



Literature review on the use of licenses in library context, and the limitations this creates to access to knowledge

By Svetlana Yakovleva, LL.M.

Table of Contents

Table of Contents	1
I. Introduction	3
II. Fundamental issues with digital content.....	4
1. Loss of control over content acquired through licensing.....	5
2. Contract law instead of copyright law regulation	6
III. Specific limitations of licensing in the library context	7
1. Difficulties to locate rightholders.....	8
1.1 Fragmentation of copyright ownership	8
1.2 Unpublished and orphan works	8
2. Restrictive terms of licensing agreements.....	10
2.1 Limitation of patrons' rights	11
2.2 Interlibrary loan	13
2.3 Preservation issues.....	14
2.3.1 Technology specific risks of loss or damage	15
2.3.2 Duration of licenses	16
2.3.3 Limitation of the right to archive	17
2.3.4 No warranty of integrity of licensed content.....	18
2.3.5 Administrative and organisational burdens of long-term planning	18
2.4 Overriding or redefining the scope of statutory exceptions and limitations.....	19
2.5 Enforcement by technical protection measures.....	23
2.6 Privacy risks.....	25
2.6.1 Monitoring of patrons' activities.....	25
2.6.2 Collection, analysis and sharing information with third parties	26
3. Increased financial burden on libraries	26
3.1 Price discrimination.....	27
3.2 Rising periodic licensing fees	27



3.2.1 Licensing of academic journals.....	27
3.2.2 Licensing of e-books	29
3.3 Limited availability of budgets for other items.....	29
3.4 Licensing fees in of orphan works context.....	30
4. Licensors' market power	30
4.1 Economic concentration.....	31
4.2 Challenges connected with forming consortia	31
5. Transaction costs	32
III. Conclusion	33
1. Summary of findings	33
2. Recommendations for further research	34
Annex 1 List of reviewed literature	36
1. Academic and Grey Literature.....	36
2. Legislation and case law	39
3. Internet resources.....	40



I. Introduction

The dual purpose of this literature review is, first, to identify and summarise limitations that result from the use of copyright licences in a library context, and, second, to illustrate these limitations with specific examples available in both the academic and grey literature. The licences discussed in the reviewed literature deal essentially with access to, and use of, digital content.

The scope of this literature review includes literature that concerns limitations in the context of the licensing of textual material (journals and e-books) by both academic and public libraries. The discussion draws a clear distinction between limitations faced by different types of libraries. As Machovec notes in relation to the licensing of e-books, there are substantial differences in the way this type of content is licensed to academic libraries on the one hand, and public libraries on the other, including different vendors/distributors and different business models. [Machovec, 2013:391]

This literature review takes account of legal-academic books and articles, articles published by librarians, research papers conducted or commissioned by governmental authorities, statistical research conducted by commercial organisations, statements by libraries and their organisations, and information available on their websites. In addition, the literature review also considers important court cases as empirical evidence of the impact of certain limitations. It is worth mentioning that the legal academic literature, such as work by Elkin-Koren, Gervais and Guibault, mostly focuses on conceptual issues and only rarely identifies limitations of copyright licensing specific to the library context. Therefore, many of the sources mentioned in the review refer either to the works of librarians, such as Farb and Machovec, or policy research such as that commissioned by WIPO, the Australian Government, the UK Copyright Office or the US Library of Congress. Although the main focus of this literature review is on *practical* limitations of copyright licensing confronted by libraries, where necessary the literature review also provides the international and national legal background of such limitations.

The research underlying this literature review took account of available literature from the late 1990s until present. However, with rare exceptions, most of the sources included in the final version of the literature review were published after 2005.

Depending on the type of digital content concerned, libraries conclude licensing agreements with different types of licensors, such as collective management organisations (CMOs), publishers, aggregators (e.g. HeinOnline, ebrary, JSTOR) or, rarely, with the authors directly. Unless it is necessary, given the context, or is a part



of a quotation, this literature review does not generally distinguish between different types of licensors.

In the course of preparing this literature review, the author conducted research mostly in English. This language bias explains that the geographical picture reflected is skewed towards English speaking countries, namely the US, the UK and Australia.

This literature review uses a deductive approach. It starts in Chapter II with a brief discussion of the fundamental copyright law issues that underlie the limitations resulting from licensing in the digital context. Chapter III focuses on different types of licensing-based limitations in the library context. It begins by discussing difficulties connected with locating rightholders authorised to conclude licensing agreements (section III.1). It then summarises different types of restrictive terms contained in licensing agreements concluded by libraries (section III.2). Next, it outlines other challenges that libraries face in connection with the licensing of digital content, such as the rising costs of maintaining their collections (section III.3), the issue of market power in favour of licensors (section III.4), and transaction costs (section III.5). The literature review concludes with a summary of findings and recommendations for further research in chapter IV.

II. Fundamental issues with digital content

It is generally acknowledged that “libraries have undergone a major shift in collection development practice in the last twenty years, moving a substantial amount of their collections budgets from purchasing content to licensing it” [Cross, 2012:203]. For example, a study conducted in the US in 2006 indicates a 600% rise in the use of licensing agreements between 1994 and 2005 [Farb, 2006]. Already in 2006 in the US, Farb shows, libraries acquired, on average, 69.4% of their resources solely in digital or online form [Farb, 2006:table 1]. Machovec notes that although in the late 1990s many publishers still allowed libraries to continue receiving paper copies for a discount in addition to the online version, over time most academic libraries cancelled the majority of their print subscriptions. One of the underlying reasons for this, as Machovec reports, was the desire to lower costs [Machovec, 2015:72]. A more recent study conducted by Primary Research Group via a survey of 41 academic libraries shows that research universities had corresponding print copies for only an estimated 25% of the e-books in their collection [Primary Research Group, 2016 (summary of report)].

Before turning to the specific challenges that academic and public libraries face as a result of this digital shift, two fundamental problems at the root of those challenges are worth mentioning. The first is the loss of control over content due to the shift to licensing; the second is the shift to private regulation of allowed uses by contract, instead of by (public) copyright law.



1. Loss of control over content acquired through licensing

When it comes to textual content, libraries traditionally acquired books and journals in paper form. Acquisition of an item automatically transferred the ownership of this item (although not copyright) to the library. Copyright laws provided for special mechanisms, such as the first sale doctrine and statutory exceptions and limitations that ensured that rightholders could not restrict the ability of libraries to provide access to knowledge for their patrons at an affordable price. Digital material, however, is acquired under licensing contracts that only provide a right of access (rather than ownership) of this work, under the conditions contained in the terms and conditions of the license.

Difficulties libraries face because of this shift are to a large extent country-specific. They tend to be determined by the intricacies of copyright legislation in each legal system. In the US, for example, public lending of physical products is safeguarded by the first sale doctrine (an analogue of the exhaustion doctrine in the European Union). This doctrine ensured that a library had a legal right to lend a book (or other content) to its patrons, once it had bought it¹. In US law, this doctrine does not apply to digital content [Cross, 2012:206-207, Geist, 2012:64, Walters, 2013:193]². This puts libraries “at a distinct disadvantage when it comes to providing access to digital information” [Geist, 2012:65]. In addition, US judicial doctrines have recently developed, under which the issue of whether a contract governing access to digital content is a license or a sale of a digital copy (by analogy with a physical item) is determined solely on the basis of the terms of such contract. This, according to Geist, “tilts the license-sale dichotomy heavily in publishers’ favour” [Geist, 2012:88]. Walters notes that many e-book contracts “specifically prohibit the transfer of content to anyone other than the original lessee” [Walters, 2013:193].

Thus, in the US (and other countries following the same legal tradition), the most crucial and far-reaching legal and practical consequence of licensing vs sale of content in the library context is that “licensing content removes library ownership from the legal equation” [Cross, 2012:203]. “A license merely grants certain rights to content, pursuant to certain terms, whereas an actual sale, subject to the first sale doctrine, limits the rights a copyright holder has to the work. Licensing results

¹ *Kirtsaeng v. John Wiley & Sons, Inc.*, 133 S.Ct. 1351 (2013).

² *Capital Records, LLC v. ReDIGI Inc.*, 934 F.Supp.2d 640 (S.D.N.Y. 2015) (“Put another way the **first sale defense is limited to material items**, like records, that the copyright owner can put in the stream of commerce.” *Id.* at 655 (emphasis added).”).



in a reliance on contractual obligations rather than copyright laws for determining how libraries may lend, copy, archive, and preserve content" [Cichocki, 2007-2008:38].

The situation is different in the European Union (EU). Under EU law, sale or transfer of ownership of the original or copies of the work only exhausts the distribution right, not the lending right, which is considered as an independent fragment of rightholders' 'bundle' of copyright rights [Article 4(2) of the Infosoc Directive, Article 1(2) of the Rental and Lending Directive]. Public lending of physical copies by libraries, however, was traditionally based on a specific statutory public lending exception that EU member states can implement in national laws, provided that at least authors obtain a remuneration for such lending [Article 6(1) of the Rental and Lending Directive]. Whether the public lending exception applied to digital content, and if so, to what kind of activities (providing onsite access on library premises and/or remote access) was unclear until very recently. A recent judgement of the Court of Justice of the European Union (CJEU) clarified that the public lending right/exception applies equally to lending of digital copies of books, provided such "lending is carried out by placing that copy on the server of a public library and allowing a user to reproduce that copy by downloading it onto his own computer, bearing in mind that only one copy may be downloaded during the lending period and that, after that period has expired, the downloaded copy can no longer be used by that user." Another important condition for the public lending right/exception to apply to e-lending is that the copy of the e-book should be obtained from a legal source [Case C 174/15, *Vereniging Openbare Bibliotheken v Stichting Leenrecht*, paras 54, 72]. It remains unclear how this development will affect compensation schemes imposed by licensors on the libraries under the licensing contracts.

2. Contract law instead of copyright law regulation

Another fundamental issue with digital content is that libraries only acquire a right of access to such content, rather than ownership thereof, under a licensing contract with a private party. Consequently, when compared to physical copies of works, the specific application of copyright law to digital content is determined more by private licensing terms and conditions, than by public copyright law. As licenses become more wide-spread, "the model for online publishing is shifting from a property-based system of transactions governed by copyright law to a contract-based system of transactions governed by whatever terms the market will bear, even if such terms do not further the pro-dissemination values inherent in [copyright law]" [Olson, 2006: 88].



This difference plays out on several levels. When digital content is licensed, the licensor retains ultimate legal control over it. Hinkes notes that “what has changed from the analogue to the digital age is the ability of copyright holders to control access to their works on a more exacting basis through access controls” [Hinkes, 2007:709]. Digital content is generally not physically stored on the library’s “digital shelf” and owned by the library [Cross, 2012:204]. Thus, not only are libraries often unable to determine independently what they can or cannot do with the licensed content, but they also have to bear the risk that the licensed content may become unavailable for their patrons due to technical or other issues on the licensor’s side [Cross, 2012:204].

According to Lipinski, another immediate risk of the incursion of private regulation via contract law (licensing) as compared to copyright law is that a library “exists in a climate of increasing information adhesion,” which, from the scholar’s perspective, signifies “the tendency for actors to employ external forces (primarily legal but also technological, economic, etc.) to inhibit the natural internal desire to access and disseminate information.” Information adhesion, he continues, leads to a “fundamental shift occurring in the nature of the interchange of information access, use and dissemination” [Lipinski, 2014:6-7]. Contracts for digital content concluded by libraries are rarely fully negotiated; they are often based on pre-determined standard form contracts prepared by the licensors. With respect to practices in the US, the Section 108 Study Group noted in this respect that “[m]any licenses to electronic content are in the form of a click-wrap or shrink-wrap agreement, where the library or archives is given only a “take it or leave it” option with no opportunity to affect the terms of the bargain. ... By and large, courts have held that they are enforceable, at least where affirmative assent to the terms is manifested” [Section 108 Study Group Report, 2008:122].

III. Specific limitations of licensing in the library context

This section discusses different aspects inherent to licensing that affect libraries’ ability to provide access to knowledge to their patrons. It is worth highlighting that the challenges connected with licensing do not always originate in the licensing contracts *per se*. Although a substantial part of this review is devoted to discussing the limitations imposed by licensing terms and conditions, it is worth mentioning at the outset that other aspects of licensing arrangements also create a hindrance to libraries’ efforts to fulfil their mission. The reviewed literature shows that not all digital content is apt for licensing in the first place. For example, difficulties may arise in locating the holders of the (fragments) of copyrights that libraries intend to license, as in the case of orphan works. In addition, such issues as the market structure of publishing and copyright management industries, and transaction costs of negotiating, executing, and managing licensing contracts constitute additional limitations on libraries’ activities in the digital age.



1. Difficulties to locate rightholders

The frequent impossibility or prohibitive costs of locating the rightholder(s) for copyrighted content mean that a significant proportion of copyright material is not suitable for licensing. Two specific issues are discussed in the reviewed literature in this respect. The first relates to the fragmentation of copyright ownership. Fragmentation is inherent in the structure of copyright law in general; it applies to all types of works; and it is not specific to the context of libraries. The second issue arises in relation to certain types of works, namely unpublished and orphan works. It is especially acute in the library context because libraries are typically endowed with a public function of preservation of knowledge and cultural heritage.

1.1 Fragmentation of copyright ownership

Irrespective of the legal system, copyright is traditionally described as a bundle of rights that include the rights to reproduction, public performance, communication to the public, etc. [Gervais, 2010: 10] Copyright does not create, or no longer creates a single “copy-right.” Of the collection of rights created by modern copyright, different so-called sub-rights can be spread across many rightholders [Gervais&Maurushat, 2003:20]. Fragmentation of rights often makes the rights clearance process a challenge.

In the general copyright context, as Gervais notes, a single use of a copyright work or object of a related right (e.g. performance, recording) often requires multiple authorisations (right fragments) from several different right holders [Gervais, 2010: 10]. These different fragments of rights over a single copyrighted work within a particular country are often managed by a number of collective management organisations (CMOs). [Gervais, 2010: 8]. Such management is (still) organised around those traditional fragments (reproduction, communication to the public, etc.). It is often the case that one CMO licenses the right of communication to the public/public performance, while another licenses the right of reproduction (for musical or textual works) [Gervais, 2010:11].

In the library context, as the reviewed literature suggests, such rightholders could be authors, publishers, aggregators (databases of literature such as HeinOnline, JSTOR, Ebrary-Proquest) or CMOs. The literature does not identify whether there is a fragmentation problem specific to the library context. Therefore, this review does not make a meaningful distinction between these actors, unless such a distinction is necessary or constitutes a part of a quotation.

1.2 Unpublished and orphan works

In order to obtain a license a library must be able to identify and locate the holders of the rights in those works (or their representatives) that the library would



like to “acquire.” The absence of registration (and other formalities) in the field of copyright and the extreme term of protection (compared to most other intellectual property rights) make it costly - and occasionally functionally impossible - to identify the right holders in many protected works, especially those that do not, or no longer have any real commercial value. The literature identifies two specific situations in which locating rightholders would be a particularly difficult task, namely the case of orphan works across different legal systems, and the specific case of unpublished works in Australia due to the peculiarities of its copyright legislation.

The scale of the orphan works problem is impressive, as arguably, orphan works constitute a large part of many library and archive collections. According to Hansen, in the US “[o]rphan works make up a large part of library and archive collections—some estimates numbering them in the millions for some large archival collections—but only a fraction are currently available online” [Hansen, 2016:2].

Australia’s National and State Libraries also contain significant amounts of unpublished orphan works. Depending on the collection, orphan works make up anywhere between 10% and 70% [Draft Report on Intellectual Property Arrangements, 2016:80-81] of all works held. The British Library points to findings by the ARRoW study of an orphaning rate of 40% in some EU archives in 2011 [Hargreaves, 2011:38]. Hargreaves notes that orphan works raise particular difficulties in the context of mass digitisation by libraries and archives because they are unable to find rightholders of these works to obtain a license, and in some cases, it is also not clear whether the work is still protected by copyright [Hargreaves, 2011:39].

Some jurisdictions, such as the EU, have adopted legislation (Directive 2012/28/EU of 25 October 2012 on certain permitted uses of orphan works) or introduced special schemes for orphan works (extended collective licensing (ECL) in Nordic countries, or licensing mechanism, such as the one applicable to “unlocatable right holders” administered by the Copyright Board of Canada). Several other countries, such as the US, do not have statutory provisions on orphan works [Hansen, 2016:3]. The main reasons why libraries do not digitise and make available orphan works online in the US is the risk and associated uncertainty connected with potential large statutory damage awards payable to rightholders that could not be located at the moment of digitisation and subsequent making available, but came forward with a copyright infringement claim after digitisation and making available took place [Hansen, 2016:2]³.

³ U.S. COPYRIGHT OFFICE, REPORT ON ORPHAN WORKS 15 (2006) (“Many users of copyrighted works who have limited resources or are particularly risk-averse have indicated that the risk of liability for copyright infringement, however remote, is enough to prompt them simply to not make use the work. *Such an*



A particular problem with locating rightholders of unpublished works exists in Australia. According to the 2016 Draft Report on Intellectual Property Arrangements in Australia, this creates a serious barrier to the preservation and presentation of such works to the public. The Draft Report explains that this problem is a result of the peculiarity of Australia copyright law that, unlike UK, Canada, New Zealand, the US and much of the European Union, protects unpublished works in perpetuity. Therefore, the permission of the author or his/her heirs is generally required before the unpublished material can be digitised or used in public exhibitions [Draft Report on Intellectual Property Arrangements in Australia, 2016:118]. The Draft Report highlights that unpublished materials, including diaries, letters, journals, recipes and sketches, constitute a large part of libraries' and archives' collections. According to the submission of Australian Digital Alliance included in the Draft Report, as of 2015, 14 Australian universities (over 20 collections covering roughly 1/3 of the university sector) cumulatively held over 12.9 km of unpublished works, or approximately 103,904,000 pages, in their collections [Draft Report on Intellectual Property Arrangements in Australia, 2016:80-81, 118].

Submissions quoted in the Draft Report contend that "tracking down rights holders of unpublished works is a complex and costly barrier to displaying, digitising and publishing historical materials and conducting research" [Draft Report on Intellectual Property Arrangements in Australia, 2016:118]. In many cases, locating all the heirs (and heirs of heirs) is almost impossible [Draft Report on Intellectual Property Arrangements in Australia, 2016:118]. Similar concerns were also raised by the Australian Law Reform Commission in 2013. It reports that, according to its estimates, the National Library of Australia held 2,041,720 unpublished items in its collection, use of which would support the "general interest of Australians to access, use and interact with content in the advancement of education, research and culture" [Australian Law Reform Commission, 2013: para 12.41].

2. Restrictive terms of licensing agreements

The limited scope of rights that libraries obtain under licensing agreements, as compared to the rights they have in relation to content in physical form under the first sale doctrine and copyright exceptions and limitations, is one of the major issues highlighted in the literature. This is the result of a variety of restrictive licensing terms in contracts that libraries are often forced to conclude with licensors of digital content. The main problem here is that by including restrictive terms,

outcome is not in the public interest, particularly where the copyright owner is not locatable because he no longer exists or otherwise does not care to restrain the use of his work.")



licensors do not transfer to libraries the whole bundle of copyright rights, but only some rights, to use on a temporary basis. In addition, they can (or try to) override statutory exceptions and limitations or redefine the scope of unclear statutory provisions. For example, the American Library Association, that has both academic and public libraries among its members, states on its official website that “[t]he usual e-book license with a publisher or distributor often constrains or altogether prohibits libraries from archiving and preserving content, making accommodations for people with disabilities, ensuring patron privacy, receiving donations of e-books, or selling e-books that libraries do not wish to retain.”

Contract law that governs restrictive licensing terms, at least in Europe and the US, does not typically make such licensing terms unenforceable [Elkin-Koren, 2001:193, 198]⁴.

This review of the available literature shows that licensing agreements signed by libraries not only can limit the rights that they typically have in relation to physical copies of works, but can also affect the rights of libraries' patrons, such as the right to access to information and the right to privacy and personal data protection. It should be noted that the literature identified in the course of this review predominantly (but not exclusively) contains examples of restrictive terms in licensing agreements of academic libraries. This, however, does not *per se* imply that these issues are not relevant for public libraries. Some evidence, albeit scarce in many cases, suggests that most of the issues connected with restrictive licensing terms are equally relevant in the context of public libraries.

2.1 Limitation of patrons' rights

Because licensing terms negotiated by libraries in respect of digital content are often expressed in terms that are meant to be binding on patrons, licensing poses difficulties also for patrons.

With respect to academic libraries, Cichocki notes in general that “license agreements between publishers and academic libraries typically include terms that restrict access and use of digital content more extensively than federal copyright law” [Cichocki, 2007-2008:40]. For example, Farb shows that license agreements with academic libraries often contain a limitation of the type of patrons who can get access to digital content. This is done by limiting access to licensed content only to the so-called “authorized users” that are often defined

⁴ See also, *Vernor v. Autodesk, Inc.*, 621 F.3d 1102, 1112 (9th Cir. 2010), cert. denied 132 S. Ct. 105 (Oct. 3, 2011) (citations to section 106 and 117 omitted). “We hold today that a software user is a licensee rather than an owner of a copy where the copyright owner (1) specifies that the user is granted a license; (2) significantly restricts the user's ability to transfer the software; and (3) imposes notable use restrictions. Applying our holding to Autodesk's SLA, we conclude that CTA was a licensee rather than an owner of copies of Release 14 and thus was not entitled to invoke the first sale doctrine or the essential step defense.” *Id.* at 1111.



as “students, faculty, staff and members of the general public that are authorized to use materials on the premises of the library regardless of location” [Farb, 2006]. In addition, Farb also identifies the problem of the lack of continuity in the rights of use granted to academic libraries and their patrons by the license agreements. “In the context of licensing, he notes, there are no guarantees related to rights of users or uses of information. Any existing rights granted under contract are negotiated on a case-by-case basis, and renegotiated every two to five years. Everything is negotiable, including time-honored user rights and traditions, such as the right to read, quote, criticize, parody, and otherwise use in the creation of new work” [Farb, 2006]. Another problem, related to the lack of continuity, is that titles held by libraries can be simultaneously governed by multiple licensing agreements over time. As a result, Farb contends that “[i]t may be difficult, if not impossible, for users [of academic libraries] (and for the institutions themselves) to understand and follow multiple, conflicting license provisions” [Farb, 2006].

A problem that seems to be common for all types of libraries in connection with e-books is that “libraries might be compelled to limit perusal of information units to one user at a time, as with books” [Bartow, 2001:830]. One of the major American e-book publishers, HarperCollins, limited distributions in 2011 of e-book titles acquired by [all kinds of libraries] libraries to 26; when this cap is reached the books expired [Machovec, 2013:391, Cross, 2012:196]. Similarly, in relation to academic libraries, Machovec notes that as of 2013 “several of the big six [American] publishers⁵ will not allow libraries to distribute their titles at all and they often charge libraries several times the retail price even for rights to distribute to only one person at a time” [Machovec, 2013:391].

The reviewed literature shows that an issue faced specifically by public libraries is that publishers are reluctant to ‘sell’ e-books to them. For example, Walter notes that as of February 2012, at least four major American trade publishers (Hachette, Macmillan, Penguin, and Simon & Schuster) had stopped selling e-books to American public libraries fearing that library lending was cutting into their sales [Walters, 2013:194]. According to the statement of the Dutch Association of Public Libraries (Vereniging Openbare Bibliotheken), as of 23 November 2016, 75% of the e-books produced in the Netherlands were not available in libraries, which undermines their ability to perform their lawful task of providing access to neutral and pluralistic information [Official website of Dutch Association of Public Libraries].

⁵ According to the American Library Association, The Big Six publishers became the Big Five on July 1, 2013, when the Penguin Random House merger was completed. The publishers are: Hachette, HarperCollins, Macmillan, Penguin Random House, and Simon & Schuster. Together these companies control roughly two-thirds of the U.S. consumer book publishing market. <http://www.ala.org/transforminglibraries/frequently-asked-questions-e-books-us-libraries> (last accessed on 26 November 2016)



In relation to libraries in general, organisations representing user interests in Australia have raised concerns regarding “restrictions on the use of insubstantial portions of materials, restrictions on the use of materials in the public domain, the use of ‘site-clauses’ which restrict use of materials to a particular geographic location, restrictions on ‘walk-in’ and non-affiliate use, the variety of agreements governing the use of copyright materials, difficulties in negotiating agreements and ‘bundling’ of content” [Australian Copyright Law Review Committee, 2002: para 4.75].

Also talking about libraries in general, Geist notes that licensors sometimes alter the terms and conditions of their licensing agreements, or simply revoke access to content [Geist, 2012:95]. Geist gives the example of an incident where lending by a UK library of a book to a patron outside its designated geographical service area lead to the Publisher’s Association amending its lending guidelines in order to prevent all libraries from engaging in such practices. As a result, libraries in the UK can only lend e-books to patrons physically present at a library branch, with exemptions made by the publishers on a case-by-case basis [Geist, 2012:95].

With respect to both public and academic libraries, Cichocki points out that licensing agreements often prohibit reproduction rights for patrons, such as the legal right to provide patrons with copies of works and interlibrary loans (discussed in greater detail in the following section 2.2) [Cichocki, 2007-2008: 40].

2.2 Interlibrary loan⁶

Licensing terms may prohibit, limit or create uncertainty with respect to the legality and scope of interlibrary loans. Cichocki notes that many of the standard licensing agreements concluded by both academic and public libraries prohibit interlibrary loan, unless otherwise negotiated by the library in the licensing agreement [Cichocki, 2007-2008:40]

Discussing this issue in the context of academic libraries, Machovec claims that resource sharing (including interlibrary loan) for e-books is one of the biggest challenges facing [academic] libraries in the digital environment. In particular, he notes that licensing contracts for e-books that limit use to authorized users (such as faculty, staff and students of the licensee’s institution) imply that these resources cannot be shared with other libraries. These provisions thus limit access to knowledge to what each particular library can afford to have as part of its own digital collection (subscriptions) [Machovec, 2013:397-398]. Even where interlibrary loan is allowed by the license, this license sometimes includes a

⁶ In an analysis published in 2013 of 224 electronic journal licenses in California libraries from 2000-2009 Professor Kristin Eschenfelder found that prohibitions on electronic interlibrary loan as well as other restrictions were common. Kristin R. Eschenfelder, et al., How Institutionalized are Model License Use Terms: An Analysis of E-Journal License Use Rights Clauses from 2000–2009. 74 COLLEGE AND RESEARCH LIBRARIES 355 (2013).



limitation allowing sharing only chapters, not entire e-books [Machovec, 2015:78]. Machovec notes that this dilemma has been successfully overcome by one of the consortia - the Orbis Cascade Alliance - which, however, he describes as an exception rather than the rule [Machovec, 2013:397-398].

In respect to the interlibrary loan of academic articles, 2002 work by Croft & Murphy draws attention to transaction costs connected with *compliance* with a wide range of licensing provisions on interlibrary loan that the library has negotiated with different licensors, as such clauses widely vary and furthermore are often unclear [Croft & Murphy, 2002:6]. This conclusion is supported by the authors' examination of licenses in the LIBLICENSE database and in the files of the University of Oklahoma Library [Croft & Murphy, 2002:7]. Croft & Murphy also point out limitations on the *format* of sharing. More often than not, direct electronic transmission of an article is not permitted. Instead sharing must be effectuated by digital transmission of a printout, mail or hand-delivered lending. This conclusion is based on the analysis of licensing terms offered by such journal publishers as American Mathematical Society, American Physical Society, Portland Press, and JSTOR digital library [Croft & Murphy, 2002:7]. The authors also show that some licensors of academic articles expressly prohibit interlibrary loan, e.g. as the American Institute of Physics [Croft & Murphy, 2002:8].

2.3 Preservation issues

A study by Farb shows that over 50% of academic libraries she surveyed considered "lack of archive," "preservation and storage of electronic copy," "replacing print with the electronic version," or "developing policies and infrastructure for long-term access and preservation [and] doing this affordably" among the most difficult challenges to long-term access and use of digital resources" [Farb, 2006].

These issues can be roughly classified into two blocks. They apply to all types of libraries. The first is the preservation of collections held by libraries in paper form by means of digitisation and making available to the public in digital form. One of the key problems that exists in this context is locating the rightholders of works, as discussed in section 1 above. Even if the rightholders can be located, however, Rosen notes that making works available online on the basis of individual licenses work-by-work does not work in practice [Rosen, 2012:81]. The second issue, as the reviewed literature indicates, is a major concern for libraries in the licensing context. It is the preservation of content *originally acquired* in digital form, or so-called "digital born" material. The scale of the problem can be illustrated by the statistics presented by Farb in her 2006 study of academic libraries. Her study shows that as of 2006, 60% of licensing agreements concluded by academic libraries did not include archiving rights; 55% of the licensing agreements did not include perpetual access; 25% of the licensing agreements did not include fair



use; and 75% of libraries did not have any long-term plan for licensed digital resources [Farb, 2006: figure 2].

A study of literature presented in this review suggests that digital licensing affects libraries' ability to preserve digital born material in at least the five following ways: 1) risks of loss or damage to digital content due to deterioration, compromised access or other technological issues; 2) limited short term duration of most licensing agreements concluded by the libraries; 3) licensing limitations on the right to archive; 4) lack of warranty of integrity of content provided under the license; 5) higher administrative and organisational burden on libraries connected with the need of long term planning of preservation activities. Each of these challenges will be briefly discussed below with references to the relevant literature. Let us consider each in turn.

2.3.1 Technology specific risks of loss or damage

Increasing reliance of libraries on digital material stored outside the library creates the following technology-specific risks in connection with the preservation of this material. Digital media and formats are prone to deterioration; hardware and software necessary to support and run the materials are prone to sometimes rather rapid technological obsolescence [Farb, 2006, Section 108 Study Group Report, 2008:7]. Other challenges include sudden and unseen degradation, particularly with infrequently used items; and the ephemerality of many digital works, particularly those not disseminated in physical copies [Section 108 Study Group Report, 2008:44]. In the light of these factors, it is contended that digital preservation "requires the making and active management of multiple copies over time, stored in multiple locations, prior to deterioration and the loss of information" [Section 108 Study Group Report, 2008:44]. However, this in itself is a challenge because, as discussed below, licensing agreements often prohibit making copies of digital content.

Walters highlights a number of additional concerns in relation to e-book licensing. He explains that each e-book consists of several elements, including the content and formatting of the work itself, the file format, the software needed to access and use the file, the operating system needed to run the software, and hardware compatible with the operating system. "[T]he ability to read an e-book, he contends, is contingent on the existence of a complex infrastructure that may be owned or controlled by multiple agencies." Walters further suggests that preservation of e-books requires the maintenance of "the long-term usability of content (through the migration of file formats, for instance), the authenticity of content (including text, images, and page formats), discoverability (the preservation of metadata within the e-book or its package), and accessibility (through the maintenance or emulation of e-book readers, interfaces, and other access mechanisms)" [Walters, 2013:200]. Although the title of Walter's work



suggests that it only focuses on academic libraries these concerns seem equally relevant for public libraries.

2.3.2 Duration of licenses

Several studies focusing on academic libraries show that most licenses are granted to such libraries for a limited duration and thus do not guarantee long-term security of access to their collections acquired in the digital form. For example, the 2006 study conducted by Farb shows that in 2006, 55% of licensing agreements concluded by academic libraries she surveyed did not include perpetual access, most of them were for a relatively short duration of one to five years [Farb, 2006: table 1].

In respect of e-books licensing, presumably by both academic and public libraries, Walters, referring to a 2007 study, notes that only one-third of major e-book vendors offered perpetual access licenses, of which 75% were priced according to the number of students enrolled and 25% according to the number of concurrent users [Walters, 2013:192]. This inability to pay in any particular year would result in the loss of all content, without refund of previous payments for access to the content [Walters, 2013:202]. As demonstrated by Lipinski, some licensors of online databases impose in their terms and conditions an obligation on the library to destroy upon termination of a license any physical media, such as CD-ROMs, FTP databases, or any software containing copies of content retrieved from licensed database(s). Such terms and conditions may also require the library to “use its best endeavours” to ensure that all authorised users similarly destroy all material retrieved from licensed database(s) [Lipinski, 2016: slide 18].

Using the example of the licensing agreement provided to libraries by NetLibrary (an intermediary between publishers and all types of libraries providing access to digital books and audiobooks), Cichocki demonstrates that libraries not only do not “own” content, they also often do not even host it. In the case of NetLibrary the patron is redirected from the library’s website to the website of NetLibrary, for which the library is charged an annual fee. Failure to sustain payments (by the library) shuts patrons off from access to this content [Cichocki, 2007-2008:39-40]. Shipe, an arts and literature bibliographer from the University of Iowa Libraries, notes that “[a]ttempting to secure permanent rights to use the data for which we pay has become a major priority in our license negotiations. However, there are significant electronic resources for which we are unable to secure such rights. This creates a sense of uncertainty about the enduring nature of some of our resources” [Shipe, 2005:32].

In contrast, a 2016 study by Primary Research Group, based on the practices of 41 academic libraries and focussing on academic library use of e-books shows that only a small fraction of surveyed academic libraries (4.55%) would refuse a licensing agreement for an e-book due to a lack of guarantees of perpetual



access. Furthermore, only approximately 30% of the surveyed libraries called it a very important consideration that they will forego only in unique circumstances. According to this study, 51% of e-book purchases in the entire sample were through some form of ownership model [Primary Research Group, 2016 (summary of report)]. The limited information available from the summary of the report, however, does not allow this review to reach a definitive conclusion as to the reason why most libraries would accept time-restricted licensing agreements, and specifically whether that reason is that having perpetual access to the collection is unimportant for them. It could also be that the underlying reason is the weakness of the libraries' bargaining position in relation to licensors or standard practices of most licensors not offering perpetual access to certain digital content.

Another risk related to the limited duration of licenses is identified by Walters, namely the removal of titles by the licensor from the database or collection, sometimes without notifying the library [Walters, 2013:202]. Although, as already mentioned earlier, Walters' main focus is on academic libraries, this risk could also exist for public libraries.

Empirical research conducted by the Australian Law Reform Commission shows that licensing schemes used for preservation of orphan works, such as those granted through a central body or extended collective licenses, are also often granted for a limited duration [Australian Law Reform Commission, 2013: para 13.51]. A study commissioned by the UK Intellectual Property Office in 2013 that looked inter alia, at licensing orphan works in Canada, Japan, Denmark, Hungary, United States, and France, found that there was "no systematic recognition of the need for permanent licences" in these countries. Favale, 2013:113] The rights clearance simulation conducted by the authors also revealed that "licensing terms were very variable from country to country, ranging from a monthly to a 5 years licence, without the provision of a permanent licence" [Favale, 2013:113]. From the study it follows that these short term arrangements are determined by the licensing schemes practiced in those countries and are not, therefore, evidenced of a lack of desire of libraries to obtain permanent licenses. On the contrary, the authors note in the summary of key findings that "[p]ermanent or long-term licensing seem particularly relevant in the case of mass digitisation projects, where a short-term licence would make the project too costly and therefore unviable." [Favale, 2013:113].

2.3.3 Limitation of the right to archive

Another difficulty with the preservation of digital materials is the absence of archiving rights in most licensing agreements concluded by the libraries [Section 108 Study Group Report, 2008:120; Farb, 2006]. Under US law, if a library acquires material under a license, under subsection 108(f)(4) of the US 1976 Copyright Act the license terms apply notwithstanding the section 108 exceptions securing the



library's rights for preservation of material in a physical medium [Section 108 Study Group Report, 2008:120]. This is a matter of concern for librarians, at least in the US, because they could diminish their ability to preserve and provide access to these materials in the long term.

According to Farb, in 2006, 60% of US licensing agreements concluded by academic libraries surveyed did not include archiving rights, including the right to make archival and back-up copies as provided under copyright law [for materials in paper form] [Farb, 2006: table 1]. Farb's study also shows that all six commercial publishers' agreements she reviewed offered archived material for purchase or lease [Farb, 2006].

With respect to e-books licensing by academic libraries, Walters observes that even licenses granting perpetual rights of access only rarely (even with non-profit publishers) provide for any archiving mechanism that preserves access to e-books for patrons if the licensor goes out of business. To illustrate this point he notes that American Association for the Advancement of Science provided archiving rights only in response to the requirements of major library consortia, not to individual libraries [Walters, 2013:202].

2.3.4 No warranty of integrity of licensed content

Farb notes that most license agreements and terms of use of academic libraries that she surveyed "omit any type of standard warranty for accuracy, integrity, reliability or completeness of the licensed content." The Farb study shows that less than 15% of fifteen publishers' license agreements covered by his survey contained a warranty for the integrity or authenticity of content subject to the license. Of the three publisher groups, whose contracts Farb analysed (commercial, scholarly society, and university presses), only scholarly societies explicitly included such a warranty [Farb, 2006]. As the examples of the licensing terms of Wiley InterScience and Taylor & Francis quoted by Farb show, digital content is provided mostly on an "as is" basis without any warranties of any kind, either express or implied [Farb, 2006].

2.3.5 Administrative and organisational burdens of long-term planning

"In a digital environment, Farb also suggests, preservation requires continuous and active commitment, additional resource allocation and long-term planning - a new role for most college and university libraries - as well as the need to commit greater financial resources in order to keep digital resources "alive" [Farb, 2006]. At the same time she notes that while over 75% of academic libraries covered by her survey (26/35 libraries) thought the lack of a digital archive of licensed resources was an issue, only 25% (9/35 libraries) reported having a plan for dealing with it [Farb, 2006: figure 2].



2.4 Overriding or redefining the scope of statutory exceptions and limitations

A recent study commissioned by World Intellectual Property Organisation (WIPO) shows that of the 188 WIPO member countries, 156 have at least one statutory library exception, and “most of the countries have multiple statutory provisions addressing a variety of library issues.” On the basis of these statistics, the study contends that “exceptions for libraries and archives are fundamental to the structure of copyright law throughout the world, and that exceptions play an important role in facilitating library services and serving the social objectives of copyright law” [Crews, 2015: 6].

A number of legal scholars have observed that in licensing relationships with content providers of copyright and related rights material, libraries are often the weaker party. As a result, “[i]t is not uncommon for right holders to wield their bargaining power to arrive at contractual terms that purport to set aside the privileges that the law grants users pursuant to the limitations on copyright” [Guibault, 2010:59, see also 61-62]. Other literature provides empirical support for this observation. For example, both the 2002 Report of Australian Copyright Law Review Committee and 2016 Draft Report on Intellectual Property Arrangements in Australia, relying on the submissions from, inter alia, libraries and library associations, and their own survey, conclude that local and overseas digital licenses can explicitly or implicitly exclude or modify statutory copyright exceptions and thus alter the copyright balance [Draft Report on Intellectual Property Arrangements in Australia, 2016:126; Australian Copyright Law Review Committee, 2002: paras 4.58, 4.98].

In addition, the 2006 US study shows that most standard publisher’s agreements concluded by academic libraries do not include Federal copyright guarantees and exceptions [Farb, 2006]. Instead of (re)negotiating contracts, about two-thirds of academic libraries surveyed by Farb accepted standard agreements overriding the fair use exception in whole or in part [Farb, 2006].

Similar evidence is found in the 2011 Hargreaves Review conducted in the UK. The study report shows that “it is possible for rights holders licensing rights to insist, through licensing contracts, that the exceptions established by law cannot be exercised in practice.” The report also quotes a study that analysed 100 contracts offered to the British Library, which demonstrated that contracts and licences often override the exceptions and limitations allowed in copyright law [Hargreaves, 2011:51].

The literature considered in the course of this literature review offers the following examples of contractual provisions overriding statutory exceptions and limitations.

The case of British Library [Hackett, 2015]:



Looking to protect itself from copyright infringement claims, in 2012 the British Library stopped its international document supply service, the Overseas Library Privilege Service, that was provided under a copyright exception. The library replaced it by a publisher-approval licensing arrangement, the International Non-Commercial Document Supply (INCD) service. Hackett shows that, following this decision, the number of journal titles available under the INCD service fell by 93%, from 330,700 titles in 2011 to 23,600 in 2012. More titles “disappeared” than are available under the non-commercial licenses, and some 28,300 titles were no longer available either at commercial (that could be as high as USD80 for a journal title) or non-commercial rates. The number of countries served by the service also fell, from 59 in 2011, when service was provided under the copyright-based service, to 33 in 2014 when service was provided under a new licensing scheme. Hackett also reports that the number of requests that the British Library was able to satisfy under the new arrangement also fell by 92%, in the first year, from 38,100 to 2,884. The number of fulfilled requests for information also declined dramatically. Hackett further notes that “[w]hereas in 2011 the Library would have anticipated fulfilling over 100,000 requests for information during the period 2012-2104, by the end of 2014 the number had fallen to just 1,057, representing a year-on-year reduction of 97%.” In 2012 the British Library refused more requests for information due to licensing restrictions (2,942) than satisfied under the new licensing service (2,884).

The case of Australian libraries

The 2016 Draft Report on Intellectual Property Arrangements in Australia shows that 79% of digital products (e-books, databases, aggregator licences) purchased by the National Library of Australia prohibited document supply (or, in other words, interlibrary loan) [Draft Report on Intellectual Property Arrangements in Australia, 2016: 126]. An earlier 2002 study of the Australian Copyright Law Review Committee offers other examples of statutory exceptions being overridden by licensing provisions. For example, the report contains the submission of the Australian Digital Alliance (ADA) that states: “A very substantial number of licence agreements contain terms or conditions which purport to override or modify copyright exceptions. These include:

- restrictions on users printing or downloading or emailing copies of (parts of) the resource – overriding s. 40 (fair dealing for research or study);



- restrictions on libraries performing Inter-Library Loan/ Document Supply – overriding ss. 49 and 50 (reproducing and communicating works by libraries and archives for users & reproducing and communicating works by libraries or archives for other libraries or archives);
- restrictions on libraries copying the work for preservation purposes under section 51A;
- restrictions on libraries networking the resource across the premises of the library subject to certain conditions – overriding s. 49(5A)" [Australian Copyright Law Review Committee, 2002: para 4.60].

The ADA also reported that licensing agreements would also control material not covered by copyright such as facts or insubstantial portions. It submitted that some licenses would also "restrict reference librarians from answering queries, by refusing to allow the reproduction of an "extract," however small" [Australian Copyright Law Review Committee, 2002: para 4.77].

e-Books in the United States

In respect of e-books Walters notes that many e-book licenses force libraries and their patrons to give up rights that they would otherwise have under the fair use and educational use provisions of US copyright law. As an example, he mentions that "nearly all e-book licenses prohibit interlibrary lending, and many restrict the use of e-books for course reserves" [Walters, 2013:193].

The literature also identified a number of reasons for the proliferation of such contractual provisions - beyond the generally stronger bargaining power of licensors. In the European context, Guibault notes that it is because of the lack of clarity of statutory exceptions and limitations, and the frequent inapplicability of exceptions to the digital domain that leads to initiatives of rightholders "to more clearly delineate the scope of what libraries and archives purchasing or licensing the copyright material may do with what he or she is buying or hiring" [Guibault, 2010:61-62; see also Guibault, 2003:21].

Some of the case law of the CJEU illustrates that, in a situation in which the scope of library exceptions in EU law and/or national law is unclear, the refusal by a library to purchase an e-book license instead of digitising the same books in the library's collection under a statutory exception may lead to lengthy court proceedings [see e.g. Case C-117/13 *Technische Universität Darmstadt v Eugen Ulmer KG*].



As to the US, Cross notes that a deliberately open-ended fair use exception “is one of the most important aspects of copyright law for library practice, but also one of the most daunting for librarians to employ” [Cross, 2012:198]. “Evaluating fair use, he continues, is one of the most complex legal decisions librarians must make and that this complexity often leads large institutions simply to decline to exercise their fair use rights at all.” This complexity is “multiplied exponentially in the digital environment” [Cross, 2012:205, referring to Gerhard & Wessel, 2010:484]. With respect to the Section 108 library exception under US Copyright Act, Gasaway notes that many of its protections are not applicable in the digital environment [Gasaway, 2007:1339-44].

The reluctance to litigate fair use can be illustrated by the case concerning Google Books. Two lawsuits were filed against Google (one by a group of authors; the other by a group of publishers). Google defended its digitisation project, claiming that its actions constituted fair use. The parties initially tried to negotiate a settlement to this class action litigation, rather than litigate fair use, and actually achieved this in 2009 [Lunney, 2015:354-355]. The settlement agreement was however rejected by the district court in March 2011 [*Authors Guild v Google Inc.*, 770 F. Supp. 2d 666(S.D.N.Y. 2011)]. It was only after this rejection that Google brought the fair use argument to bear. Litigation on the issue resulted in the dismissal of the lawsuits against Google in the district court and on appeal on the grounds that Google’s Books project constituted fair use under US Copyright law [*Authors Guild, Inc. v. Google Inc.*, 954 F.Supp.2d 282, 294 (S.D.N.Y.2013), *Authors Guild v. Google, Inc.*, 804 F. 3d 202 - Court of Appeals, 2nd Circuit, 2015]/ The fair use doctrine thus allows digitisation and access to “snippets”, but not full access to digitised books still protected by copyright⁷.

In contrast, statutory exceptions and limitations under Australian law, such as “fair dealing” and exceptions for libraries to preserve and disseminate works, particularly in the digital era, are said to be “too narrow and prescriptive,” “insufficiently flexible” [Draft Report on Intellectual Property Arrangements in Australia, 2016:17-18], “too rigid, complex and difficult to apply” [Draft Report on Intellectual Property Arrangements in Australia, 2016:118] and “inadequate for the digital environment” [Australian Law Reform Commission, 2013:para 12.57].

⁷ *Authors Guild, Inc. v. Google, Inc.*, 804 F.3d 202, 229 (2d Cir., 2015), cert. denied, 2016 WL 1551263 (April 18, 2016): “In sum, we conclude that: (1) Google’s unauthorized digitizing of copyright-protected works, creation of a search functionality, and display of snippets from those works are non-infringing fair uses. The purpose of the copying is highly transformative, the public display of text is limited, and the revelations do not provide a significant market substitute for the protected aspects of the originals. Google’s commercial nature and profit motivation do not justify denial of fair use. (2) Google’s provision of digitized copies to the libraries that supplied the books, on the understanding that the libraries will use the copies in a manner consistent with the copyright law, also does not constitute infringement. Nor, on this record, is Google a contributory infringer.”



The problem of licensing provisions overriding statutory exceptions and limitations is exacerbated by the fact that the legal systems often do not provide any relief from the restrictions imposed by the licenses. In some cases, as under section 108(f)(4) of the US Copyright Act, it is explicitly stated in law that a library is obligated to adhere to any contractual terms it accepted at the time it acquired a copy of the work. Cross also notes that licensing provisions would also trump the fair use exception [Cross, 2012:205].

Although EU law does not provide any explicit guidance on the hierarchy between statutory exceptions and limitations and licensing provisions, Guibault, a legal scholar who has conducted extended research on the topic, concludes that “nothing in the EU Information Society Directive seems to preclude rights owners from setting aside by contract the limitations on copyright and related rights” [Guibault, 2010:59].

Australian law is reported to be currently unclear as to whether copyright or contract prevail in case of discrepancies. In this situation of uncertainty combined with the lack of expertise among library officers and the need to maintain relationships with publishers, the industry practice is to follow licences [Draft Report on Intellectual Property Arrangements in Australia, 2016: 126].

Difficulties connected with negotiating standard form licensing contracts, especially with international subscribers, as reported by the Draft Report on Intellectual Property Arrangements in Australia, could be another reason for libraries simply accepting the licensing provisions overriding copyright law [Draft Report on Intellectual Property Arrangements in Australia, 2016: 126].

2.5 Enforcement by technical protection measures

Both academic and policy research shows that the problem of licensing provisions overriding copyright exceptions and limitations is compounded by the application of technical protection measures (TPMs) to enforce compliance with such licensing provisions. The legal protection of TPMs is mandated by the 1996 WIPO Copyright Treaty (WCT), which requires the Contracting Parties to introduce “legal protection and effective legal remedies against the circumvention of effective technological measures that are used by authors in connection with the exercise of their rights ... in respect of their works, which are not authorized by the authors concerned or permitted by law [Article 11]. The general nature of this obligation allows Contracting Parties to adopt rules that, according to Guibault, “do not fit well in the copyright and related rights framework,” and create “a reason to fear that the exercise of legitimate limitations on copyright may be seriously compromised in the digital networked environment through the application of technological protection measures” [Guibault, 2003: 35-36]. “In countries where new anti-circumvention protections ... have been introduced, Hackett notes, while 52 countries have exempted libraries, around half of them



have not. In practice, this means that where a technological protection measure is applied to digital content, libraries cannot circumvent it even to make use of an exception under copyright law, and therefore cannot copy the work concerned" [Hackett, 2015].

The US Digital Millennium Copyright Act (DMCA) is an example of legislation that has transposed the WCT provision into national law in a way that raises multiple concerns. The DMCA makes it unlawful to circumvent technological protection measures (TPM) or intentionally to remove information (Rights Management Information or RMI) regarding the work, the right holders, attributes of the work, etc. [17 U.S. Code sections 1201-1202] As suggested by Lipinski, the notion of RMI is "broad enough to include the terms and conditions of use" [Lipinski, 2014:6-7].

Cross notes that restrictive licensing terms "coded in" the digital material through TPMs - the circumvention of which is both a civil and a criminal offence under the DMCA - effectively override the rights of libraries contained in the Copyright Act [Cross, 2012:204, see also Geist, 2012:76]. "The combination of licensing terms and conditions that cannot lawfully be removed from the content (in the meta data for example) with technological controls that prevent access unless the terms and conditions of the rights holder or content supplier are fulfilled results, in the opinion of Lipinski, in a form or super or 'uber' contract" [Lipinski, 2014:6-7].

In a similar vein, the Section 108 Study Group Report expresses librarians' concern that the growth of TPMs (the circumvention of which is prohibited) will impede their ability to conduct such preservation activities in relation to digital works as adding metadata, migrating the original copy to archival formats or other new formats, or emulating the original format as prior formats become obsolete or incompatible with the software that manages them. As a result, they fear that they will not be able "to preserve and provide access to the nation's creative output" [Section 108 Study Group Report, 2008:124-125].

Cichocki also contends that digital rights management (DRM) that relies on TPMs "can have dire consequences in the public library setting." From his perspective, "[i]f the license and the subsequent DRM applied to the license prohibit copying or printing, or further enforce time limits (e.g. the license agreement between the library and the copyright holder is for a one year term of access), then both lawful uses and the ability of libraries to preserve access and archive content are eliminated notwithstanding the exemptions provided in copyright law" [Cichocki, 2007-2008:48-49].

The 2002 study of Australian Copyright Law Review Committee reports that the prohibition on the supply of circumvention devices (for which there is no fair dealing exception) and the new exclusive right of communication to the public



(both adopted following the WCT) “significantly alter[ed] the extent to which the copyright exceptions can be exercised” [Australian Copyright Law Review Committee, 2002: para 4.133]. The study shows that “licences may be backed by technology which can directly enforce terms of the agreement (e.g., by disabling printing or “locking-up” a CD-ROM after a licence period expires) and/or communicating with the vendor with respect to compliance status” [Australian Copyright Law Review Committee, 2002: para 4.133].

2.6 Privacy risks

Recent research by Rubel and Zhang from School of Library and Information Studies at the University of Wisconsin based on a content analysis of 42 license agreements for electronic journals in academic libraries between 2007 and 2009 identified two primary areas in which patrons’ privacy may be a concern [Rubel & Zhang, 2015:436]. The first is the monitoring of patrons’ activities by libraries in order to enforce authorised use of licensed resources. This issue has been previously identified in legal academic literature in the context of collective management of copyright, in particular, by Gervais [Gervais, 2010:8-9] and in general library context by Bartow [Bartow, 2001:829]. Bartow raises concerns that “[l]icenses could ... force librarians into becoming gatekeepers of copyrights. As a condition of acquiring copyrighted works, libraries could be compelled to police how patrons get access to digital publications based on who patrons are, the reasons patrons desire access, the ways patrons expect to use the publication, or the nature of the publications at issue” [Bartow, 2001:829].

The second area of concern is the collection and sharing with third parties of patrons’ personal information by licensors [Rubel & Zhang, 2015:436]. Rubel and Zhang recall that those issues were also raised by Lipinski [Lipinski, 2013] and Harris [Harris, 2009]. Scholars also mention a third potential issue, referred to in the study work of Magi, namely the licensor’s personalised services that collect information about individual users [Magi, 2010]. Their own research found only two licenses concerning this issue [Rubel & Zhang, 2015:436].

2.6.1 Monitoring of patrons’ activities

Work by Rubel and Zhang shows that 38.1% of 42 licenses of academic libraries that they studied required that the libraries monitor unauthorized use of licensed materials. 42.9% of licenses required libraries to take disciplinary action when they become aware of unauthorized use. The vast majority of licenses (81%) obliged libraries to report identified unauthorized use to publishers [Rubel & Zhang, 2015:436-437]. Rubel and Zhang also show that in most cases academic libraries were supposed to authenticate users by IP address and, under the licensing provisions, were obliged to provide this information to licensors for enforcement purposes. 16.7% of the licenses stated that licensors may suspend access of the IP address(es) from which unauthorized use occurs; 9.5% of licenses stipulated that



the licensor may suspend the access of any authorized user violating the terms of use, without specifying the mechanism. Some licensing agreements allowed (2.4%, one license) or required (9.5%) that libraries suspend authorized user access upon request from the licensor [Rubel & Zhang, 2015:436-437].

Rubel and Zhang also demonstrate that 13 out of 42 licenses required the libraries maintain and share records of authorized users and access details. Although the licenses did not clarify which exact details were required, the authors admit that these could be user logs that can be correlated with the IP addresses requesting resources. Five out of 42 licenses required libraries to share information about users and their activities with licensors. In addition, six out of 42 licenses required that libraries "cooperate" or "cooperate fully" with publishers' investigations of copyright infringement and unauthorized use [Rubel & Zhang, 2015:438].

2.6.2 Collection, analysis and sharing information with third parties

Rubel and Zhang found that 66.7% of licenses they surveyed allowed licensors to collect non-IP data, including (for example) usage data. In addition, 26.7% of commercial licenses expressly allowed publishers to share data with third parties. Most licenses from non-commercial publishers (except for one) were silent regarding data sharing with third parties. Only eight licenses (19%) expressly clarified that the data that publishers could share with third parties was usage data. Only five of the eight licenses expressly stated that such usage data could be shared with third parties in anonymous or aggregated form. Moreover, only 31% of licenses specified that publishers were not allowed to share with third parties raw usage data or data that could identify individual users [Rubel&Zhang, 2015:438].

Only a small number of licenses (9.5%) specified the types of third parties with whom publishers could share users' data. 21.4% of licenses named the reasons that non-IP address information can be collected by publishers (for example, assisting both licensor and participating academic library to understand the impact of this license) [Rubel & Zhang, 2015:438].

3. Increased financial burden on libraries

This review of the literature indicates that an increase in the financial burden faced is another major concern that libraries have as a result of shift to digital content. As discussed in section 2.3 above, to preserve access to their collections in digital form libraries often have to maintain subscriptions, most of which require annual payments. In addition, publishers and aggregators that license digital content to libraries often possess a degree of market power (as discussed in section 4 below), which also translates into unequal bargaining positions when it comes to negotiating licensing agreements with libraries. This affects libraries in at



least two ways. First, it is difficult for libraries to negotiate favourable financial terms in contracts, and, as a result, they may suffer from the effects of price discrimination by licensors. Second, licensors may increase periodic fees libraries must pay in order to maintain access to their collections at an unreasonable rate. This endangers the ability of libraries to acquire new content and enlarge their collections in the long term. The situation is exacerbated by the lack of long term planning practices by the libraries.

Although some empirical evidence is available only in relation to academic libraries, it is quite plausible that these problems are confronted by public libraries as well.

3.1 Price discrimination

The UN Human Rights Commission Special Rapporteur notes that “[l]ibraries negotiating subscription fees with publishers face an unequal bargaining situation; they are obliged to pay high prices, or forego providing researchers and students with the resources needed for their work” [HRC Special Rapporteur Report, 2014;para. 80].

This tendency is supported by US sources that contend that the inapplicability of the first sale doctrine to the licensing of digital materials makes libraries (in general) vulnerable to price discrimination [Bartow,2001:828]. Geist demonstrates how this price discrimination works in case of e-book licensing. She notes that current e-book licensing models isolate libraries from the market power of consumers. Such models limit access of libraries to secondary markets because they typically limit resale of e-books through second-hand stores, donations and interlibrary loan. As a result, “publishers can and do charge libraries more than the average consumers.” Instead of a one-time fee for unlimited access to an e-book that a normal consumer would pay, publishers charge libraries annual subscription fees in order to maintain access to the e-book [Geist, 2012:93].

3.2 Rising periodic licensing fees

As licensed digital content constitutes an ever-larger fraction of libraries’ collections, the costs of maintaining their collections increase exponentially. This is true both in relation to both journal and e-book subscriptions that are discussed separately below. Most of the examples presented below concern academic libraries. That said the identified issues seem equally relevant for public libraries.

3.2.1 Licensing of academic journals

As the HRC Special Rapporteur states, “[t]he burden of journal subscription fees is becoming unsustainable even at some of the world’s best-resourced universities. In some developing countries, the subscription fee to a single database may exceed the total annual budget of a university library [HRC Special Rapporteur



Report, 2014:para. 80]. An earlier 2006 survey by Farb showed that academic libraries spent over 35% of their collection budgets on licensed electronic resources [Farb, 2006: table 1]. Farb also demonstrates that the costs of digital resources, such as large packages of online journals “have rapidly outgrown those for print, and have risen much faster than traditional library resources when compared to the Consumer Price Index (CPI).” For example, between 1986 and 2002, library expenditures for journal subscriptions increased 227%, whereas the CPI increased by only 57% [Farb, 2006].

The reviewed literature indicates a very rapid growth of research libraries' expenditures spent on electronic subscriptions in the last 20 years. Referencing a report by the Association of Research Libraries (ARL),⁸ Horava notes an almost 400% growth of research libraries' expenditures on electronic resources between 1994/1995 and 2001/2002. [Horava, 2005:9] According to the information on the ARL website available as of November 2016, “[c]ommericalization of publishing in both the for-profit and non-profit sectors has led to egregious price increases and unacceptable terms and conditions of use for some key research resources needed by the scholarly community” [Website of Association of Research Libraries]. Moreover, “ARL members collectively spend over \$1.4 billion on materials and the average ARL academic library spends close to two-thirds of its materials budget on electronic resources, many of them licensed” [Website of Association of Research Libraries].

A 2012 Harvard Library Memorandum states that “[m]any large journal publishers have made the scholarly communication environment fiscally unsustainable and academically restrictive.” According to this Memorandum, Harvard's annual bill for journals from these providers is now approaching \$3.75 million. The Memorandum also draws attention to the price increases for online content from just two providers by about 145% over the past six years, which by far exceeds both the consumer price index and the higher education and the library price indices. It thus concludes that these journals claim an ever-increasing share of the Library's overall collection budget; major periodical subscriptions are not financially tenable and cannot be sustained [Harvard Library Memorandum on Journal Pricing, 2012].

A recent US study by Primary Research Group that considers an array of research libraries database licensing practices shows an 8.7% annual price increase of libraries' spending in 2014 as compared to the previous year [Primary Research Group, 2014-2015].

⁸ According to its official website, the Association of Research Libraries (ARL) is a nonprofit organization that includes 124 research libraries at comprehensive, research institutions in the US and Canada, see <http://www.arl.org/about>



In relation to academic libraries, Machovec also shows that, in some cases, as with the American Chemical Society (ACS), a move to a non-print pricing scheme can lead to substantial price increases for the majority of customers. Simply put, the fast growth of costs forces academic libraries to choose between dropping access to a full collection or increasing their spending [Machovec, 2015:73].

3.2.2 Licensing of e-books

Similar to what is happening with journals, most e-book licences, as Walters shows, require libraries to pay annual (recurring) fees in order to maintain access to the same set of titles. Walters highlights that unlike journal subscriptions, most e-book licenses provide no additional titles with each subscription term. Each new edition often counts as a new title and requires additional payment. Even perpetual licenses that are supposed to provide permanent access to e-books often require payment of annual “platform fees” of several thousand dollars. Licensors offering perpetual licenses may also demand that libraries acquire more e-books each year in order to maintain access to an already licensed collection. Walters thus concludes that even perpetual access licenses create long-term financial obligations on the libraries, which are a major factor in librarians’ dissatisfaction in the US and UK [Walters, 2013:192]. Walters does not specify whether this issue is only relevant to academic libraries, which are the main focus of his work, or to libraries in general.

With respect to libraries in general, Geist also points out that shift from print to e-book subscriptions lowers the libraries’ return on investment because e-book licenses often limit the possibility of re-use of purchased items and thus do not allow libraries to spread the cost of access to the book among several consumers as it did with print books [Geist, 2012:93].

3.3 Limited availability of budgets for other items

Several works considered in the preparation of this review raise concerns that the rising costs of digital collections undermine the libraries’ ability to acquire other items and enlarge their collections. For example, Geist argues that licensing “eliminates a library’s ability to effectively manage its budget in response to changing economic climates” [Geist, 2012:92]. Taking the example of academic libraries Machovec observes that “[a]s publishers and aggregators try new sales and distribution models with libraries many are growing concerned that the distribution of monographs is now taking on serial-like characteristics. Many academic libraries are concerned that their entire budget will be tied up in ongoing subscriptions” [Machovec, 2013-1:207-208]. In later work, Machovec explains that libraries have become dependent on large journal packages, the composition and the price of which continue to grow annually. He notes that “[t]he rate of rise for many of the largest journals packages were going up much faster than [academic] library budgets ... meaning that these “good” deals were



cannibalizing the rest of the materials budget squeezing out monographs and other materials not embedded in the protective envelop of a big contract.” “As curricular and research needs evolved on campus, he adds, many academic libraries have little flexibility in tailoring subscriptions to meet evolving needs” [Machovec, 2015:72].

This trend is confirmed by information provided by the UC Santa Barbara Library on its website. According to this, one of the management strategies developed in order to maximise the value of their limited collection budget is cancelling print versions of journals to which the library has digital subscriptions, and offsetting the cost of new journal subscriptions by cancelling others of equivalent value that are less needed. [Official website of UC Santa Barbara Library]. This approach, however, as other literature suggests, carries with it risk of loss of a substantial part of its collection in the case of a budget cut that would make the library unable to continue paying licensing fees [Geist, 2012:93; Cross, 2012:204].

3.4 Licensing fees in of orphan works context

A UK study conducted by Favale et al discusses the issue of high licensing costs in the specific context of mass digitisation projects. The study includes a rights clearance simulation that was conducted by asking representatives from rights clearance authorities in Canada, Denmark, France, Hungary, India and Japan to provide a licence fee for six scenarios that are likely to occur in reality, ranging from small online resources to mass digitisation projects in relation to orphan works. The study, among other things, concludes that mass digitisation projects of orphan works that are based on licensing solutions are charged “per item” or “per page” thus resulting in prohibitively high costs for non-commercial uses [Favale et al, 2013:103]. These fees are charged on an annual basis, thus presenting a difficulty for most mass digitisation projects, especially non-commercial ones. These projects will only be funded by governments or donors if they last for more than a year. Accordingly, annual fees increase the overall cost of such projects [Favale et al, 2013:104]. The study also notes that high licensing fees may discourage mass digitisation projects, since “[f]ees initially appearing very low and thus sustainable, ... may render mass digitisation unviable for public and non-profit institutions” when aggregated data is scaled up under reasonable assumptions” [Favale et al, 2013:113].

Interestingly, with respect to pricing practices Favale et al. found out that in some of the examined jurisdictions, such as Denmark and Hungary, the price of the license was calculated based on the economic situation of the applicant [Favale et al, 2013:111].

4. Licensors’ market power



Licensing of digital materials in the library context raises a number of issues connected with market power and specifically the economic concentration of publishers that negatively affects libraries. In trying to overcome the weaker market and bargaining power in licensing relations with publishers, libraries create consortia, which, in turn, present other difficulties.

4.1 Economic concentration

In the academic libraries context, a tendency of the publishing industry towards higher concentration has been observed, in particular by Farb and Spindler and Zimbehl [Farb, 2006; Spindler & Zimbehl, 2011:63]. Mergers in the publishing industry are said to be accompanied or followed by a significant rise in the price of serial publications. This makes it difficult for academic libraries to maintain access to the collections they need [Association of Research Libraries; Spindler & Zimbehl, 2011:63; Official website of UC Santa Barbara Library].

The superior market power of major publishers may allow them to implement *bundling practices* in respect of materials licensed to the libraries. For example, the Harvard Library notes that “some providers bundle many journals as one subscription, with major, high-use journals bundled in with journals consulted far less frequently” [Harvard Library Memorandum on Journal Pricing, 2012]. The Australian Copyright Law Review Committee also notes that “the practice of ‘bundling’ – i.e., requiring consumers to purchase/subscribe to a number of products/services in order to obtain access to or use a single product/service – is of concern to the library sector” [Australian Copyright Law Review Committee, 2002: para 4.92]. Cross explains that bundling practices are often accompanied by contractual limitations imposed by publishers against disclosure of pricing and terms, which “allow publishers unilateral control over communication about the purchase or the terms of use of the product, often forcing librarians to negotiate without crucial information about peer institutions and the market for works” [Cross, 2012:204].

The Report of the Australian Copyright Law Review Committee shows, in relation to libraries in general, that licensing agreements concluded by libraries are commonly dictated by the licensors and are difficult to negotiate [Australian Copyright Law Review Committee, 2002:para 4.86]. The Australian Federal Libraries' Information Network notes that difficulties in negotiations were, in particular, caused by the “concentration of electronic publishing in the hands of aggregators due to the technical requirements of delivering content online” [Australian Copyright Law Review Committee, 2002: para 4.86].

4.2 Challenges connected with forming consortia

To increase their bargaining power with publishers and negotiate better licensing deals it is common for libraries to create consortia. Machovec shows that such



arrangements work well for academic libraries with big publishers. They are not as good a solution, however, for negotiating better deals with certain e-resources, such as focused digitized collections (e.g., Alexander Street Press, Adam Matthew, Gale, ProQuest), specialty databases, specialized journals (specifically standalone titles not offered in major publisher packages), small e-book publishers, etc. Most of the time this is due to the fact that such products do not generate enough interest within a regional consortium to negotiate a group deal [Machovec, 2015:73].

The reviewed literature identifies the following difficulties that academic libraries trying to take advantage of consortia arrangements may face. First, entering a consortium requires an initial investment in acquiring information and communication technology, central hardware set-up, mounting data, and developing interfaces [Bjoernshauge, 1999:117]. Second, being a member of a consortium often leads to additional on-going costs. For example, publishers may charge a library that has entered a consortium agreement additional payments for off-consortia delivery of documents, both in electronic and paper formats [Bjoernshauge, 1999:117]. Another long-recognised problem is the overlap of services and licensing opportunities, and competition of consortia, especially over e-resource licensing. Machovec points out that “some deals offer greater levels of discount based on the number of participating libraries, combined FTE, overall expenditures or other group metrics which create the consortial advantage” [Machovec, 2015:74]. In his earlier work, he asserted that this problem was inevitable for libraries as virtually all of them belong to many different organisations [Machovec, 2013-1:206]. The absence (in many cases) of top down funding for consortia licensing digital material is also problematic. It is one of the main obstacles preventing consortia from licensing on behalf of the libraries. Instead, most consortia only negotiate licenses and then each member library pays its share of the deal [Machovec, 2015:76]. The fact that such arrangements create additional administrative and transaction costs is key. Geist shows that an attempt to create a single national purchasing point for libraries to negotiate license agreements with publishers led by the Chief Officers of State Library Agencies (“COSLA”) failed mainly for exactly that reason [Geist, 2012:94].

5. Transaction costs

The reviewed literature mentions several issues, which could be labelled as transaction costs that both academic and public libraries are likely to bear in the context of licensing digital content. Farb notes that “[t]erms and conditions of any title included in a particular license for a particular package could change repeatedly over time, with the content being governed by different license agreements containing different terms and conditions negotiated by different



publishers” [Farb, 2006]. Australian libraries have raised concerns that “licence terms are not standardised and that this made it difficult for institutions to keep track of different licence conditions and to readily explain their implications to staff” [Australian Copyright Law Review Committee, 2002: para 4.85]. Any licensing term, as the report of the Australian Copyright Law Review Committee shows elsewhere, can be commonly altered by licensors at any time without notice [Australian Copyright Law Review Committee, 2002: para 4.99]. It is also a matter of concern in Australia that individual libraries need to replicate negotiations with domestic and overseas suppliers [Australian Copyright Law Review Committee, 2002: para 4.85].

Jurisdictional issues also may add to the transaction costs of handling licenses by libraries. The 2002 report of Australian Copyright Law Review Committee indicates a tendency of licenses concluded by Australian users to be governed by foreign, and particularly US law. Australian libraries view this a matter of special concern, as vendors of scholarly publications are often based in the United States. Submission of Federal Libraries Information Network also notes that “jurisdictional issues compounded the difficulties faced in attempting to negotiate licences” [Australian Copyright Law Review Committee, 2002: para 4.139].

III. Conclusion

1. Summary of findings

The main findings of this literature review can be summarised by the four following observations.

First, the literature reviewed in this study shows that the difficulties and challenges libraries confront in connection with the use of material covered by copyright licenses, and the barriers these difficulties can create to access to knowledge, are not only caused by the terms of individual licensing contracts *per se*. Certain types of content, such as unpublished works in some jurisdictions (e.g. Australia) and orphan works, are simply not suitable for licensing due to the impossibility or prohibitive costs of locating the rightholders and establishing whether the works concerned are still protected by copyright.

Even where licensing may in theory be appropriate, other factors contribute to these difficulties and limitations, including the economic concentration of the publishing industry and journal database aggregators, pricing models for digital content (that are frequently imposed on libraries and non-negotiable), and transaction costs connected with the management of, and compliance with, multiple licensing agreements.



Second, a number of key challenges stem in large measure from restrictive terms contained in individual licensing agreements. Those terms endanger the libraries' ability to provide access to knowledge, in particular by restricting reproduction rights for patrons and prohibiting or constraining interlibrary loan options. An issue that seems to be specifically faced by public libraries is the reluctance of publishers to "sell" e-books to them for public lending, fearing that this will undercut their sales. Furthermore, certain licensing agreements undermine libraries' preservation function - especially in relation to "born-digital" content - by failing to take full account of technological preservation needs, limiting access to digital content to a short period of time, limiting the right to archive, granting access to digital content on an "as is" basis without warranty of integrity, and creating additional organizational and administrative burdens. The available literature also points to the increased financial burdens caused by rapidly rising periodic licensing fees for academic journals and e-books, and challenges connected with forming consortia to negotiate better terms.

Third, this literature review identifies problems existing in connection with the licensing of digital content by libraries which are rooted in legislative shortcomings. Frequent problems include the validity of restrictive licensing terms overriding or redefining the scope of statutory exceptions and limitations (that is private regulation trumping public law); the possibility of enforcement of such licensing terms by technical protection measures (which may then be supported by legislation even if circumvention undertaken by a library is done to accomplish one its core functions); privacy risks that proliferate due to unclear, restrictive or absent statutory provisions; transaction costs related to compliance with overlapping licensing agreements; and licensing agreements governed by foreign (specifically US) law. In sum, licensing terms are often more restrictive than the statutory exceptions and limitations meant to ensure that authors' rights guaranteed by copyright are balanced against the public interest, specifically when they grant certain public interest rights and privileges to libraries (for example, in connection with reproduction rights for patrons or preservation).

Fourth, this study reveals that the literature focusing on the limitations of the use of copyright licenses specific to the library context is comparatively more extensive in relation to academic than to public libraries or libraries in general. That being said, despite the differences between academic and public libraries, this literature review allows the study to conclude that the majority of challenges confronted by the libraries in the licensing context are common to both academic and public libraries.

2. Recommendations for further research



The main findings of this literature review identify issues that require additional research.

First, compared to academic libraries, there is a relative lack of literature focusing on the challenges faced by *public* libraries in the context of licensing digital content. More specifically, this literature review shows that there is a lack of sufficient evidence to demonstrate that licensing agreements concluded by public libraries limit their preservation function; that public libraries equally suffer from increasing financial burden of rising licensing fees; and that they face similar challenges in connection with being part of consortia.

Second, a substantial part of the empirical evidence mentioned in this literature review, in particular in relation to the limitations posed by restrictive terms of licensing agreements, relies on a US-focused empirical study focusing on academic libraries by Farb that came out in 2006. Research by Rubel and Zhang, that underlies this review's discussion of privacy risks, also devoted to academic libraries, although published in 2015, relies on a content analysis of licensing agreements concluded between 2007 and 2009. It is thus suggested that more recent empirical research would be desirable to verify whether the issues supported by the above-mentioned findings persist or have gotten worse or better. Evidence that is more recent is likely to uncover new limitations that may have appeared in the past 5-10 years.

It should be acknowledged, however, that some empirical studies on the topics relevant to this literature review, namely on the research libraries' licensing practices and academic library use of e-books were published by a US based commercial organisation - Primary Research Group Inc. – in 2015 and 2017 respectively. Due to lack of access to the full version of the reports this literature review relies on their summaries provided on this company's official website.

Third, it is plausible that the recent CJEU judgement that (unexpectedly for many) clarified that the public lending right/exception, under certain conditions, equally applies to the lending of digital copies of books, could affect licensing practices of digital content by libraries. Whether and to what extent this judgement affects the limitations discussed in this literature review could also be a subject-matter for a further study.



Annex 1 List of reviewed literature

1. Academic and Grey Literature

Australian Law Reform Commission, "Copyright and the Digital Economy," Final Report, November 2013 ALRC Report 122, available at <http://www.alrc.gov.au/publications/copyright-report-122> (last accessed 07 December 2016)

Bartow A, "Libraries in a Digital and Aggressively Copyrighted World: Retaining Patron Access through Changing Technologies" (2001) 62 Ohio State Law Journal 821, available at SSRN: <https://ssrn.com/abstract=555841> (last accessed 07 December 2016)

Bjoernshaug L, "Consortia Licensing: Implications for Digital Collection Development" (1999) INSPEL 332, 116

Cichocki KM, "Unlocking the Future of Public Libraries: Digital Licensing that Preserves Access" (2007-2008) 16 University of Baltimore Intellectual Property Law Journal 29

Copyright Law Review Committee, "Copyright and Contract" (2002), available at <http://www.austlii.edu.au/au/other/clrc/2/> (last accessed 07 December 2016)

Crews K D, "Study on Copyright Limitations and Exceptions for Libraries and Archives: Updated and Revised", Standing Committee on Copyright and Related Rights, Thirtieth Session, 2015, available at http://www.wipo.int/meetings/en/doc_details.jsp?doc_id=306216 (last accessed 07 December 2016)

Croft J, Murphy M, "Licensing and the interlibrary loan workflow: The best solution is prevention" (2002) Journal of Access Services, 1:2, 5

Cross W M, "Restoring the Public Library Ethos: Copyright, E-Licensing, and the Future of Librarianship," Law Library Journal (2012) 104:2

"Digital Opportunity. A Review of Intellectual Property and Growth," An Independent Report of Professor Ian Hargreaves, May 2011, available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/32563/ipreview-finalreport.pdf (last accessed 07 December 2016)

"Draft Report, Intellectual Property Arrangements," Productivity Commission of Australian Government, released on 29 April 2016, available at <http://www.pc.gov.au/inquiries/completed/intellectual-property/draft> (last accessed 07 December 2016)



Elkin-Koren N, "A Public-Regarding Approach to Contracting over Copyright in Dreyfuss RC, Zimmerman DL, First H (eds.) *Expanding the Boundaries of Intellectual Property. Innovation Policy for the Knowledge Society* (Oxford University Press, 2001)

Faculty Advisory Council, "Memorandum on Journal Pricing: Major Periodical Subscriptions Cannot be Sustained", Harvard Library, 17 April 2012. Available at <http://gantercourses.net/wp-content/uploads/2013/11/Faculty-Advisory-Council-Memorandum-on-Journal-Pricing-%C2%A7-THE-HARVARD-LIBRARY.pdf> (last accessed 07 December 2016)

Farb S, "Libraries, Licensing and the Challenge of Stewardship," 11 *First Monday*, no. 7 (2006), available at <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1364/1283> (last accessed 07 December 2016)

Favale M, Homberg F, Kretschmer M, Mendis D, Secchi D, "Copyright, and the regulation of orphan works: a comparative review of seven jurisdictions and a rights clearance simulation," (UK Intellectual Property Office, July 2013), available at <https://www.gov.uk/government/publications/copyright-and-the-regulation-of-orphan-works> (last accessed 07 December 2016)

Gasaway L N, "Amending the Copyright Act for Libraries and Society: The Section 108 Study Group" (2007) 70 *Albany Law Review* 1331, 1339

Geist R A, "A 'License to Read': The Effect of E-Books on Publishers, Libraries, and the First Sale Doctrine," (2012) 52 *IDEA* 63

Gerhardt D, Wessel M, "Fair Use and Fairness on Campus" (2010) 11 *North Carolina Journal of Law & Technology* 461, 484

Gervais D, "Collective Management of Copyright: Theory and Practice in the Digital Age" in D. Gervais (ed.), *Collective Management of Copyright and Related Rights* (Kluwer Law International, 2010)

Gervais D, Maurushat A, "Fragmented Copyright, Fragmented Management: Proposals to Defrag Copyright Management" (2003) *Canadian Journal of Law and Technology* 2, 15

Guibault L, "The Nature and Scope of Limitations and Exceptions to Copyright and Neighbouring Rights with Regard to General Interest Missions for the Transmission of Knowledge: Prospects for Their Adaptation to The Digital Environment," *e-Copyright Bulletin* October-December 2003, available at <http://unesdoc.unesco.org/images/0013/001396/139671e.pdf> (last accessed 07 December 2016)

Guibault L, "Why Cherry-picking Never Leads to Harmonisation: the Case of the Limitations on Copyright under Directive 2001/29/EC (2010) 1 *JIPITEC* 55



Hackett T, "Time for a single global copyright framework for libraries and archives" December 2015, available at

http://www.wipo.int/wipo_magazine/en/2015/06/article_0002.html (last accessed 07 December 2016)

Hansen D, "Digitizing Orphan Works: Legal Strategies to Reduce Risks for Open Access to Copyrighted Orphan Works" Courtney KK and Suber P (eds.), Harvard Library, 2016, available at

<https://dash.harvard.edu/bitstream/handle/1/27840430/OrphanWorksReportFINAL.pdf?sequence=3> (last accessed 07 December 2016)

Hinkes E M, "Access Controls in the Digital Era and the Fair Use/First Sale Doctrines" (2006-2007) 23 Santa Clara High Technology Law Journal 685

Horava T, "Access policies and licensing issues in research libraries" (2005) 24 Collection Building, 1, 9

Lipinski T A, "The Incursion of Contract Law (Licensing) in the Library: Concerns, Challenges, Opportunities and Risks" IFLA, Lyon, 2014

Lipinski T A, "Licensing Pitfalls: Legal Aspects of Information Products and Services," PowerPoint slides, 2016.

Lunney G, "Copyright Collectives and Collecting Societies: The United States Experience" in Gervais D. (ed.) *Collective Management of Copyright and Related Rights*, (3rd edn, Kluwer Law International, 2013)

Machovec G, "Consortial ebook Licensing for Academic Libraries" (2013) *Journal of Library Administration*, 53:5-6, 390

Machovec G, "Consortial E-Resource Licensing: Current Trends and Issues," *Journal of Library Administration*, (2015) 55:1, 69

Olson K K, "Preserving the Copyright Balance: Statutory and Constitutional Preemption of Contract-Based Claims" (2006) 11 *Communications Law and Policy* 83, 87

Primary Research Group Inc., *Survey of Academic Library Database Licensing Practices*, 2016-17 Edition, summary available at

<http://www.primaryresearch.com/Newsletter.aspx?ID=46> (last accessed 07 December 2016)

Primary Research Group Inc., *The Survey of Library Database Licensing Practices*, 2014-15 Edition, summary available at

<http://www.primaryresearch.com/Newsletter.aspx?ID=46> (last accessed 07 December 2016)



Report of the Special Rapporteur in the field of cultural rights, "Copyright policy and the right to science and culture," UN Human Rights Council, A/HRC/28/57, 24 December 2014

Rosen J, "The Nordic Extended Collective Licensing Model as a Mechanism for Simplified Rights Clearance for Legitimate Online Services" in Axhamn J (ed.) *Copyright in a borderless online environment* (Seminar at the Institute for Legal Research, Stockholm, 2012)

Rubel A, Zhang M, "Four Facets of Privacy and Intellectual Freedom in Licensing Contracts for Electronic Journals" (2015) *College & Research Libraries* 427, available at <https://pdfs.semanticscholar.org/46ce/6c2c5f3efecb76ea2789263cab3a9ee5c175.pdf> (last accessed 07 December 2016)

Shipe T, "Travels into Several Remote Corners of the Information Universe" (2005) *The Acquisitions Librarian*, 17:33-34, 25

Spindler G, Zimbehl P, "Is Open Content a Victim of its Own Success? Some Economic Thoughts on the Standardization of Licenses" in Guibault L, Angelopolous C (eds.) *Open Content Licensing. From Theory to Practice* (Amsterdam University Press, 2011)

The Section 108 Study Group Report, An Independent Report sponsored by the United States Copyright Office and the National Digital Information Infrastructure and Preservation Program of the Library of Congress, March 2008, available at <http://www.section108.gov/docs/Sec108StudyGroupReport.pdf> (last accessed 07 December 2016)

Walters W H, "E-books in Academic Libraries: Challenges for Acquisition and Collection Management" (2013), *13 Libraries and the Academy*" 2, 187

2. Legislation and case law

Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society, OJ L 167, 22.6.2001, p. 10–19

Directive 2006/115/EC of the European Parliament and of the Council of 12 December 2006 on rental right and lending right and on certain rights related to copyright in the field of intellectual property OJ L 376, 27.12.2006, p. 28–35

US Digital Millennium Copyright Act, 17 U.S.C. sections 1201-1202

Authors Guild v Google Inc., 770 F. Supp. 2d 666(S.D.N.Y. 2011)

Authors Guild, Inc. v. Google Inc., 954 F.Supp.2d 282, 294 (S.D.N.Y.2013)



Authors Guild v. Google, Inc., 804 F. 3d 202 - Court of Appeals, 2nd Circuit 2015

Judgment of 11 September 2014, *Technische Universität Darmstadt v Eugen Ulmer KG*, C-117/13, ECLI:EU:C:2014:2196

Judgment of 10 November 2016, *Vereniging Openbare Bibliotheken v Stichting Leenrecht*, Case C 174/15, ECLI:EU:C:2016:856

3. Internet resources

Official website of UC Santa Barbara Library, <http://www.library.ucsb.edu/collection-development/budget-challenges> (last accessed 07 December 2016)

Official website of Association of Research Libraries, <http://www.arl.org/focus-areas/scholarly-communication/marketplace-licensing> (last accessed 07 December 2016)

Official website of Dutch Association of Public Libraries, <http://www.debibliotheken.nl/nc/de-vob/publicaties/nieuws/bericht/auteurrecht-belemmert-de-bibliotheek-in-haar-wettelijke-taken/> (last accessed 07 December 2016)

ADDENDUM (14 September 2017): CRL Resources on Licensing, including a model licence for the US, and instructions on how to join the LibLicense Mailing List: <http://liblicense.crl.edu/>