policies.

An example is Charles Sturt University's IP policy¹⁰⁴ which states that the university owns all IP created by an employee author in pursuance of the author's duties under a contract of employment, including copyright in 'courseware (books, print, videos, CD-ROMs, manuals, audiovisual recordings, computer software or other materials) created specifically for use in, or in connection with, a course, subject or unit offered by the university'.¹⁰⁵ On the other hand, employee authors own IP in copyright works 'the subject matter of which is primarily concerned with scholarship, research, artistic expression, creativity or academic debate', including 'books, articles or other similar works, whether in written or any other form', 'artistic works created by researchers in fine art or design' and 'any other professional work' created by an employee

¹⁰³ For a comprehensive overview of the IP policies of Australian universities, see Monotti and Ricketson, *Universities and Intellectual Property*. The IP policies of many Australian universities are set out on the SURF website

<<http://www.surf.nl/copyright/keyissues/countries/australia.php>> at 16 May 2006.

¹⁰⁴ Version 4.0, adopted 1997, last modified August 2007,

<<http://www.csu.edu.au/adminman/tec/PolicyonIntellectualProperty.pdf>> at 16 May 2006.

¹⁰⁵ Clause 6.1.

author.¹⁰⁶ The policy expressly excludes from employee copyright ownership materials which ‘were prepared for CSU course work and teaching’, ‘were created using IP owned by CSU’ or if CSU ‘has made a specific and significant contribution of funding, resources, facilities or apparatus which led to the creation of [the] works’.¹⁰⁷

For those materials in which the IP policy vests copyright ownership in the university, no problems arise. The university, as copyright owner, can exercise all the rights required to make the material available through its own institutional open access repository or an external disciplinary repository. By contrast, where the terms of the IP policy vest copyright ownership in the employee, the situation is more complex and needs to be carefully managed by the university if it is to ensure that its employees do not, by exercising their rights as copyright owners, limit the university’s ability to implement its policy on open access to academic and research output. In particular, in the absence of any restriction imposed by the university (whether through its IP policy or express terms of the employment contract) there is nothing to prevent employed academics and researchers who own copyright in their academic and research output from assigning copyright or granting an exclusive licence to a third party (such as a publisher), without reference to the university. In the typical case, where the assignment is of the whole of the copyright (for example, in the traditional Publishing Agreement), the university will not be in a position to require the material to be made available in an institutional or disciplinary repository once the transfer has been effected.

Where a university is seeking to develop a comprehensive OA institutional repository containing the academic and research output of its employees, it should review the terms of its employment contracts and IP policy to ensure consistency between the institution’s policies regarding OA to academic and research output and the obligations imposed on academic and research staff. To address the problems arising from copyright transfer by employees, it may be appropriate for universities to include in their IP policies a requirement that before transferring copyright ownership to a third party the employee must first grant the university all the rights required to enable it to make the

¹⁰⁶ Clause 6.2, paras (a) to (d).

¹⁰⁷ Clause 6.2, paras (e) to (h).

material available in an OA repository. Such grant of rights may take the form of an assignment of part of the copyright to the university or it may be in the form of an irrevocable, non-exclusive licence in favour of the university. In either case, it should expressly state the rights granted to the university and should be in writing, signed by the employee.

The first Australian university to implement a formal requirement for academic authors to deposit all academic and research output was the Queensland University of Technology (QUT), under *Policy F/1.3 E-print repository for research output at QUT*,¹⁰⁸ adopted in 2003.¹⁰⁹ The QUT E-prints policy states that deposit of materials is subject to ‘any necessary agreement with the publisher’ and advises that ‘guidance on copyright arrangements and standards for publishers is available from the University Copyright Officer’. The deposit policies of all other Australian universities (except CSU and UTAs) are based on voluntary submission by academic and research staff. In a recent survey conducted by Professor Arthur Sale of the proportion of DEST¹¹⁰ funded research output deposited in institutional repositories, it was found that no Australian university with a voluntary policy collects significantly more than 15% of DEST reportable content, and in most cases the amount was considerably less. This finding was comparable with international surveys which have also found 15% to be the average deposit level achieved voluntarily.¹¹¹ In comparison, QUT achieved deposit rates 2.5 times higher than its nearest competitor in 2004 and 5 times higher in 2005, with estimated deposit rates of 60% for 2005 and 80% for 2006.¹¹² Sale attributes the difference between the high deposit levels being achieved by QUT as compared to those observed at other Australian universities to ‘the deposit policy coupled with good author support

¹⁰⁸ <http://www.mopp.qut.edu.au/F/F_01_03.html> at 8 May 2006.

¹⁰⁹ Since that time, Charles Sturt University has implemented a mandatory deposit policy for all staff (in January 2008), and the University of Tasmania has been implementing a university-wide deposit mandate in a “patchwork” fashion – department by department. The School of Computing at University of Tasmania has had a deposit mandate in place since 2006.

¹¹⁰ Commonwealth Department of Education, Science and Technology.

¹¹¹ A. Sale, “Comparison of Content Policies for Institutional Repositories in Australia” (2005) <http://www.firstmonday.org/issues/issue11_4/sale/> at 27 July 2008

¹¹² A. Sale, “Comparison of Content Policies for Institutional Repositories in Australia” (2005), 3 <http://www.firstmonday.org/issues/issue11_4/sale/> at 27 July 2008

practices',¹¹³ a finding consistent with a major international study by Swan and Brown in 2005.¹¹⁴ Sale drew the following conclusion:

A requirement to deposit research output into a repository coupled with effective author support policies works in Australia and results in high deposit rates ... Authors are willing to comply with a requirement to deposit. Voluntary deposit policies do not result in significant content, regardless of any author support ...¹¹⁵

It should also be noted that recent developments, most notably at Harvard University, have seen university academics vote to subject themselves to a requirement to provide their university with permission to make their scholarly articles available in an institutional open access repository. The Harvard Faculty of Arts and Sciences adopted such a policy on 12 February 2008.¹¹⁶

C. Author – Publisher (Publishing Agreement)

The degree of control that an academic author is able to exercise in respect of a published article, in terms of the use that the author can personally make of it or authorise others to make of it, depends on the scope of the rights (if any) that the author has in the published article. This, in turn is largely dictated by the legal relationship between the author and publisher, as established by the Publishing Agreement. The extent to which authors of published articles can continue to reproduce, distribute or provide access to the article, for example, by self-archiving

¹¹³ Sale, *Comparison of Content Policies*, 3.

¹¹⁴ Alma Swan and Sheridan Brown, *Open access self-archiving: an author study*, Technical Report, External Collaborators, JISC, HEFCE <<http://eprints.ecs.soton.ac.uk/10999>> at 16 July 2006.

¹¹⁵ Sale, *Comparison of Content Policies*.

¹¹⁶ For the Harvard Faculty of Arts and Sciences policy, see: <http://www.fas.harvard.edu/~secfas/February_2008_Agenda.pdf> at 25 March 2008; for more information about the Harvard Faculty of Arts and Sciences policy, see Peter Suber, "The open access mandate at Harvard?" *JPARC Open Access Newsletter*, Issue #199, 2 March 2008, <<http://www.earlham.edu/~peters/fos/newsletter/03-02-08.htm>> at 20 May 2008; see also, Kylie Pappalardo, *Understanding Open Access in the Academic Environment: A Guide for Authors*, June 2008, OAK Law Project, available at <http://eprints.qut.edu.au/archive/00013935/01/Microsoft_Word_-_Final_Draft_-_website.pdf>.

it or depositing it with an institutional or disciplinary repository, depends on the scope of the rights (if any) retained by the author.

Even though the author has written the article, if they have assigned copyright to the publisher and have not obtained a licence back from the publisher permitting them to continue reproducing and distributing the article, their actions in doing so will be every bit as much an infringement of copyright as if the acts were done by a completely unrelated third party. Likewise, if academic writers are to permit third parties to use their published articles, they must have the authority to be able to grant that permission. In particular, academic authors who wish to submit copies of their published articles to digital repositories from which they can be reproduced, viewed etc. by the public at large or by members of a qualified community, must be able to warrant to the repository manager ("custodian") that they have the rights to authorise the repository to make the copyright material available to those who access the repository. That is, they have the rights to reproduce, first publish and communicate electronically the copyright material to the public (in other words, by making the material available on a website or by transmitting the material in digital form).

Much of the discussion of the allocation of rights between publishers and authors in the academic context has started from the assumption that copyright is assigned in its entirety from the author to the publisher at the time the publishing arrangements are agreed. There has also been little discussion of the importance of identifying the actual owner of copyright in a published article. Too often, discussion of authors' rights in relation to ongoing use of their published articles has been based upon assumptions which do not necessarily apply across the board. There has been a tendency to assume that the author has, prior to publication, assigned copyright to the publisher. The focus on the publisher as controlling the ongoing use of published articles has tended to put into the shadows alternative models of rights management, which involve a lesser ceding of control by the author, (for example, through a partial transfer of copyright or merely granting the publisher a licence to publish). If the participants in the discussion were to shift their focus they would find that the increased emphasis on OA has been accompanied by a shift away from the dominant model in favour of one in which copyright is retained by the author, the publisher is granted a

licence to publish and the author retains rights over further re-use of the material.

The range of models of copyright management in the author-publisher relationship, can be seen along a continuum of control, with maximum control by the author at one extremity and maximum control by the publisher at the other. At the one end of the spectrum the author retains copyright (and thereby maximum control) and merely licenses the publisher to publish the article, on an exclusive, sole or non-exclusive basis. At the other end of the spectrum, the publisher obtains a full assignment of copyright from the author (and thereby maximum control) and does not permit the author to self-archive the article (either in its draft PrePrint form or the published PostPrint) or further distribute it (although the author may purchase hard copy reprints). In retaining copyright the author has control of further distribution of the article (including the right to self-publish, self-archive or deposit it in a repository).

Points along the continuum from maximum author control to maximum publisher control can be identified, in broad terms, as follows:

1. Author retains copyright and controls distribution (which may include self-publishing, self-archiving or depositing it in a repository).
2. Author retains copyright and grants a licence (exclusive, sole or non-exclusive) to publisher to publish the article.

Ultimately in developing any licensing model for managing the author-publisher relationship, the scope of the rights granted to the publisher will be determined by how the licence deals with a range of issues, including:

- whether the licence granted is exclusive, sole, or non-exclusive
- the period of time for which the licence is granted
- the territory covered by the licence
- whether any restrictions are imposed on the commercial use of the material (or whether it can be used only for non-commercial purposes)
- conditions applying to any further distribution of the material.

3. Author assigns copyright partially to publisher, retaining (reserving) ownership of part of the copyright.
4. Author assigns copyright to publisher but obtains an express licence back from publisher to further reproduce and distribute, on terms determined by publisher.
5. Author assigns copyright entirely to publisher, with an implied licence to self-archive or deposit the article into an institutional or disciplinary repository.
6. Author assigns copyright entirely to publisher.

Recent surveys of authors have clearly indicated a preference for a copyright model under which the author retains copyright and continues to be able to exercise rights over re-use of the material for educational, academic or commercial purposes.¹¹⁷ In *The Institutional Repository* (2006), Jones, Andrew and MacColl comment that they have ‘noted that the major difficulties with clearing permission arise when dealing with materials that are not owned by the submitting author [and] advocate that [generally speaking] authors should retain as much of their rights as possible’.¹¹⁸

Examples of Rights Management Models under the Author-Publisher Relationship

1. Author Retains Copyright and Grants a Licence (Exclusive, Sole or Non-Exclusive) to Publisher to Publish the Article.

This is the model favoured by the Open Access Law Program established by Lawrence Lessig (Stanford Law School), Michael Carroll (Villanova Law School) and Dan Hunter under the umbrella of the Science Commons project.¹¹⁹ It encourages authors to negotiate

¹¹⁷ See Maurits van der Graaf and Esther Hoorn, *Towards good practices of copyright in Open Access Journals* (2005) the first output of the JISC-SURF partnering on copyright project <<http://www.surf.nl/en/publicaties/index2.php?oid=50>> at 26 May 2006; see also, Anthony Austin, Maree Heffernan and Nikki David, *Academic Authorship, Publishing Agreements & Open Access: Survey Results*, March 2008, OAK Law Project, available on the OAK Law website at <<http://www.oaklaw.qut.edu.au>>.

¹¹⁸ Richard Jones, Theo Andrew and John MacColl, *The Institutional Repository* (2006) 54–155.

¹¹⁹ See <<http://sciencecommons.org/literature/oalawpublication>>.

individually with the journals in which they publish, to retain ownership of copyright and the right to deposit their material in OA repositories. The program has developed the following resources to promote OA in legal publishing, including:

- *The Open Access Law Journal Principles*: The OAL Program encourages law journals to commit to a set of OAL Journal Principles. These Principles require that a journal: (1) take only a limited term licence, (2) provide a citable copy of the final version of the article, and (3) provide public access to the journal's standard publishing contract. In return, the author promises to attribute first publication to the journal. (See <http://sciencecommons.org/literature/oalawjournal>).
- *The Open Access Law Author Pledge*: For authors wishing to commit publicly to OA ideals, we have established an OAL Author Pledge. This pledge commits authors to only publish law review articles in journals that adhere to a minimum OAL commitment.
- *The Open Access Model Publishing Agreement*: The OAL Program also provides a Model Agreement that embodies the OAL Journal Principles in a fair and neutral contract that is easy for both authors and law reviews to adopt. It also provides for an easy mechanism for authors and journals to adopt Creative Commons (CC) licences to make their work more easily available.¹²⁰

2. *Author Assigns Copyright Partially to Publisher, Retaining (Reserving) Ownership of Part of the Copyright.*

Under this model, based on the splitting of copyright interests among the parties, the author assigns copyright partially to the publisher but retains (or 'reserves') certain key rights required to enable them to control certain uses of the article, for example, to enable the author to self-archive the article or to deposit it in a digital repository.

¹²⁰ See <<http://sciencecommons.org/literature/oalawpublication>>.

This model underlies the so-called SPARC Author Addendum (or simply, SPARC Addendum)¹²¹ developed by Professor Michael Carroll of Villanova Law School for the Scholarly Publishing and Academic Resources Coalition (SPARC).¹²² The SPARC Addendum is a set of clauses intended for inclusion by an author in a standard Publication Agreement in which copyright is assigned to the publisher, in order to limit what would otherwise be a general transfer of copyright, by excluding from the transfer certain distribution rights which are reserved to the author. In particular, the SPARC Addendum reserves to authors certain key rights, in particular, the right to post their articles in digital repositories.¹²³

3. Author Assigns Copyright to Publisher but Obtains an Express Licence Back from Publisher to Further Reproduce and Distribute, on Terms Determined by Publisher.

The prevalence of the copyright assignment model is apparent from the survey of publishers conducted by the UK SHERPA (Securing a Hybrid Environment for Research Preservation and Access) project. The information about publishers' practices on the SHERPA website¹²⁴ shows that the majority obtained a transfer of copyright from the author. The SHERPA website provides a useful overview of publishers' practices, with a primary focus on whether or not they permit authors to self-archive or further distribute pre-prints and post-prints.

In formulating the SHERPA categorisation (green/blue/yellow/white) much emphasis was placed on the policies issued by publishers. Such policies represent to the public at large the publisher's practices. In some cases, for example, where the publisher's policy states that authors are permitted to self-archive, or make the published article available in an institutional or disciplinary repository, the publisher may be going

¹²¹ Version s 2.1 of the SPARC Addendum is available at <http://www.arl.org/sparc/author/docs/AuthorsAddendum2_1.pdf> at 2 August 2006.

¹²² See: <<http://www.arl.org/sparc/>> at 16 July 2006.

¹²³ See: <<http://www.arl.org/sparc/author/addendum.html>> and <http://www.arl.org/sparc/author/docs/AuthorsAddendum2_1.pdf> at 16 July 2006. For a guide to the SPARC Author Addendum, see SPARC, *Author Rights* <<http://www.arl.org/sparc/author/addendum.html>> at 2 August 2006.

¹²⁴ <<http://www.sherpa.ac.uk/>> at 2 July 2006.

beyond what has been expressly stated in their standard, written publishing agreements which provide for assignment of copyright by the author but are silent as to any rights the author may have to further use or distribute the published article. In this case, the question arises as to whether the general statement of policy can be regarded as unilaterally varying the express terms of the existing publishing agreements with authors. The more likely situation is that the publishers' policy statements are merely a representation which, if acted on by authors, cannot be disavowed by publishers (doctrine of estoppel). Essentially, the publisher is indicating that it will not enforce its rights as copyright owner, if the author makes use of the published article in the manner described by the publisher in its policy statement.

While the publishers' policy statements have retrospective effect in relation to existing contracts, it would be expected that new contracts would be drafted to expressly reflect the published policy.

4. Author Assigns Copyright Entirely to Publisher, With an Implied Licence to Self-Archive or Deposit the Article into an Institutional or Disciplinary Repository.

Many publishers require the author to assign copyright and, while the question of the author's rights to self-archive or deposit the article (in pre-or post-print version) is not expressly addressed in the Publishing Agreement, the circumstances may give rise to an implied licence to the author to use the article in this way. While there may be circumstances which can be relied upon to support the existence of an implied licence, there will inevitably be uncertainty about the terms and extent of any such licence.

5. Author Assigns Copyright Entirely to Publisher.

Under the traditional model of academic publishing, the author assigns the whole copyright to the publisher in exchange for having the article or work published. Few, if any rights are licensed back to the author.

In the context of pursuit of OA objectives, this option is the least suitable. It minimises the author's control over the published article, while maximising the publisher's ability to prohibit or impose restrictions on further distribution and educational uses of the published work, without consulting the author.

D. Author – Digital Repository (Repository Deposit Licence)¹²⁵

The relationship between the author (or another party who owns copyright in the work, such as the author's employer or the publisher to which copyright has been assigned) and the digital repository in which a copy of the article is deposited is governed by the terms of the Repository Deposit Licence between the parties.

The Repository Deposit Licence will be entered into by the administrator of the digital repository and the author, the author's employer or the publisher.

If the repository is an institutional repository or disciplinary repository established by the author's employing institution, the parties to the Repository Deposit Licence will be the author and their employer.

Surprisingly, many ePrint repositories do not enter into formal agreements with authors who deposit their works because such agreements are thought to discourage authors from depositing. In a 2000 survey of e-print repository practices, the Rights METadata for Open Archiving (RoMEO) project found that about 32% of respondents took it on trust that the author had the right to deposit the work without explicitly asking them to confirm that they held all necessary rights.¹²⁶ However, a 2005 report commissioned by SHERPA on deposit licences for e-prints emphasised the value of such licences in establishing a formal relationship between the repository and authors depositing their works into digital repositories. It concluded that:

[d]eposit agreements should be considered an essential part of an e-print repository's operation. ... For the repository, it provides a formal framework that defines what the repository can and cannot do, making it easier to manage the e-print in the long-term while helping to reduce its legal liabilities. For the author, it provides reassurance that the repository is not

¹²⁵ See further, Kylie Pappalardo and Dr Anne Fitzgerald, *A Guide to Developing Open Access Through Your Digital Repository*, September 2007, OAK Law Project, including Sample Repository Deposit Licence, available at <<http://eprints.qut.edu.au/archive/00009671/01/9671.pdf>>.

¹²⁶ The RoMEO study is referred to in Gareth Knight (Arts & Humanities Data Service), *Report on a deposit licence for E-prints*, 7 (21 June 2004) 1 <http://www.sherpa.ac.uk/documents/D4-2_Report_on_a_deposit_licence_for_E-prints.pdf> at 16 May 2006 (hereinafter Knight, *Deposit Licence Report*).

taking ownership of their work, and makes them aware of what type of service the repository is providing.¹²⁷

It is necessary for a digital repository to determine the basis on which repository content may be accessed and re-used by end users. The Repository Deposit Licence between the author (or publisher) and the repository should address the extent to which the deposited material can be made available to other users and institutions and should grant an express licence to the repository to enable the repository to do all acts required to make the material available for access, use and/or further distribution by end users.

In particular, the matters addressed in the Repository Deposit Licence may include:

- *permissions granted by author (or other copyright owner) to digital repository*
 - grant of a non-exclusive licence to the digital repository
 - extent of rights granted to digital repository, for example, to reproduce, distribute the deposited material (including the abstract) worldwide in print and electronic format in any medium
 - retention by author of rights to make use of the current and future (revised) versions of the deposited work
 - rights granted to digital repository to translate the deposited work (without changing the content) to any medium or format for the purpose of preservation
 - requirement for citation to published version to be included and to be clearly visible
 - author's rights to provide updated versions of the work
 - conditions under which the repository administrators can remove the deposited work.

¹²⁷ Knight, *Deposit Licence Report*.

- rights granted to digital repository to copy the deposited work for purposes of security, back-up and preservation.
- *access to work by other parties*
 - basis on which work is to be made available to other users and institutions
 - rights of other parties to access, use and further distribute the work.
- *representations and warranties by the author (or copyright owner) to repository administrators*
 - representation by author of authority to enter into the Repository Deposit Licence
 - representation by author of right to grant the rights to the digital repository as stated in the Repository Deposit Licence
 - where the deposited work has been sponsored or supported by another organisation, a representation by the author that obligations required by the agreement with such sponsor regarding use of the work have been fulfilled
 - warranty by author that the work is original, and to the best of his or her knowledge, does not infringe any other party's copyright
 - representation that, where the deposited work contains material for which the author does not hold copyright, the author has obtained the unrestricted permission of the copyright owner to grant the digital repository administrator the rights required by the Repository Deposit Licence and that any third party owned material is clearly identified and acknowledged within text or content of the deposited work clearly identified and acknowledged within text or content of the deposited work.

- *responsibility for enforcement of IP*
 - whether administrators of digital repository have any obligations to take legal action on behalf of the author (or copyright holder) in the event of breach of IP rights in the deposited work.

*E. Digital Repository – End Users*¹²⁸

The Repository Distribution (End User) Agreement grants rights to end users to access and re-use the deposited material that are consistent with (and do not extend beyond) the licence granted to the repository by the author (or publisher) under the Repository Deposit Licence.

End users may be individual members of the public or members of a specific academic community with defined access rights. The terms and conditions governing access to and use of material in the repository should be clearly displayed on the repository web site and brought to the attention of end users so they understand that their use of the repository and materials in it is subject to those terms and conditions. In particular, any limits on the rights of end users to copy and further distribute the material in the repository should be stated.

Where it is essential to obtain assent by end users to comply with restrictions on access and use, the click-wrap format should be used for the Repository Distribution (End User) Agreement.¹²⁹ A click-wrap web site agreement involves end users first viewing the terms and conditions governing access to and use of the materials in the repository, and clicking an 'I accept' or 'I agree' button or icon to indicate that they assent to those conditions before they are able to obtain access to and use articles in the repository. Where restrictions apply and the

¹²⁸ See further, Kylie Pappalardo and Dr Anne Fitzgerald, *A Guide to Developing Open Access Through Your Digital Repository*, September 2007, OAK Law Project, including Sample Repository Deposit Licence, available at <<http://eprints.qut.edu.au/archive/00009671/01/9671.pdf>>.

¹²⁹ A similar approach to that described in this paragraph is advocated by Richard Jones, Theo Andrew and John MacColl in *The Institutional Repository* (2006) 152–4.

repository will not permit access unless end users have agreed to be bound by the terms and conditions of access and use, end users who do not accept the terms and conditions should be given the opportunity of declining (by clicking a 'I decline' or 'I do not agree/accept' button), in which case they will not be permitted to continue to access the repository or download material from it.

In cases where few, if any, restrictions are imposed on access to and use of the materials in the repository, it will suffice if the Repository Distribution (End User) Agreement is in browse-wrap form or if the terms and conditions are available by clicking on hypertext links at the bottom of the repository web site pages. In the browse-wrap form of agreement, the end user is required to view the terms and conditions but is not required to click on a button to indicate assent.

F. Author/Publisher – End Users

Where the article is distributed by the author or publisher (or another copyright holder), the rights of end users are governed by the terms of the Distribution Agreement. If the author has assigned copyright to a publisher, the rights of end users will be determined by the terms of the licence granted to end users by the publisher. However, in cases where the author has retained copyright wholly or partially, it may be the author who directly authorises end users to use the article (Author Distribution Agreement).

An example of an author-end user agreement is the SCRIPT-ed Open Licence ('SOL')¹³⁰ used by the SCRIPT-ed online law journal which takes the form of a non-exclusive licence granted by the author to 'Users'.¹³¹ Users are given the right to disseminate the original and unmodified work, provided it is not done for commercial purposes.¹³²

¹³⁰ See SCRIPT-ed Open Licence (SOL).

¹³¹ *User* is defined as 'the person who reads, copies, issues copies of the work, translates, displays, performs or broadcasts the Work'.

¹³² See <<http://www.law.ed.ac.uk/ahrb/script-ed/policies.asp>> at 16 July 2006. Clause 4 deals with Modification and Clause 5 deals with Adaptations.

G. Copyright Collecting Society – Digital Repository and End Users

In establishing a system to enable access to academic and research materials in online repositories, it is necessary to consider how such materials will be treated under the statutory licence for reproduction and communications of works in electronic form under Division 2A of Part VB of the *Copyright Act*.

The question is whether the obligation to pay remuneration to a collecting society for the use of the copyright work still remains when a licence to use the work is granted expressly or impliedly by the copyright owner. If the obligation to pay remuneration continues in force unless expressly excluded by the terms of the licence to archive the material, this will have implications for the drafting of Publication Agreements.

COPYRIGHT MANAGEMENT ISSUES FOR ELECTRONIC THESES AND DISSERTATIONS

The electronic distribution of theses also raises many copyright issues.

Ownership Principles – the Legal Status of Theses

Copyright

Theses and dissertations will automatically be protected by copyright as a literary work, with the rights vesting in the author who has created them. It should also be noted that a thesis may consist of more than simply literary works or dramatic, musical or artistic works.¹³³ For example, sound recordings and cinematograph films are now common in theses in some disciplines and these materials may also contain more than one layer of copyright. For example, the underlying rights in the script or any sound recording may co-exist alongside the copyright in the film.

Ownership of Copyright in Theses

Subject to any express agreement to the contrary (such as an agreement assigning copyright to the university or a third party), PhD students will own copyright in the original expressions in their theses.

¹³³ *Copyright Act* s 31.

Where a student is receiving a scholarship or there has been a significant investment made towards the student's thesis, the investor may seek to obtain ownership of copyright in the thesis.¹³⁴

Performers' and Moral Rights

Performers' rights may be relevant for theses and dissertations, in particular theses in the area of creative industries and performing arts. In addition to having the personal right to prevent the making, copying or public performance of an unauthorised recording or communication of a live performance (as outlined in 'Overview of Principles of Copyright Law', above), performers also have new economic rights to the extent that the performer who performed the performance and the person at the time of the recording who owned the record (being the person who owned the master recording on which the record was made) and are now co-owners of the copyright in equal shares in the sound recording of the live performance.¹³⁵ These rights are relatively new, following to amendments to the *Copyright Act* arising out of the Australia-United States Free Trade Agreement (AUSFTA).¹³⁶ Performers may assign their share of the copyright to the original copyright owner in the sound recording or to a third party. The normal employment provisions under the *Copyright Act* will also apply — for example, copyright in a performance done in the course of employment will be owned by the employer.

PhD students and researchers could also have moral rights in their theses, including the right to be attributed/cited as the author of a work in third party papers and publications reproducing parts of their thesis. In addition, the moral right of integrity may be relevant for theses in the creative industries, such as film-making or sound production, where the remixing and re-use of aspects of a work (such as in a pastiche or multimedia work) could potentially subject the work to derogatory treatment in a way that demeans the creator's reputation if done without the consent of the creator — thereby infringing their moral right of integrity.

¹³⁴ Ann Monotti and Sam Ricketson, *Universities and Intellectual Property* (2003) Chapter 7 (hereinafter 'Monotti and Ricketson, *Universities and Intellectual Property*').

¹³⁵ *Copyright Act* s 97 (2A). See also ss 100AA-100AH.

¹³⁶ *Copyright Act* s 22 (3A). See ss 22 (3B)-(3C).

A History of the Distribution of Theses

The Pre-Digitisation of Theses

Prior to the digitisation of theses, the thesis service that libraries could provide was necessarily limited. Theses were predominantly distributed in hard copy form, usually a bound copy, which would then be deposited in the library of the degree awarding institution, and perhaps that of the external assessor's institution. The core problem prior to digitisation of theses was that, in the majority of cases theses were not published on a commercial basis. This made it extremely difficult to locate and access theses in many cases, as they were held at the library of the institution where the degree was awarded, with access limited to personal inspection of the hard copy within the library.

In some cases, copies of theses and dissertations are also held in the various state libraries and the National Library of Australia (NLA). However, as the NLA currently does not receive a copy of every thesis awarded by an Australian university it recommends that the relevant institution where the thesis was completed be consulted in order to obtain access to the required theses or dissertations.¹³⁷

In contrast to Australia, the British Library provides a thesis service, which is known as the British Thesis Service, comprising:¹³⁸

- Full text access to over 170 000 doctoral theses dating from the 1970s to today, with most UK universities making their students' theses available on the service.
- This collection of theses is held in either paper bound copies or on microfilm. The service also makes available for sale the majority of theses in the collection, through either microfilm copies or bound paper copies.

The Digitisation of Theses

With the growth of computer usage over the last 20 years we have seen the gradual development of the notion of submitting a thesis or dissertation in digital form into an electronic or digital repository.

¹³⁷ National Library of Australia, *Theses* (2006) <<http://www.nla.gov.au/apps/eresources/action/item?id=1484&loaditem=true>> at 30 June 2006.

¹³⁸ The British Library, *British Thesis Service* (2006) <<http://www.bl.uk/services/document/brittheses.html>> at 30 June 2006.

For example, the Australasian Digital Theses Program (ADT Program) was established in order to improve access to, and enhance the transfer of, research data contained in theses through the provision of full text theses available on the Internet. It establishes a distributed database of digital versions of theses produced by postgraduate students at all Australian universities, which is made available on the Internet. The aim behind the ADT Program is to provide access to, and to promote, Australian research to the international community through the reproduction of theses on the ADT database.

Given that it is the responsibility of each individual institution to maintain an archived copy of the theses, every member of the ADT Program is required to host their own theses on a server located within the university. However, every member uses an identical database configuration, standards and metadata, ensuring compatibility with all electronic theses contained in the ADT Program.

Copyright Management Issues for Electronic Theses and Dissertations

With the increasing trend towards the promulgation of research findings electronically, there has been a concomitant increase in the number of Australian academic institutions that have 'put online' electronic versions of dissertations and theses. Accordingly, there is a need for comprehensive protocols for managing the copyright issues in providing access to Electronic Theses and Dissertations (ETDs).

To build protocols for managing the legal aspects involved in making ETD available online, it is necessary to consider the issues from the perspective of each of the following four distinct stakeholders:

1. **The student.** As the contributor of original material, the submitting student will have IP rights in most, if not all of the content. This will include copyright, but may also have patent issues arising (for example, containment of pre-patent disclosure).¹³⁹

¹³⁹ Publication prior to the filing of a patent will usually result in the inability to get the patent, as the invention would no longer be 'novel'. There are now some provisions for grace periods.

2. **The supervisor.** Depending on the discipline, there may be some content of the thesis that is directly or co-contributed by the student's supervisor. This may give IP rights to the supervisor and/or the supervisor's employer, the relevant academic institution.
3. **University, granting agency and industrial partner.** Universities, granting agencies and industrial partners typically have IP rights agreements and policies that may govern some of the ETD content.
4. **ETD disseminating institution (Repository).** Institutions that have a repository of ETD need clarification of IP rights ownership. What is the status of the repository? (Is it a publisher?); what are the permissions required for cited materials; and are there any exemptions available (such as fair dealing for research or study, or criticism or review)? There may also be tortious issues arising in rare circumstances (such as defamation or passing off).

Adopting the perspective of each of these stakeholders, the management of IP rights in ETD needs to be considered at a fine level of granularity. Taking this approach, numerous questions arise, including:

1. How to manage licensing of distribution?
2. How is the whole work in the thesis and dissertation to be regarded (in other words, is it entirely an original work of the student or does it contain third party or other contributions)?
3. Is this discipline dependent?
4. How to manage cited materials?
5. How to manage contributions by others? (for example, technical photos, cite charts etc.)
6. How to manage derivative works?
7. How to manage confidential information (for example, pre-patent materials)?
8. Liability and risk management?
9. What protocols should be adopted?

The key objective of copyright management in this context is to ensure that the ETD repository has appropriate authorisation to be able to legally carry out all the acts involved in putting the ETD online. In other words, the ETD repository must be granted a licence (preferably in written form) by the copyright owner — usually by the author of the thesis — authorising the ETD repository to reproduce and communicate or otherwise disseminate the thesis via the Internet. Where third party copyright material is included in the ETD, it will be necessary to ensure that appropriate ‘clearances’ (in other words, permissions) have been obtained to use that material in the ETD, unless permission is not required under law.

Status of the Repository – is it a ‘Publisher’?

Copyright issues facing ETD repositories may include whether the repository is a publisher or a ‘re-publisher’ of the thesis for the purposes of copyright, defamation, confidential information (trade secrets) and privacy issues.

In terms of copyright, where a thesis in hard copy form in the form of a work (literary, dramatic, musical or artistic work) is digitised and made available online in an ETD repository where it can be accessed and downloaded by members of the academic and research community, it is arguable that it would be deemed to have been published on the basis of the operation of s 29(1)(a) of the *Copyright Act*. However, the deemed publication provision has a much narrower scope of operation in relation to cinematograph films (s 29(1)(b)) than for ‘works’. Publication is only deemed to occur if copies of the cinematograph film have been sold, hired, or offered or exposed for sale or hire to the public. While it is arguable that copies of film-based ETD are supplied to the public when they are made available for access in an ETD repository, the absence of any commercial dealings in the way of sale, hire, etc. means that it is not possible to rely on the deemed publication provision.¹⁴⁰ Since ETD consisting of moving images (and attracting copyright protection as cinematograph films) will not have the benefit of the deeming provision, it will be necessary to consider whether non-commercial distribution of film ETD from ETD repositories where they

¹⁴⁰ *Copyright Act* s 29 (1)(b).

can be accessed by members of the academic and research community can amount to publication.

Converting Paper Theses to Digital Theses

Where any paper thesis is converted to a digital thesis (p2ETD) a number of copyright issues may arise. These include scanning the thesis without permission of the copyright owner, which will breach copyright as it involves the exercise of the copyright owner's rights of reproduction.¹⁴¹

Furthermore, in retroactively distributing electronic versions of paper based theses (especially older theses) there is the difficulty in getting the permission of the author. Obtaining such permissions would be expensive (both in terms of time and actual fees). One suggested option is to adopt a risk management approach and engage in the digitisation and digital archiving process anyhow given that the risk of copyright infringement proceedings commencing is low.¹⁴²

Another problem with older theses is that even if the author is located, it is unlikely that the author will invest much time or money in establishing that use of any third party content copied is permitted or indeed engage in resolving any of the issues that may arise. Therefore, considerable caution needs to be taken when dealing with the authors of paper based theses and a more specialised licence agreement may be needed.

¹⁴¹ *Copyright Act* ss 31, 101. See also Sections 51 and 53 of the *Copyright Act 1968*. Section 51(2) applies to a manuscript or a reproduction of an unpublished thesis or other similar literary work that is kept in a library or a university or other similar institution. It provides that copyright in the thesis or other work is not infringed by the making or communication of a reproduction of the thesis or other work by or on behalf of the officer in charge of the library if the reproduction is supplied (whether by communication or otherwise) to a person who satisfies an authorized officer of the library that he or she requires the reproduction for the purposes of research or study. Section 53 extends the application of section 51 to illustrations accompanying the thesis or other work. See further, Hudson and Kenyon, *Guidelines for Digitisation*, 129.

¹⁴² See Hudson and Kenyon, *Guidelines for Digitisation*, 50. Arguably, authors of theses would be happy to have their thesis distributed. The greatest risk of copyright infringement would arise if the student assigned the copyright in their thesis to a third party, such as a publisher, and the publisher sought to take action against the repository for breach of their reproduction and communication rights.

Third Party Copyright in Electronic Theses and Dissertations

A high proportion of ETD will contain third party materials, in the form of quotes of text passages, drawings, photographs, reproductions of paintings, video and sound clips and so on. It is essential for ETD repositories to develop and implement strategies to avoid incurring liability (whether through an action for copyright infringement or through a request for payment of equitable remuneration to a copyright collecting society) due to the unauthorised use of any third party copyright materials included in ETD.

If the copyright owner of the third party content has given permission for the work to be used, repositories must ensure that the terms of such permission are not only confined to use in the original theses or dissertation but extend to reproducing or communicating the content for the purposes of digitisation and public access via the repository. The use of third party copyright materials in ETD will typically involve acts within the scope of the copyright owner's exclusive rights to reproduce¹⁴³ or make a copy¹⁴⁴ and to communicate to the public.¹⁴⁵

Exercise of the Reproduction/Copying Right

Incorporation of third party materials into the new copyright work created by the student, in other words, the ETD, whether in the form of a quote of a passage of text from a literary work, inclusion of a diagram or samples of digital images or sounds, will involve the exercise of the reproduction or copying right. Where an ETD is born digital, it will be the student (rather than the university) who does the initial reproduction and copying of the third party material although the consequences of any further reproduction or copying made by the repository need to be considered. Note that, in the case of a thesis submitted by the student in hard copy form, the reproduction right will be exercised by the university when it converts the work from hard copy into digital format.¹⁴⁶

¹⁴³ For Part III works.

¹⁴⁴ For Part IV subject matter.

¹⁴⁵ 'Communicate' is defined in s 10(1) as meaning to 'make available online or electronically transmit (whether over a path, or a combination of paths, provided by a material substance or otherwise)'.

¹⁴⁶ *Copyright Act* s 21 (1A).

Exercise of the Communication Right

Making an ETD available on a repository website where it can be accessed by users involves an exercise of the communication right, which encompasses making copyright material available online or electronically transmitting it.¹⁴⁷ In a system which is designed so that the ETD is uploaded to the repository directly by the student, it may be that only the student engages in an act of communication. However, in the situation where the student provides the repository with the ETD and authorises the repository to make the ETD available online but all further steps required to make the ETD available online at the repository's web site are carried out by the repository, it is likely to be the case that the act of communication is done by the repository.

The only guidance provided by the *Copyright Act* is found in s 22(6) which states that 'a communication ... is taken to have been made by the person responsible for determining the content of the communication'. The question which arises is whether it is the repository or the student who is the 'person responsible for determining the content of the communication'.¹⁴⁸

Due to the intimate connection the university has with the inception, completion and then uploading of the thesis there is strong argument that it has either undertaken an act of communication or authorised such an act.¹⁴⁹ If the university has undertaken the primary act of infringement (in other words if it actually undertook the infringing act, namely communication) then liability accrues regardless of fault, subject to the exceptions already highlighted. If the university has merely authorised the act of communication then a number of 'fault based' factors will need to be considered including the power to prevent the act, the relationship between the university and the infringer (student) and whether the university took reasonable steps to avoid the act

¹⁴⁷ *Copyright Act* s 10 (1).

¹⁴⁸ See further *Universal Music Australia Pty Ltd v Cooper* [2005] FCA 972, [70]-[76].

¹⁴⁹ For this reason it would seem unlikely that the university could rely on ss 39B, 112E *Copyright Act* which state that merely providing facilities to make or facilitate the making of a communication is not, without more, an authorisation of copyright infringement: *Universal Music Australia Pty Ltd v Cooper* [2005] FCA 972, [97]-[99]; *Universal Music Australia Pty Ltd v Sharman License Holdings Ltd* [2005] FCA 1242, [418]. In relation to moral rights see *Copyright Act* s 195AVB.

(including complying with any industry codes of practice). Regardless of which argument is correct, due to the university's close connection with the thesis, its risk of liability for communicating the thesis must be carefully managed.

There are a number of options available to a repository in order to mitigate the risk of copyright infringement in relation to third party content for born digital theses and dissertations.

These include:

1. Ensuring that ETD candidates are provided with sufficiently extensive information and, if necessary, practical training on the basic principles of copyright law, so they understand when they can use third party content in their thesis without permission (in other words, an insubstantial part or a substantial part which can be used because of the operation of the fair dealing or other exception to infringement) and when they will need to obtain permission ('clearance') from the copyright owner to use third party content and how to obtain permission.
2. Requiring the ETD candidate to be responsible for identifying all third party content included in the thesis, determining which third party content they require permission to use and obtaining all necessary licences (typically a non-exclusive, perpetual licence) from the owners of such third party content, which must be broad enough to permit the thesis containing the third party material to be reproduced and communicated via the Internet (whether by the student, the university or the disciplinary repository).
3. Requiring the ETD candidate to 'self manage' any third party content which is not authorised for digital distribution.

Copyright law does not require permissions where an insubstantial amount of a third party copyright work is involved or where an exception such as fair dealing applies. However the operation of both these doctrines is very fact specific. The best that can be done is to provide ETD candidates with clear examples of what the courts have

decided in the past so they have a practical understanding of what material they can use and when they should seek permission. For example, in *TCN Channel Nine Pty Ltd v Network Ten Pty Ltd (No 2)*¹⁵⁰ it was held that whether a part taken is a substantial part or not, involves an assessment of the importance of the part taken to the work as a whole.¹⁵¹

As discussed in ‘Overview of Principles of Copyright Law’, above, copyright is not infringed by dealings with copyright materials that are considered to be ‘fair’ and provided the dealing falls within one of five classes of purpose:

- research or study (ss 40 and 103C)
- criticism or review (ss 41 and 103A)
- reporting news (ss 42 and 103B)
- judicial proceedings or professional advice (ss 43 and 104)
- parody or satire (ss 41A and 103AA).

Once it is established that the purpose for using the third party copyright material fits into one of these categories, the next step is to consider whether the use made of that material for that purpose is fair.

In the context of ETD, the most relevant of the fair dealing provisions are those which exempt from infringement dealings with copyright materials for the purposes of ‘research or study’ and ‘criticism or review’.¹⁵² The terms ‘research’ or ‘study’ are not defined in the *Copyright Act*, however, in *De Garis v Neville Jeffress Pidler*¹⁵³ Beaumont J held that term ‘research’ within the meaning of s 40 of the *Copyright Act* is intended to have its ordinary dictionary meaning:

25. According to the Macquarie Dictionary, ‘research’ may be defined as

¹⁵⁰ [2005] FCAFC 53 (Sundberg, Finkelstein and Hely JJ, 26 May 2005) [52].

¹⁵¹ *Network Ten Pty Ltd v TCN Channel Nine Pty Ltd* (2004) 78 ALJR 585, 589, 605; *TCN Channel Nine Pty Ltd v Network Ten Pty Ltd (No 2)* [2005] FCAFC 53, [12], [50]-[52]; *Network Ten Pty Ltd v TCN Channel Nine Pty Ltd* [2005] HCA Trans 842 McHugh and Kirby JJ. See also *Haines v Copyright Agency Ltd* (1982) 42 ALR 549.

¹⁵² *Copyright Act* ss 40–43, 103A, 103B, 103C, 104.

¹⁵³ *De Garis v Neville Jeffress Pidler* (1990) 18 IPR 292, 298 (hereinafter *De Garis*).

‘1. diligent and systematic enquiry or investigation into a subject in order to discover facts or principles: research in nuclear physics ...’

Similarly, the *Copyright Act* does not define ‘criticism’ or ‘review’, although it has been held that the words are of ‘wide and indefinite scope which should be interpreted literally’. In *Warner Entertainment Co Ltd v Channel 4 Television Corp PLC*¹⁵⁴ Henry LJ stated that the question to be answered in assessing whether a dealing is fair or not is ‘is the [work] incorporating the infringing material a genuine piece of criticism or review, or is it something else, such as an attempt to dress up the infringement of another’s copyright in the guise of criticism’.

It is clear from the judicial consideration of the meaning of these terms¹⁵⁵ that an individual student engaged in activities involving the use of third party copyright material in the course of researching and writing a thesis would be able to establish that their acts are for the purposes of ‘research or study’ or ‘criticism or review’. It is also clear from the wording of ss 40 and 41 that the fair dealing provisions can be raised as a defence to copyright infringement in relation to an act of communication. Furthermore, there does not seem any doubt that a student can rely on the fair dealing provisions to communicate copyright material for the purposes of ‘research or study’ or ‘criticism or review’. The only doubt raised here is whether any act of communication¹⁵⁶ by the university can be regarded as being for the purposes of ‘research or study’ or ‘criticism or review’?¹⁵⁷ This is explored in the following two arguments.

¹⁵⁴ (1993) 28 IPR 459, 468.

¹⁵⁵ *De Garis*, 298; *CCH Canadian Ltd v Law Society of Upper Canada* [2004] 1 SCR 339; *Warner Entertainment Co Ltd v Channel 4 Television Corp PLC* (1993) 28 IPR 459, 468; *TCN Channel Nine Pty Limited v Network Ten Limited* [2001] FCA 108 [66], also see [16]-[17]; see also *TCN Channel Nine Pty Ltd v Network Ten Pty Limited* [2002] FCAFC 146.

¹⁵⁶ If the university is not regarded as undertaking an act of communication but rather authorising an act of communication then the issue will stand or fall on the basis of the student’s ability to rely on the defence.

¹⁵⁷ See generally: *De Garis v Neville Jeffress Pidler Pty Ltd* (1990) 189 IPR 292; cf. *CCH Canadian Ltd v Law Society of Upper Canada* [2004] 1 SCR 339.

Argument 1: The student’s act of research or study or criticism or review includes dissemination of the end product and the university in communicating the ETD is part of that process.

If the university can successfully argue that it is simply a part of or extension of the student’s activities and merely a conduit for dissemination then it is more likely that a court will accept an argument that the university in communicating the ETD is doing so for the purpose of research or study or criticism or review. For what other purposes is the university engaging in this activity? Is it to promote the university as a commercial entity or is it to disseminate a product of research or review?

In the old hard copy world the student reproduced copies of the thesis usually through a copying service, supplied them to the university and they were placed on the library shelf. History tells us that no one has ever questioned in the hard copy world the act of the thesis copying service in terms of copyright infringement and the applicability of the fair dealing provisions. If anyone had successfully argued that the thesis copying service could not rely on the fair dealing provisions then the thesis would never have been copied or made available for others to read. It seems odd that a similar activity cannot be undertaken with the same degree of legal certainty in the digital environment, especially when technology neutrality is seen to be a key part of our legal framework.¹⁵⁸

Thus, the university could argue that the student’s act of research or study or criticism or review includes dissemination of the end product and the university in communicating the ETD is part of that process. In *CCH Canadian Ltd v Law Society of Upper Canada*¹⁵⁹ the Supreme Court of Canada explained that when library staff made copies of legal materials they did so for the purpose of research ‘although the retrieval and photocopying of the legal works are not research in and of themselves, they are necessary conditions of research and thus part of the research process’.¹⁶⁰ Dissemination of research is very much part of the modern

¹⁵⁸ Consider *Electronic Transactions Act 1999* (Cth) ss 11(6), 12(6)

¹⁵⁹ [2004] 1 SCR 339.

¹⁶⁰ [2004] 1 SCR 339, [64]. See also *TCN Channel Nine Pty Ltd v Network Ten Pty Ltd* [2002] FCAFC 146 at [100]-[101]: ‘Ten engaged Working Dog Pty Ltd (Working Dog), referred to by the primary judge as “its contracted production team”, to produce for it a television programme which would, amongst other things, involve criticism and review and the

research process and the university is merely helping this to happen. As the Supreme Court explained a restrictive interpretation of the fair dealing provisions ‘could result in undue restriction of users’ rights’.¹⁶¹

If this argument for the university based on its function as a conduit for dissemination cannot be sustained then the argument for the operation of the fair dealing provisions must focus solely on the nature of the activity being undertaken by the university. In particular, it is unlikely that the university would be able to avail itself of the fair dealing defence for purposes of criticism or review, although such a purpose may well underlie the student’s use of the third party material. However, it is arguable that current concepts of ‘research’ (and, possibly, ‘study’) are sufficiently broad to encompass the dissemination of research outputs by means such as making ETD available for access through web-based repositories. In a recent report, The British Academy stated the following in relation to the broader meaning of research:

UK law has always provided for exemption from copyright for fair dealing in the course of research. There is, however, no statutory definition of research, or clarity on what differentiates the use of otherwise copyright material in research from its use in private study, or in criticism, or in review. Research involves the production of new ideas, whereas private study might represent only the consideration of existing ones. But this is a fine line indeed, and not one that it would seem appropriate for a publisher, or a court, to draw ... But research without the publication of the results is barely if at all distinguishable from private study, and there is little or no public benefit in the production of new ideas unless they are made publicly available.¹⁶²

reporting of news events. The purpose of Working Dog in the production of these programmes was the purpose of Ten. Consistently with the decisions of the UK Court of Appeal earlier referred to, the “purpose” referred to in ss 103A and 103B is to be ascertained objectively, and it was neither necessary nor appropriate for officers of Ten or of Working Dog to give evidence that they had a sincere belief that he or she was criticising a work or an audio-visual item or reporting news.’

¹⁶¹ ¹⁶¹ [2004] 1 SCR 339 [54].

¹⁶² The British Academy, *Copyright and Research in Humanities and Science* (2006), 9 <<http://www.britac.ac.uk/reports/copyright/index.html>> at 25 September 2006.

In the absence of clarity in either statute or case law, we focus on what we believe the position should be. We consider that the research exemption must extend to the publication of research. The exemption would be largely nugatory and the consequences seriously inimical to scholarship if it did not do so. We also consider that the distinction between non-commercial and commercial research should relate to the purpose of the research, rather than the purpose of the publication of the research.¹⁶³

To restrict the concepts of ‘research’ and ‘study’ to the narrow range of activities associated with collecting, reading, summarising and extracting parts of the material may unjustifiably limit the operation of this fair dealing provision. In the digital, networked environment in which research and study now occur and in which research and teaching processes are iterative and collaborative, communicating research findings to an online audience of colleagues and commentators is considered an integral part of the research and teaching process.

Argument 2: The University in communicating the ETD is engaged in an act of research broadly defined as an intermediary.

As explained, the University is either engaged in the act of communicating the ETD or assisting such communication. Amendments to the *Copyright Act* introduced as a result of the AUSFTA limit the liability (by way of limiting remedies available) for certain acts performed by intermediaries.¹⁶⁴ These provisions apply to ‘carriage service providers’ and provide for a ‘safe harbour’ from liability in defined circumstances. They are commonly called the ‘ISP safe harbour provisions’ and are modelled on similar provisions in the US *Digital Millennium Copyright Act 1998* (DMCA). These new provisions limit the remedies available against carriage service providers for copyright infringements that occur on their systems, as long as they comply with certain conditions.

There is currently some uncertainty as to whether universities may take advantage of this scheme. This uncertainty relates primarily to whether

¹⁶³ Ibid 10.

¹⁶⁴ *Copyright Act* ss 116AA-AJ Part V Division 2AA.

universities fall within the definition of ‘carriage service provider’, which for the purpose of the safe harbour provisions is drawn from the highly technical definition provided by the *Telecommunications Act 1997*. From 1997 to 2001 a determination by the then Minister for Communications, Information Technology and the Arts, Mr Richard Alston, under s 95 of the *Telecommunications Act* effectively excluded universities from being carriage service providers by stating that services provided by tertiary education institutions in connection with their research, educational and administrative functions were not carriage services. Since this determination was allowed to lapse, the general opinion seems to be that universities are nevertheless excluded from being carriage service providers because they do not provide their services ‘to the public’, as required by s 88 of the *Telecommunications Act*.¹⁶⁵ In late 2005 the Attorney General’s Department commenced a review of the scope of the safe harbour scheme which, among other things, sought comments on this issue. In making a submission to that Review the AVCC explained:

As the regime currently stands, only carriage service providers (within the meaning of the *Telecommunications Act*) can obtain the protection of the safe harbour regime. As most universities are not engaged in supplying a carriage service to the public but rather to their immediate circle (as that term applies under the *Telecommunications Act*) they do not qualify to take advantage of the safe harbour regime.¹⁶⁶

The Government is yet to announce the findings of this review. Until that point in time we must assume that Universities even if they could

¹⁶⁵ See generally: DEST, *Limitation on Remedies Available against Carriage Service Providers under Part V Division 2AA of the Copyright Act*, submission by the Department of Education, Science and Training to the Attorney General’s Review, October 2005.

¹⁶⁶ AVCC, *Safe Harbour Regime: Review of the Scope of Part V Division 2AA of the Copyright Act*, submission by the AVCC to the Attorney General’s Review, October 2005, <http://www.avcc.edu.au/documents/publications/policy/submissions/AVCC-SafeHarbourSubmission_OCT05.pdf>. It seems commonly accepted that the University of Queensland is the only Australian university that currently falls within the definition of ‘carriage service provider’: AVCC, *University IT Systems: Managing Liability for Transmitting, Caching, Hosting and Linking to Copyright Material* (2004) 2 <http://www.flinders.edu.au/isd/copyright/AVCC_resource_paper.pdf>.

satisfy the condition for enlivening the safe harbour provisions cannot take advantage of them because they are not carriage service providers.

One other suggestion is that any potential infringement of third party content by the University in the ETD process could be covered by the statutory educational licences which allow certain acts on the basis of equitable remuneration. Whether this is the case raises a number of difficult legal questions which deserve closer consideration. However, it is important to keep in mind that the statutory licences do not require remuneration where there is a fair dealing or use of an insubstantial part and as such close scrutiny of the material is the sensible starting point.

Protocols for the practical handling of ETD¹⁶⁷

In light of the foregoing analysis it is clear that universities are subject to the risk of copyright liability for the communication of ETD and as such need to put in place workable and effective compliance mechanism. The sensible way to approach these steps is to have the ETD candidate self manage the process from the very first day of their candidature. That is, the student would be asked to record all third party copyright materials included in the thesis, to make an assessment of the copyright status of these materials and to note this in their Copyright Compliance Table on a continuous basis. In managing these situations the following steps are suggested:

¹⁶⁷ See further, Damien O'Brien and Dr Anne Fitzgerald, *Copyright Guide for Research Students: What you need to know about copyright before depositing your electronic thesis in an online repository*, August 2007, OAK Law Project, including Copyright Compliance Table and Model Third Party Copyright Permission Requests available at <<http://www.oaklaw.qut.edu.au/files/Copyright%20Guide%20for%20Research%20Students.pdf>>.

1. **Identify all third party copyright materials** included in the ETD.
2. **Is there a substantial part?** Examine each item of third party copyright content included in the ETD to assess if its inclusion involves the exercise of acts (for example, reproduction, adaptation) in relation to a substantial part of the third party copyright content; where only an insubstantial part of any item of third party content is used, there is no need to take further steps as use of an insubstantial part is not an infringement and does not need to be authorised by the copyright owner. Establishing guidelines for what is a substantial part is integral to the risk management process. It is not possible to provide absolute and firm guidelines for all situations, but it must be understood that any figures stated in the guidelines will essentially become the de facto rule.
3. **Is there a fair dealing?** If a substantial part of an item of third party copyright content is included in the ETD, consider whether use of that part is justified under one or more of the fair dealing provisions.
4. **Does any other exception to copyright infringement apply?** For example it is not an infringement of copyright to take a photo of a sculpture or work of artistic craftsmanship that is on permanent public display,¹⁶⁸ so if a student includes an image of such a work in a public place there is no need to obtain permission from the owner of copyright in the publicly displayed work. A list of these kinds of miscellaneous exceptions which are relevant to the education sector should be compiled. A dated but useful starting point for understanding these exceptions is found in the Copyright Law Review Committee's (CLRC) reports, *Simplification of Copyright Act 1968 Part 1* (1998)¹⁶⁹ and *Copyright and Contract* (2002).¹⁷⁰

¹⁶⁸ *Copyright Act* s 65.

¹⁶⁹ See: <http://www.clrc.gov.au/agd/WWW/clrHome.nsf/Page/Overview_Reports_Simplification_of_the_Copyright_Act_Part_1>.

¹⁷⁰ See <http://www.clrc.gov.au/agd/WWW/clrHome.nsf/Page/Overview_Reports_Copyright_and_Contract>.

5. **Permission requested?** If after going through these steps there is still uncertainty about whether the use of the third party content in the thesis is authorised, a request should be sent to the copyright owner specifying the third party materials which are to be included in the thesis and the use to be made of that material and seeking express permission for such use; any licence obtained for the use of third party content must be broad enough to permit the thesis to be reproduced in digital form and communicated online (whether by the student, the university or a disciplinary repository). Since there will be doubt about whether the reproduction and communication of some materials included in theses is permissible, in some cases there will be no option but to seek express permission.

Adopting appropriate licences

In general, repositories will be seeking to rely on non-exclusive licences from owners of copyright in theses which they seek to place in the repository. The four types of licences listed below should be considered in relation to licensing issues for ETD.

Deposit licence – between the owner of copyright in the ETD and the ETD repository in order give certainty to repositories, in terms of what rights they have to store, manage and organise the ETD stored within the repository. The licence could also contain terms that reduce repository liability through disclaimers and indemnities.¹⁷¹

End user licence – the end user, in other words, the person who downloads a thesis, should be clearly informed about the specific activities of use and re-use that are permitted — under what is termed an End User Licence. For example, this would typically include activities such as browsing (reading on screen); downloading and printing; or possibly downloading and distributing copies in class. To ensure that end users are clearly informed of the uses they are permitted to make of ETD, it is

¹⁷¹ Examples of current deposit licences include Swinburne University of Technology *Access to Thesis* <<http://www.swin.edu.au/research/postgrad.htm>> and the National Library of Canada *Theses Non-Exclusive License* <<http://www.nlc-bnc.ca/obj/s4/f2/frm-nl59-2.pdf>>.

recommended that a standard, though flexible, protocol be adopted for end user licensing. For example, a straightforward approach would be for the ETD holder to license end users under one of the standard open content licences such as the Creative Commons (CC)¹⁷² or AEShareNet licence.¹⁷³

Third party licence – as explained at length above, where third party copyright content is included in the ETD it is necessary to confirm that rights to use the content have been granted by the third party copyright owner (in the absence of any exemption or exclusion from copyright infringement).¹⁷⁴

Publisher licence – a licence between the publisher and the ETD repository will be crucial where an ETD candidate has already assigned the copyright in all or part of their thesis, such as where they have had an article published prior to submitting the electronic thesis and dissertation.

CONCLUSION

The challenge for knowledge management lies in harnessing the enormous power of networked digital technologies. At the heart of this issue is best practice copyright management. What we have shown in this article is that to achieve this, institutions and people have to appreciate the variety of copyright management models that are emerging and how to employ them. If open access is a value we wish to promote, for social, economic and cultural reasons, institutions must articulate their commitment in clear policies. From this touchstone an effective copyright management framework can be built. At the end of the day, we must realise that better copyright management will provide us with more choices (including open access) but that it will not happen by default. It must be structured and managed. That is the challenge and the path forward.

¹⁷² See by way of example: Oleg Evnin's CC licenced Caltech doctoral thesis at <<http://resolver.caltech.edu/caltechetd:etd-06072006-174745>> at 13 July 2006.

¹⁷³ See <<http://www.aesharenet.com.au>>.

¹⁷⁴ For a current example see Queensland University of Technology, *Non-exclusive Licence Agreement for Inclusion of Third Party Copyright Material in ETD* <http://www.research.qut.edu.au/downloads/ADT_copyright_owner_request.doc>.