



**The Department of Commerce
United States Patent and Trademark Office
National Telecommunications and Information Administration**

Docket No. 10090448-0448-01

Inquiry on Copyright Policy, Creativity, and Innovation in the Internet Economy

COMMENTS OF THE LIBRARY COPYRIGHT ALLIANCE

The Library Copyright Alliance appreciates the opportunity to respond to this inquiry on copyright policy, creativity, and innovation in the Internet Economy. The Library Copyright Alliance (LCA) consists of three leading library associations: the American Library Association, the Association of College and Research Libraries, and the Association of Research Libraries.

The American Library Association (ALA), established in 1876, is a nonprofit professional organization of more than 61,000 librarians, library trustees, and other friends of libraries dedicated to providing and improving library services and promoting the public interest in a free and open information society.

The Association of College and Research Libraries (ACRL), the largest division of the ALA, is a professional association of academic and research librarians and other interested individuals. It is dedicated to enhancing the ability of academic library and information professionals to serve the information needs of the higher education community and to improve learning, teaching, and research.

The Association of Research Libraries (ARL) is a nonprofit organization of 126 research libraries in North America. ARL's members include university libraries, public libraries, and government and national libraries. ARL influences the changing

environment of scholarly communication and the public policies that affect research libraries and the diverse communities they serve.

Collectively, these three library associations represent over 139,000 libraries in the United States employing over 350,000 librarians and other personnel.

The issues raised by this notice of inquiry are extremely complex. LCA will attempt to contribute to the discussion by providing its views on three narrow points. First, when considering the liability for Internet service providers, policymakers must bear in mind that libraries function as Internet service providers for underserved populations. Second, libraries have learned that the key for institutions to survive in the face of changing technology is not for the institutions to try to change consumer behavior, but instead for the institutions to adapt to consumer demand. Third, the federal government can most effectively promote creativity and innovation in the Internet Economy by encouraging the use of open licensing models and by requiring access to the results of federally funded research.

I. Libraries as Internet Access Providers

The notice of inquiry addresses the responsibilities of Internet intermediaries. As the Department of Commerce's Internet Policy Task Force considers this issue, it must bear in mind that not only large commercial entities such as Verizon and AT&T act as Internet intermediaries. Public libraries play this role as well, particularly for underserved communities. A recent study performed by the Information School of the University of Washington for the Institute of Museum and Library Services found that in 2009, over 77

million people accessed the Internet from public libraries in the United States.¹ Forty-four percent of people below the poverty line used library computers for Internet access and other services. Among young adults below the poverty line, the level of usage increased to 61%. Forty-two percent of the people who accessed the Internet from public libraries did so for purposes relating to education, 40% (30 million people) for employment matters, 37% for healthcare, 34% for government and legal matters, and 25% for personal finance.²

Community college libraries also provide Internet access to underserved populations. Nearly 31% of students at two-year colleges do not own desktop computers or full size laptops, and thus often rely upon their college libraries for Internet access and other information technology needs.³

The safe harbors of the Digital Millennium Copyright Act (DMCA) have enabled libraries to provide Internet access without the specter of liability for onerous copyright damages. Any alteration of the DMCA's framework, either directly by amendment of 17 U.S.C. § 512 or indirectly by imposition of new obligations on Internet access providers, could have an adverse effect on the ability of libraries of all types to deliver a critical service to underserved and other user communities.

II. Adapting to Consumer Demand

Libraries have survived for millennia by providing their users the content they want in the format they want—from cuneiform, to papyrus rolls, codices, microfilm,

¹ Samantha Becker, *Opportunity for All: How the American Public Benefits from Internet Access at U.S. Libraries 2* (2010), <http://www.ims.gov/pdf/OpportunityForAll.pdf>.

² *Id.* at 5-8.

³ EDUCAUSE, *Core Data Service Fiscal Year 2009 Summary Report 34* (2009) <http://net.educause.edu/apps/coredata/reports/2009/>.

CDs, DVDs, and to online journals. Now libraries are responding to consumer demand for electronic books. In 2008, the nation's 3,800 academic libraries made 102 million e-books available to their users. This represents an increase of 20 million books in one year. Similarly, 66% of public libraries now offer free access to e-books, an increase from 38% just three years ago.⁴

Library expenditures have likewise shifted to the provision of electronic resources. In 2008, academic libraries spent over \$1 billion on electronic journal subscriptions and \$133 million on e-books. Forty-three percent of academic library acquisition budgets are dedicated to electronic resources, and this percentage is rapidly increasing.

Although libraries have responded to the consumer demand for electronic resources, this adaptation has required library directors to make difficult choices. Because of limited budgets, increased expenditures on electronic resources have necessitated reduced expenditures on analog resources. The shift to electronic formats has required staff retraining and redeployment. It has also complicated libraries' ability to fulfill one of their missions—preservation. When libraries serve as portals to commercial databases of e-books and electronic journals, the libraries do not acquire physical possession of objects they can preserve.

The lesson of the libraries' experience with the “disruptive” technology of the Internet is clear: an institution must evolve to respond to user interests and information needs. It must meet user demand for more convenient and effective access to content. It

⁴ American Library Association, *E-books in Public Libraries*, (last visited Nov. 19, 2010) http://www.ala.org/ala/research/initiatives/plftas/2009_2010/ebooksmmap0910.cfm (citing *Public Library Funding & Technology Access Study 2009-2010*).

cannot successfully convince users not to employ available technology. Adaptation can be costly, but it is necessary.

Until now, the focus of U.S. government policy regarding the distribution of copyrighted works over the Internet has been enforcement—creating new tools in the U.S. and abroad for bringing legal action against infringers. This strategy has failed. Instead, the Task Force should seek to eliminate barriers to the legitimate distribution of content. One significant barrier is the difficulty of clearing the thicket of rights necessary for making works available on the Internet on a scale demanded by consumers. For example, Internet platforms have not succeeded in obtaining licenses from record labels to provide streaming services in the United States, comparable to those available in Europe.⁵ Likewise, the controversy over the Google Books Settlement is rooted in the enormous transactions costs of clearing the rights in millions of in-copyright but out-of-print books. Elimination of these barriers in some cases could require the enactment of antitrust exemptions or amendments to the Copyright Act (including adoption of collective or compulsory license regimes and limitations on remedies for orphan works). Eliminating these barriers to legitimate distribution would significantly reduce the infringement problem on the Internet.

III. Embracing Alternative Licensing and Distribution Models

A. Open Access Models for Scholarly Communications

The purpose of this inquiry is to understand “the relationship between the availability and protection of online copyrighted works and innovation in the Internet economy.” The starting point for understanding this relationship is the differentiation

⁵ See Eric Pfanner, *You Can Hide, but in Europe You Can't Watch Hulu*, N.Y. Times, Oct. 31, 2010, <http://www.nytimes.com/2010/11/01/business/media/01cache.html>.

between the entertainment industry and other fields where copyrighted content is produced. Similarly, the creators of copyrighted content must be differentiated from the distributors of the content. One of the primary sources of innovation in the U.S. economy is scholarly communications: articles, monographs, and databases written by professors, graduate students, and other researchers in all fields of human endeavor. The ideas expressed in these writings stimulate new research, advance the scientific and technology enterprise, and encourage commercial development of marketable products and services. This conversion is by no means a trivial exercise. Companies often must invest heavily in research and development to convert basic research into useful products and services. But without the basic research, and its dissemination through scholarly communications, many technologically sophisticated products and service would not exist. The important role of academic research to innovation is detailed in the recent book by Steven Johnson, *Where Good Ideas Come From: The Natural History of Innovation*.

Significantly, academic authors do not engage in scholarly communications for the purpose of receiving copyright royalties on their writings. Indeed, they typically assign the copyright in their writings to a publisher without any sort of payment. Instead, the academic authors are compensated by promotion in their institution, enhancement of their reputations, and increased funding from grantors.⁶

Historically, publishers of scholarly communications performed critical and costly functions: coordination of the peer-review process, and the printing, marketing, and

⁶ To be sure, in some fields a researcher might be motivated by the possibility of sharing patent license fees, but a patented invention that results from research is completely different from the copyrightable expression in an article describing the research.

distribution of the copies of the journals or monographs.⁷ The publishers needed copyright protection to ensure that they would recover their investment in the production and distribution of the copies, even though they received the content itself at no cost from the academic authors.

The Internet has dramatically changed the economics of the scholarly communications market. Email and software have reduced the cost of coordinating the peer-review process; and the Internet has cut printing and distribution costs. These reduced costs have enabled the emergence of open access business models, where readers can obtain online access to the writings for free. At the same time, the restrictive licensing terms and conditions and the skyrocketing cost of science, technology, and medical journals have encouraged researchers and scientists to promote new models of scholarly communication. Additionally, scientists are attracted to the functionality permitted by open access models, including the linking of databases and journal literature, and the mining and manipulation of these resources.

An academic author typically grants the open access publisher a non-exclusive copyright license to distribute the writing to the public at no charge. The open access publisher covers its costs by charging the author a fee for publishing the article or by receiving funding from another source, such as a granting agency or the institution that hosts the publication.⁸ There are significant public benefits from open access publication:

⁷ Although publishers coordinate the peer-review process, they do not pay the peer reviewers. Members of the academic community donate their time to peer-review activities as part of their contribution to the scholarly enterprise.

⁸ Many granting agencies now include extra funds in grant awards to cover the cost of publication in an open access format.

- Open access to published research results enable faculty and researchers to benefit from the findings of this research, both cutting-edge and historical, and to build on them in their own research efforts. Research has shown that articles available freely online are cited more often and have greater impact than those not freely available. Additionally, building upon prior studies results in more efficient research efforts.
- Faculty, researchers, and students affiliated with research institutions collaborate on research and share their results in support of the scholarly and scientific enterprise. Providing greater access to these works through open and access policies enhances this collaboration.
- Roadblocks negatively affect research productivity. In a survey conducted by the American Association for the Advancement of Science, *a* quarter of the respondents reported negative effects on their work because of difficulty in accessing the scientific literature. The consequences ranged from brief delay to abandonment of the research project.
- Open access accelerates the dissemination of basic research to entities that can make commercial applications. While large technology companies often subscribe to peer-reviewed journals directly relevant to their research and development, because of budget constraints, they usually do not subscribe to all journals of potential interest in related fields. Engineers and scientists in these companies are forced to conduct research with partial blinders on, seeing only what is directly before them and missing the potential interdisciplinary connections and the broader context that full access can provide.
- The Information Revolution has democratized research to an unprecedented degree. An individual with a laptop and a broadband connection has the capability of developing software solutions to extremely complex problems, provided that he has access to data and know-how developed by others. These software solutions can lead to the birth of new companies, or can hasten the rate of product-development by existing companies. Access to the results of academic research would dramatically increase the set of building blocks for these independent developers.

In short, open access to scholarly communications is one of the most effective ways to use copyright and the Internet to promote innovation and economic development.

The Task Force should encourage the use of open access models for scholarly communications.

B. Public Access Policies

The Task Force should take a leadership role with respect to mandating public access to one particular set of writings: the final electronic version of peer-reviewed manuscripts of articles that result from federally funded research. In 2008, pursuant to direction from Congress, the National Institutes of Health (NIH) adopted a mandatory public access policy. Under the policy, all investigators funded by the NIH are required to submit an electronic version of their final, electronic peer-reviewed manuscripts to the National Library of Medicine's PubMed Central, which then makes the manuscript publicly available within twelve months (or sooner, depending on the author's interest and the publisher's embargo period) of the official date of publication. In the 111th Congress, legislation was introduced in both the House and the Senate to expand the NIH public access policy to other funding agencies. The Federal Research Public Access Act, S. 1373/H.R. 5037, would require researchers funded by eleven federal agencies to deposit copies of the resulting electronic, peer-reviewed manuscripts of articles into an open online archive no later than six months after publication in a peer reviewed journal.

Additionally, on December 9, 2009, the Office of Science and Technology Policy requested comments on public access policies for science and technology funding agencies. The notice in the *Federal Register* stated the Administration's objective of enhancing the public's access to scholarly publications resulting from research funded by federal agencies. The notice also expressed the Administration's dedication to maximizing the return on federal investments in research and development. Finally, the notice indicated that increasing access to the results of government-funded research would stimulate scientific and technological innovation and competitiveness.

The NIH policy has been a very successful, as it has significantly accelerated the rate of innovation in the bioinformatics and health sciences arenas. The American economy will benefit if other federal funding agencies adopt a similar public access policy; such a policy enhances discovery, encourages the efficient reuse of research resources, and maximizes the dissemination of research results. The federal government funds approximately \$60 billion of research each year.⁹ The American people should receive the full value of that investment as quickly as possible. While Congress could mandate public access policies through legislation, we believe that each funding agency can adopt public access policies through its existing contracting authority. By executive order, the President can direct all science and technology agencies to do so in a consistent manner.

Public access policies do not harm traditional publishers. Because of the embargo period, academic libraries continue to subscribe to journals that rely on copyright protection. However, once the writing is made widely available through an open access repository, the public benefits increase. The writing can then be accessed by scientists affiliated with companies and institutions that cannot afford expensive journal subscriptions. Additionally, the open access repositories allow researchers to conduct data mining and manipulation that cannot be performed on the traditional publishers' platforms.

⁹ As Vice President Joe Biden stated on October 26, 2010: "Every single great idea that has marked the 21st century, the 20th century and the 19th century has required government vision and government incentive." *See, e.g.,* Never Yet Melted, <http://neveryetmelted.com/2010/10/26/every-great-idea-of-the-last-two-centuries-required-government-help/> (Oct. 26, 2010, 8:10 EST).

C. Open Innovation

Open access to scholarly communications is one example of the new models for creation and distribution enabled by the Internet. Open source software is another. It cannot credibly be argued that proprietary software is more innovative than open source software, or that traditional journals promote innovation more than open access journals. The embrace of open source software by successful companies such as IBM and Google demonstrates that in the Internet era, the use of copyright to restrict reproduction and distribution is more a matter of business strategy than a necessary mechanism to recoup investment. This can also be seen in the music industry, where more artists are promoting and distributing their sound recordings on platforms such as YouTube and receiving compensation through ad revenue and ticket sales for live performances.

This evolution of copyright enforcement from an economic necessity to a business strategy requires the Task Force to reevaluate the emphasis the federal government places on copyright enforcement and to explore other, perhaps more efficient, means of promoting innovation. Steven Johnson, the author of the book *Where Good Ideas Come From: The Natural History of Innovation*, describes four quadrants of innovators: 1) the classic solo entrepreneur, protecting innovations in order to benefit financially; 2) the amateur individual, exploring and inventing for the love of it; 3) private corporations collaborating on ideas while competing with one another; and 4) the space of collaborative, nonproprietary innovation. Johnson observes:

The conventional wisdom, of course, is that market forces drive innovation, with businesses propelled to new ideas by the promise of financial reward. And yet even in the heyday of industrial and consumer capitalism over the last two centuries, the fourth quadrant turns out to have generated more world-changing ideas than the competitive sphere of the marketplace. Batteries, bifocals, neonatal incubators, birth control pills –

all originated either in amateur labs or in academic environments.¹⁰ Johnson stresses that the fourth quadrant “is not locked in a zero-sum conflict with markets.” Rather, “this fourth space creates new platforms, which then support commercial ventures.” He views the Internet as “the ultimate example of how fourth-quadrant innovation actually supports market developments: a platform built by a loosely affiliated group of public-sector and university visionaries that has become one of the most powerful engines of wealth creation in modern times.”

Johnson believes that “the fourth quadrant has been so innovative, despite the lack of traditional economic rewards,” because of “the increased connectivity that comes from these open environments. Ideas flow from mind to mind, and need to be refined and modified without complex business development deals or patent lawyers. The incentives for innovation are lower, but so are the barriers.”¹¹

The policy prescription is clear: the Department of Commerce, and the federal government as a whole, should concentrate their efforts on encouraging the creation and maintenance of robust, open platforms that support commercial and noncommercial ventures. The federal government should not expend limited resources on protecting particular business models in the face of technological change.

¹⁰ Steven Johnson, *Innovation: It Isn't a Matter of Left or Right*, N. Y. Times, Oct. 30, 2010, at BU7, <http://www.nytimes.com/2010/10/31/business/31every.html>.

¹¹ *Id.*

Respectfully submitted,

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