International Study on Copyright and Digital Preservation

June M. Besek  
Kernochan Center for Law, Media and the Arts  
Columbia Law School  
jbesek@law.columbia.edu

Jessica Coates  
ARC Centre of Excellence for Creative Industries and Innovation  
Queensland University of Technology  
j2.coates@qut.edu.au

Brian Fitzgerald  
Law Faculty  
Queensland University of Technology  
bf.fitzgerald@qut.edu.au

William G. LeFurgy  
Office of Strategic Initiatives  
Library of Congress  
wlef@loc.gov

Wilma Mossink  
SURFfoundation  
A mossink@surf.nl

Adrienne Muir  
Department of Information Science  
Loughborough University  
A.Muir@lboro.ac.uk

Christopher D. Weston  
US Copyright Office  
Library of Congress  
cwes@loc.gov

Abstract
The International Study on the Impact of Copyright Law on Digital Preservation reviewed digital preservation activities and the current state of copyright and related laws and their impact on digital preservation in Australia, the Netherlands, the United Kingdom and the United States. In many cases, digital works are not being preserved in any systematic way, in part because digital preservation triggers copyright concerns in a way that analogue preservation does not. All the countries have some form of preservation exception. However, there is an inconsistent approach in the details and uncertainty as to how they may apply in the digital environment. None of the countries have a uniform national system collecting digital materials. Technological protection measures and private contracts may in some cases present significant practical barriers to preservation. Current approaches to address these legal barriers are ad hoc and include approaching individual rights holders and some use of model licences. There are as yet no effective solutions to the issue of orphan works. Recommendations of the study include suggestions for drafting national policies and adapting laws with the aim of allowing preservation activities to be undertaken as necessary and in accordance with international best practice standards and to allow a uniform national system for the collection of digital materials by relevant state and national collecting institutions.

Background to the Study
The aims of this study were to: review the current state of copyright and related laws and their impact on digital preservation; to make recommendations for legislative reform and other solutions to ensure that libraries, archives and other preservation institutions can effectively preserve digital works and information in a manner consistent with international laws and norms of copyright and related rights; and to make recommendations for further study or activities to advance the recommendations.

The study partners were the Open Access to Knowledge Law Project, Faculty of Law, Queensland University of Technology, Australia; the SurfFoundation in the Netherlands; the Joint Information Systems Committee in the UK and the US Library of Congress, National Digital Information Infrastructure and Preservation Program. Each of the study partners surveyed the situation in their own country and developed detailed country recommendations. The partners then developed a set of joint recommendations at a more general level for preservation institutions, legislators and policy makers. The partners also held a workshop in cooperation with the World Intellectual Property Organization in Geneva to present and discuss the study findings and recommendations, which have been published in a joint report (Besek, J.M. et al., 2008).

Digital Content, Digital Preservation and Copyright

Increasingly, radio and television programmes, musical compositions, films, maps, reports, stories, poems, letters, scholarly articles, newspapers and photographs are “born digital.” There is also a growing trend of converting so-called analogue material to digital form so that it can be easily and efficiently stored, transmitted and accessed. New forms of authorship, such as web sites, blogs and “user-generated content” of all kinds are flourishing in the dynamic environment of the Internet. These new works reflect the world’s culture as much as their analogue predecessors.

Embodying creative works in digital form has the unfortunate effect of potentially decreasing their usable lifespan. Digital information can be ephemeral: it is easily deleted, written over or corrupted. Because information technology such as hardware, software and digital object formats evolves so rapidly, it can be
difficult to access and use digital materials created only a few years ago.

Preservation is critical in the digital context to ensure continued long term access to historically, scientifically and socially valuable materials, so that future generations will be able to benefit from works created now. Libraries, archives and other preservation institutions have been responsible for much of the preservation that has occurred in the past. It is clear, however, that in many cases the digital equivalents of those works preserved in the past are not being preserved in any systematic way, in part because digital preservation triggers copyright concerns in a way that analogue preservation does not.

Digital preservation refers broadly to the series of managed activities necessary to ensure continued access to digital materials for as long as necessary, such as collection, description, migration and redundant storage. Digital preservation activities are undertaken by a range of preservation institutions, including libraries, archives and museums. Such institutions may operate independently or may be located within other bodies such as educational institutions, government entities or media organisations.

All of the countries discussed in this paper are members of the Berne Convention for the Protection of Literary and Artistic Works, which provides the foundation for governance of copyright law internationally. In addition, all have joined, or have indicated that they intend to join, the treaties that provide the principal modern updates to the Berne Convention – the World Intellectual Property Organization (WIPO) Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT), as well as the World Trade Organization’s Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs). Together, these agreements require members to provide authors of literary and artistic works with a number of exclusive rights with respect to their works, including the rights of reproduction, adaptation, broadcasting, public performance, communication to the public and distribution to the public, subject to certain limitations and exceptions. In addition, performers of phonograms (also referred to in this paper as sound recordings) are provided with a right of fixation, and performers and producers of phonograms are granted rights of reproduction, distribution, rental, and making available their fixed performances. All of these rights are subject to limitations and exceptions.

Many of the activities involved in digital preservation, such as making multiple copies of a work, distributing copies among multiple institutions, and migrating works to new technological formats and media, involve the exercise of exclusive rights. For example, reproduction is a fundamental activity of digital preservation. The right of distribution may be implicated by disseminating digital copies to multiple institutions to protect against catastrophic loss. And, to the extent access is required for digital preservation best practices, that access may implicate the right of “making available,” or of public performance or display. In any case access to content – either by users or by institution staff to verify its integrity –may entail making a copy on a screen and in computer memory. Other rights that may need to be considered are performance rights, rights in typographical arrangements, database rights (in European Union Member States, for example) and the moral rights of authors and creators.

Digital technologies have also changed the manner in which works are distributed and acquired in ways that create tension between long term preservation needs and copyright laws. Previously, copyright works were marketed in tangible “hard copy” form, and libraries, archives and other preservation institutions could acquire them on the market (or, in some cases, pursuant to legal deposit laws) for current use and long term preservation. But now, many works are never produced in hard copy. Some works – such as web sites and various types of “user-generated content” available on the Internet – are not made available for acquisition, but only for listening or viewing. Those works cannot be preserved by a preservation institution unless they can be copied or otherwise acquired. Other types of works such as e-journals are available on the market, but the terms of use may not permit the creation or retention of archival copies.

The unauthorised exercise of the rights in a work may result in infringement of copyright under the law of the various jurisdictions unless:

- the material is not protected by copyright (i.e., it is in the public domain);
- digital preservation is undertaken by the owner of copyright in the work or with the permission of the owner; or
- the copying or other use is permitted under an exception in the copyright law or related legislation (e.g., pursuant to an exception for libraries, archives or other preservation institutions or legal deposit).

The Berne Convention for the Protection of Literary and Artistic Works (1886) allows exceptions to the right of reproduction under certain conditions, known as the “three-step test”: member countries may permit limited copying of literary and artistic works for certain purposes so long as it “does not conflict with a normal exploitation of the work and does not unreasonably prejudice the legitimate interests of the author” (Art. 9(6)). The WIPO Copyright Treaty builds upon Berne’s three-step test by providing that contracting parties may allow limitations or exceptions to the rights granted under that treaty or under the Berne Convention in “certain special cases that do not conflict with a normal exploitation of the work and do not unreasonably prejudice the legitimate interests of the author.” (Art. 10). In other words, the
WIPO Copyright Treaty makes the three-step test applicable to exceptions and limitations with respect to any of the rights granted to authors under either that Treaty or the Berne Convention. The WPPT similarly makes the three-step test applicable to rights granted under that treaty. Thus, while these treaties do not mandate any exceptions or limitations specific to preservation activities or preservation institutions, the treaties do permit such exceptions or limitations, provided they comport with the three-step test.

The EU Information Society Directive (Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonization of certain aspects of copyright and related rights in the information society) permits, but does not require, European Union Member States to provide exceptions and limitations for certain activities of publicly accessible libraries, educational establishments or museums, or by archives. The permitted exceptions and limitations are: (1) for specific acts of reproduction of copyrighted works which are not for direct or indirect economic or commercial advantage, art. 5(2)(c); and (2) for use by communication or making available of copyrighted works in their collections, for the purpose of research or private study, to individual members of the public by dedicated terminals on the premises of such establishments, provided those works are not subject to purchase or licensing terms to the contrary, art. 5(3)(n).

Study Findings

Preservation and Other Relevant Exceptions

The four countries surveyed all have exceptions in their copyright and related laws that allow reproduction (and sometimes other activities) in connection with the preservation of protected works. However, many of the exceptions were enacted in an analogue era and do not adequately accommodate all of the activities necessary for digital preservation. The existing exceptions for preservation apply inconsistently across the jurisdictions with regard to which institutions may make use of them, the materials they apply to, the degree of copying they allow, and whether and how preservation copies may be accessed by the public.

For example in the UK, the exception refers to making “a copy”, where multiple and serial copying over time may well be required. Preservation exceptions may not apply to recorded sound or moving images. Exceptions may only refer to not for profit libraries and archives, so museums are excluded. Some countries have begun the process of changing their laws to create exceptions to allow digital preservation by libraries, archives and other preservation institutions, but applying the preservation exceptions that currently exist to digital preservation is often an uncertain and frustrating exercise. For example, in the USA, libraries and archives exceptions allow only up to three copies for preservation and replacement, which is inadequate to maintain works in the digital environment.

None of the countries surveyed have provisions for so-called orphan works. These are works whose right holders cannot be identified or located. This is a particular issue for audiovisual material, photographs and illustrations. For example, the most effective method of preserving fragile recordings or films may be to digitise them. If the preservation exception does not extend to these types of material, preserving institutions will have to seek permission from rights owners to preserve them. If the rights owners cannot be traced, the material cannot be digitised, unless there is some other provisions, such as a fair use exception. The Australian and UK fair dealing exceptions only allow limited copying for a narrow range of purposes or news reporting. In the United States, libraries and archives are relying on the more flexible fair use exception, but the extent to which fair use permits preservation and related activities is uncertain and has not yet been addressed by US courts.

Acquisition of Digital Content for Preservation

Three of the countries that participated in the study have laws in some form that require the deposit of publicly available copyright materials for the benefit of one or more preservation institutions. Deposit in the Netherlands is by voluntary agreement only. None of the countries, however, has a uniform national system for collection of digital materials, either through a compulsory or a voluntary scheme. While the UK has recently updated its legal deposit legislation, it will require further regulation to extend legal deposit to non-print material. The federal law in Australia only extends to print and US law does not extend to most material made available only online.

The use of technological protection measures to control access to, and use of, digital content may also prevent digital preservation since circumventing such measures may be prohibited by law. Even if preservation institutions are able to circumvent TPMs, the mechanism for doing so may be impractical, as it may involve appealing to the government. The creation and supply of circumvention tools may be illegal anyway. In any case, much digital content is made available through contractual agreements, which over-ride the legal provisions in most circumstances.
Approaches to the Challenges for Digital Preservation

There has been some activity in the study countries related to legal reform. The Gowers Review of intellectual property regimes in the UK made some recommendations on preservation of digital content, which has led to a government consultation on the Gowers recommendations. In the USA, the Section 108 Study Group has made detailed recommendations for changes to US law. There have been a number of reviews of Australian copyright law and policy in recent years. The Netherlands is the exception in that there are neither proposals nor initiatives for legal reform.

Libraries, archives and other preservation institutions have responded in different ways to the challenges that copyright laws currently present for digital preservation. For example, entities in all of the surveyed jurisdictions have embarked upon projects that rely on collaborative agreements between preservation institutions and right holders. These include the National Library of Australia’s PANDORA web archiving project, the Dutch Royal Library’s deposit agreements with publishers, the British voluntary deposit schemes and US NDIIPP activities. These agreements are important both for the materials they save and for the best practices they engender. Such arrangements are much more prevalent for some types of digital works than for others, however. For example, the most prominent international cooperative archiving and preservation initiatives, LOCKSS and Portico, have largely dealt with scholarly journals so far.

Copyright is a significant legal barrier to the preservation of orphan works in all the study countries. Preserving institutions can make collaborative agreements with right holders only if they know or are able to find out who the right holders are and are able to contact them. Many digital works by their nature are prone to becoming orphaned as they are created informally and perhaps collectively. Examples of such works include web pages and wikis. Australia has very limited provision for orphan works. UK law has no general provision for works whose right holder cannot be identified or traced. In the USA, the Copyright Office has made recommendations for reform to deal with orphan works. Orphan works legislation based on these recommendations was introduced in 2006, but not passed by Congress. It has subsequently been re-introduced and is pending.

Conclusions and Recommendations

Digital preservation is vital to ensure that works created and distributed in digital form will continue to be available over time to researchers, scholars and other users. Digital works are often ephemeral, and unless preservation efforts are begun soon after such works are created, they will be lost to future generations. Although copyright and related laws are not the only obstacle to digital preservation activities, there is no question that those laws present significant challenges. Further complicating matters are the evolving commercial markets for digital works, and the apprehension among creators and right holders concerning the impact that further exceptions might have on the market for their works.

Legal reform is needed to ensure comprehensive preservation of the vast range of copyrighted materials now being made available in digital form. The study includes specific recommendations for amendments to the laws in each country. The joint recommendations outlined here focus on amendments to national copyright and legal deposit laws in general that will help to bring these laws into the digital age, whilst being consistent with the legitimate interests of right holders. There are also recommendations for further research concerning issues related to access to preservation copies, and on the relationship of contracts to copyright exceptions (and in particular, to exceptions that facilitate digital preservation).

The study recommended that countries should establish laws and policies to encourage and enable the digital preservation of at risk copyrighted materials. These laws and policies should, at a minimum:

- Apply to all non-profit libraries, archives, museums and other institutions as may be authorised by national law (hereafter, “preservation institutions”) that are open to the public, provided they do not undertake these activities for any purpose of commercial advantage.
- Apply equally to all categories of copyright materials, including literary, artistic, musical and dramatic works, as well as to motion pictures and sound recordings.
- Apply equally to copyrighted materials in all media and formats, whether hard copy or electronic, born digital or digitised for preservation.
- Allow preservation institutions to proactively preserve at risk copyright materials before they deteriorate, are damaged or are lost, and before any software or hardware required to access and
use the material becomes obsolete, subject to measures appropriate to protect the legitimate interests of right holders.

- Allow preservation institutions to undertake preservation activities as necessary and in accordance with international best practices for digital preservation, including:
  
  - Reproduction and retention of such copies as may be necessary for effective digital preservation;
  - The serial transfer of copyrighted works into different formats for preservation in response to technological developments and changing standards, and
  - The communication of works within the preservation institution for administrative activities related to preservation, or between the preservation institution and legally authorized third party preservation repositories as necessary for the purpose of maintaining redundant preservation copies to protect against catastrophic loss.

All of the foregoing should be subject to measures appropriate to protect the legitimate interests of right holders.

- Enable relevant preservation institutions comprehensively to preserve copyrighted materials that have been made available to the public in digital form, by means of
  
  - A legal deposit system,
  - The legal ability to harvest publicly available online content for preservation purposes,
  - Incentives for contractual arrangements for preservation activities, and/or
  - Some combination of the foregoing.

It is also recommended that

- Preservation institutions should work with right holders to develop workable approaches to the digital preservation of copyright materials protected by technological measures such as encryption or copy protection.
- Preservation institutions should develop best practices for digital preservation.

Although not specifically included in the recommendations of the study, participants at the WIPO workshop also identified the issue of orphan works as one that should be addressed with some urgency.

The study recommended that further research should be undertaken on the national level to re-examine the interaction between copyright and private agreements as it relates to digital preservation. The research will help in determining whether common approaches to these issues can be developed.

**References**


**Acknowledgements**

The authors wish to thank Annemarie Beunen, Erin Driscoll, Michelle Gallinger, Neil Grindley, Helen Hockx-Yu, Scott Kiel-Chisolm, Paul Koerbin, Abigail Potter, Mary Rasenberger, Sarah Waladan.