



GLOBAL INTERNET POLICY INITIATIVE

**COPYRIGHT & THE INTERNET:
BUILDING NATIONAL LEGISLATIVE FRAMEWORKS
BASED ON INTERNATIONAL COPYRIGHT LAW**

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INTRODUCTION

Copyright protection has traditionally been viewed as offering an incentive for the production of artistic, scientific, and other creative content, while permitting the public to access, use and innovate with such creative works. As early as 1886, adoption of the Berne Convention for Protection of Literary and Artistic Works (“Berne Convention”) marked international recognition of the need for and benefits of international cooperation in establishing and harmonizing national copyright protection laws. As of today, one hundred and fifty-six states have signed the Berne Convention.¹ Meanwhile, the Internet and other global information technologies have opened new opportunities for the creation, distribution, and use of creative content. The Internet challenges lawmakers and society as a whole: how to preserve the balance between creators’ rights and users’ rights? Can the Berne-based foundations of copyright law withstand the pressures of the new technologies? Can they be interpreted to apply to the modern age?

This article aims to highlight the copyright challenges brought about by the Internet, summarize the legal instruments that are available to address them today, and project what issues a national legislature should consider to make sure that the local legal framework for protection of creative content is ready to meet the demands of the Internet revolution. Section I of this paper describes some of the major challenges that the Internet poses for policymakers in the area of copyright law. Section II describes the major international treaties related to copyright. Section II also examines examples of implementation of the international treaties in the European Union and in the U.S.A. Finally, Section III analyzes emerging approaches to specific Internet-related copyright issues.

Some basic principles should guide law reform. This paper argues that, because of the speed of the Internet revolution, policymakers should be careful not to adopt technology-specific provisions that may soon be outdated. Another general principle should be to afford the same protection to content online and off-line. Furthermore, it may be desirable to take an incremental approach to reforming copyright law in response to the Internet. It is not necessary to seek an immediate legislative solution to each and every challenge of the Internet revolution: some of them may be resolved without any legislative action at all. Finally, any reform must aim to preserve the existing balance among stakeholders’ interests.

¹ Updated information regarding the number of states that have joined Berne and other copyright treaties is available at the WIPO website: <http://www.wipo.int>.

There is an international consensus that certain issues are ripe and should be addressed in any national legal system today. These issues include:

- (1) ensuring that the reproduction right covers *all* copies of a work, including temporary and incidental copies, while also ensuring that exemptions or limitations to exclusive rights permit users to make temporary copies inherent in computer processing and electronic distribution;
- (2) providing that a copyright holder has an exclusive right to “make available” her work on the Internet either through the right of communication to the public or the right of distribution, through a combination of these rights, or through a new legislatively-devised principle;
- (3) addressing the issue of exhaustion of exclusive rights, to make it clear that online publication does not exhaust the creator’s rights;
- (4) establishing liability for circumvention of technological protection measures;
- (5) prohibiting the tampering with digital rights management information; and
- (6) clarifying the liability of intermediaries by, on the one hand, making service providers liable for infringements of which they know or had reason to know, but, on the other hand, exempting them from any active duty to uncover infringements in transactions where they normally do not interfere with content.

I. COPYRIGHT & THE INTERNET: THE CHALLENGES

The Internet affords a new medium for traditional types of creative expression and enables new types of expression. It also makes infringement of protected rights substantially easier.² The Internet’s challenges to copyright law arise from the digitization of information and the creation of the networked environment. The Internet forces policymakers to ask what interests should society protect, whose interests should be protected, from whom, how and where?

(a) The challenge of Internet technology

Digitization has made it much easier to manipulate, reproduce, and distribute protected works. Digital content can be combined, altered, mixed, and manipulated easily. Furthermore, digital material can be copied repeatedly with no loss of quality. Digital compression allows extremely large volumes of information to be stored on a single device and to be transmitted online.³

As a networked environment, the Internet is global, decentralized, and interactive. Multiple types of protected works can be brought together in a single webpage; multiple authors can contribute to one project; and components of a single online product may reside on multiple servers. A single act of infringement may involve multiple persons (an uploader, a downloader, and an intermediary service provider).

² U.S. Copyright Office, *Project Looking Forward Sketching the Future of Copyright in a Networked World*, May 1998 (prepared by Professor I. Trotter Hardy, College of William & Mary, School of Law), at p. 13, accessed August 23, 2004 at <http://www.copyright.gov/reports/thardy.pdf> (“Sketching the Future”).

³ European Commission, *Green Paper Copyright & Related Rights In The Information Society* (COM (95)) 382 final; 19 July 1995 accessed on August, 23, 2004 at http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexplus!prod!DocNumber&type_doc=COMfinal&an_doc=1995&nu_doc=0382&lg=EN (“Green Paper”).

Posting on the Internet is sometimes compared to broadcasting, because one single act of posting can communicate information to an indefinite number of people worldwide. However, broadcasting is traditionally based on “point-to-multipoint” transmission, with an active communicator and passive recipients. The Internet, by contrast, supports both “point-to-multipoint” and “point-to-point” service. Much content is distributed only “on demand” of a recipient, giving her much greater control over the content and the circumstances under which it is accessed.

(b) Decentralized infringement

The Internet today can function as a worldwide “duplicating machine, enabling anyone to make perfect copies” or unauthorized derivative works “at low cost and to distribute them all over the world.”⁴ Professor Trotter Hardy refers to the phenomenon of falling reproduction costs resulting in widening copying as “decentralized infringement.” Decentralized infringement is not an Internet-specific phenomenon: it has a long history, from photography, to photocopying, to analog audio tapes, digital audio tapes, video tapes, computer software, and so on.⁵ However, the rate of infringement brought about by the Internet is unprecedented. Estimates of the global losses from pirated music, books, films and entertainment software range into the tens of billions of dollars.⁶ In 2003, the Motion Picture Association of America (the entity globally representing the interests of American film makers) sent out over 100,000 cease and desist letters or infringement notices to Internet service providers in Europe, the Middle East and Africa demanding that they stop infringing activity by their users. The volume of such letters was up 275 percent over 2002.⁷

“Peer-to-peer” (P2P) is perhaps the most prominent example of decentralized infringement. P2P schemes date back to 1998, to the birth of a company called Napster. The company provided free software to the public allowing a user to find exact copies of digital music files that others had put on their computers and to transfer them through Napster’s server onto the user’s own computer. The record companies successfully sued Napster. However, while Napster was easy to stop by shutting down its central server, other “true” peer-to-peer schemes soon emerged, operating without any central servers. Today, peer-to-peer sharing takes place on a huge scale. For example, according to 2002 statistics, the Kazaa song swap software – one of the available products for peer-to-peer sharing - was downloaded 273 million times, and in just one month in 2003 852 million music files were shared online.⁸

What should be the legal response to decentralized copyright infringement? Should the law accept what popular culture promotes or should it crack down on piracy? Should such practices as peer-to-peer be legalized as “fair use?” Should the law create a system of compulsory licenses or impose levies on each Internet account to go to into a special copyright fund to reimburse authors for the possibility of peer-to-peer distribution? Should service providers (intermediaries) be liable for making such infringement possible? Should the law be enforced against individual infringers with vigor? Or

⁴ Alvise Maria Casellati, *The Evolution of Article 6.4 of the European Information Society Copyright Directive*, 24 Colum. VLA J.L. & Arts 369, Summer 2001 (“Casellati”).

⁵ *Sketching the Future*, supra note 2, at 17.

⁶ For a partial estimate, see Phil Hardy, *Trade losses of US copyright holders due to music piracy rose 5.5% to \$ 2.26bn in 2003, according to IIPA survey*, Music & Copyright, March 17, 2004.

⁷ The International Herald Tribune, *Web Piracy of Movies takes off worldwide; Downloading grows fastest in Europe, OECD study finds*, July 9, 2004.

⁸ USA Today, *Hammering away at piracy*, Sept. 11, 2003.

should the information society rely on content owners to develop anti-peer-to-peer technologies to fight infringement?

(c) Applying traditional approaches to a non-traditional medium

What to protect - multimedia & dispersed works. The Internet allows for an unprecedented convergence between various forms of creative expression. Traditional national copyright law may provide different levels of protection to different types of creative works (e.g. literary, artistic, scientific). Digital technology fosters the creation of “multimedia” works combining images, sound, and text in an integrated whole. Should multimedia works be protected under an existing category (e.g. like encyclopedias, Berne Convention, Art. 2(5)), or should a different principle apply to their protection?

Traditional national legislation may require that a creative work be “fixed” to be protected. (Berne Convention, Art. 2(2).) Is the content of a web page sufficiently “fixed” to make it copyrightable? Web pages often cannot be embraced by a concept of single, stable content container. A given “page” may include some material residing on a single computer file as well as links to information stored elsewhere on the Internet. Much of the page may not “reside” anywhere, but be generated “on the fly.” Often the content is so dynamic that there is not a single “thing” to be copyrighted.⁹

Whom to protect - multiple authors. Although collaboration among multiple authors is not a new phenomenon for copyright law, the convenience of collaboration offered by the Internet alters the traditional picture of the author “as a craftsman working more or less in isolation, and using wholly original materials.”¹⁰ Many more people may contribute to the creation of a single website or another digital creative expression. It may be difficult to identify individual contributions. Multiple authorship challenges administration of the copyright law, for example, by complicating the process of obtaining authorization for use of a work. Should the law develop substantially new schemes for such authorizations, establishing “one-stop-shops,” or should it leave maximum discretion to the individual authors?¹¹

Where to protect – multiple jurisdictions. The decentralized Internet poses issues of what law is applicable. Enforcement of rights will increasingly have to take place in a number of different countries under different laws.¹² For example, a U.S. infringer can easily reproduce at a German-based website a copyrighted work of a Ukrainian author originally posted at an Uzbekistan website. Which country’s law should apply? Network technology would allow an infringer, in whichever country she is located herself, to post infringing materials on a website in a country outside of the Berne Union. In such a situation, should the infringer escape liability? It is possible, for example, to apply the rule of the “origin of transmission,” as is customary for broadcasting?

Whom to protect against – multiple infringers. Should the law establish liability for downloading illegally posted materials, or should it focus exclusively on uploading? In addition to an “uploader” and a “downloader,” Internet dissemination involves one or more intermediaries – the Internet

⁹ Id. at 14-15.

¹⁰ Green Paper, *supra*, note 3.

¹¹ See *id.*

¹² European Commission, *Follow-Up To The Green Paper On Copyright And Related Rights In The Information Society* (Com(96) 586 Final), accessed on August 23, 2004 at http://aei.pitt.edu/archive/00000939/01/copyright_gp_follow_COM_96_568.pdf (“Follow Up Green Paper”).

Service Providers (ISPs) and other communications service providers who provide connectivity to the infringers. Should the law impose liability on such intermediaries? Or should the role of these service providers in copyright infringement be compared to that of telephone companies, which are viewed as mere “conduits,” with no responsibility for controlling content?

On the global Internet, copyright law enforcement can be very difficult. To find the identities of uploaders and to prove the facts of downloading can be an onerous task, especially if the service provider has no incentive to cooperate. In addition, unlike in telephone transmissions, which are of a “simultaneous” nature, Internet service providers might be able to exercise control over what is posted on their servers. Would it be beneficial, both economically and morally, for the law to impose an obligation of content control on service providers?

How to protect – exclusive rights. Even when it comes to protection of traditional works, such as stories, graphics, or songs, questions implicating core exclusive rights under the Berne Convention arise as soon as those works are placed into the new medium of digital networks.

- **Incidental or temporary copying.** For reasons inherent in the design of computers and networks, the digital processing and transmission of information results automatically and necessarily in the creation of incidental copies of a copyrighted work. “Caching,” for example, is a mechanism that allows the temporary storage of information “closer” to the consumer or on a more powerful or less congested computer, in order to speed up access. When information is cached midway between the sender and the recipient, it is copied. “Random access memory” (RAM) copies are another type of reproduction incidental to legitimate processing of digital content: as a computer runs its programs, it copies information into its internal RAM memory. These copies generally do not have an independent use except to enable processing of information, and they exist only until the computer is switched off or until they are overwritten by a new data. Should caching and RAM copies be covered by the reproduction right? If so, should they require authorization or should they be considered “fair use” or “implicitly licensed?” What about other incidental copies? Should the law address all incidental copies uniformly or should it review each of them separately? Should incidental copies be excluded from the reproduction right altogether, for their insignificance?
- **Framing.** “In-line framing” allows one Web site to post pages of another in the “frame” of the first website. One news company website may provide a link to the site of its competitor. Once a user hits the link, the competitor’s site would appear with all relevant requisites, including its URL address, but it would be placed in a smaller window framed by the referring site and displaying its own URL above. While it is generally recognized that providing links to another’s website is “fair use,” is framing also? And if it is not, would it constitute a reproduction, or a “public display,” or a “derivative work?”¹³
- **Blurred boundaries between traditional rights.** The Internet has “scrambled the beautifully arranged, dogmatically duly characterized and justified picture” of copy-related and non-copy related rights under the Berne Convention.¹⁴ Copy-related rights (such as the rights of distribution, rental, and public lending) enable “*deferred*” uses. The time when content is made available and the time when it is actually perceived (read, watched, or listened to) may well differ. Non-copy-related rights (such as the right of public performance, the right of

¹³ Sketching the Future, *supra* note 2, at 20.

¹⁴ Mihaly Ficsor, *The Law of Copyright and the Internet*, Oxford University Press, 2002, p. 498 (“Ficsor”).

broadcasting, and the right of communication to the public by wire) enable “*direct*” use. The material is made available and consumed simultaneously. Digital interactive transmissions produce a certain hybrid form of making available. An act of web-posting, for example, communicates the work to the public. It can be perceived directly at the time of communication. At the same time, it makes it possible to transmit the work to an unidentified number of individuals and lets them consume the content at any given later time. How should policy respond to such “hybridization” of rights? Should digital transmissions be covered under the right of distribution, the right of communication, or a new right to be yet invented?

(d) New themes for content protection

As a result of ongoing technological change, new means of disseminating content are emerging, which may require the expansion or reinterpretation of some traditional copyright concepts.¹⁵ For example, CD sales are being supplemented by on-line distributions of music, adding to the “sale” of creative *products* a variety of new content-providing *services*. Other content, including software and e-books, will be available for “just-in-time” use directly from an Internet server. Recent versions of the Java programming language make it possible to design applications to be downloaded over the Internet at the time they will be used and then delete them once they cease to be needed. Another possible pattern of distribution will allow the downloading of basic content (e.g. a software program) for free, but will require payments for updates and special supplements. Should the copyright law invent new and additional principles to address such emergent business models? Or are the old concepts flexible enough?

Contract law. In some ways, contract law is replacing copyright law. For example, so-called “shrink-wrap licenses” limit the scope of consumer capabilities, including those that would otherwise be available under the fair use concept. Given the delicate balance of the copyright laws, is it in the public interest that such licenses override traditional rights? Alternatively, does the public interest benefit from contractual freedom, allowing multiple types and levels of access to information based on a variety of pricing schemes and distribution models, which the digital networks support?

Technical solutions. In predicting the future of copyright law, it is important to recognize that digital technology not only poses new risks for rights holders, but it also offers new tools for control over content.¹⁶ A number of technologies are being developed to make digital works harder to copy or easier to license. These technologies are known as Digital Rights Management (DRM) or Electronic Copyright Management Systems (ECMS). For example:

- “**Access control**” methods are designed to manage access to protected content. One such method, “digital object” technology, makes it possible to encrypt a text, video, or any other content, and “wrap” it into a software “envelope.” Anyone receiving a copy of a digital object would be able to read the “wrapper” but access to the encrypted contents would be conditioned on acceptance of terms specified in the wrapper, such as payment of a royalty fee.¹⁷
- “**Rights control**” methods, such as “proprietary viewer,” are designed to prevent consumers’ manipulation of copyrighted content. Proprietary viewer is a computer program that prevents a consumer from making unauthorized uses of a protected work. For instance, if the user had paid for

¹⁵ Sketching the Future, *supra* note 2, at 26.

¹⁶ Follow Up Green Paper, *supra*, note 12.

¹⁷ Sketching the Future, *supra* note 2, at 13.

reading only, the proprietary viewer would prevent the user from printing out the work, or from making copies.¹⁸

- **“Tracking devices,”** such as “digital watermarks,” allow authors to trace the source of unauthorized use. The watermark is an almost unnoticeable alteration to a digital work; it cannot be perceived with the human eye, but can be detected with a computer program designed for the purpose. If the watermark contains a serial number, any given copy of a watermarked work can be linked to its original, making it easier to track down the source of unauthorized copies.¹⁹

How should the law adjust to the emergence of such digital rights management technologies? Should it promote or prescribe uniform standards for their deployment? Or should it encourage innovation and variety in regards to these measures? Should it apply the same or different penalties to breaches of copyright in regards to technologically protected and unprotected works?

(e) Addressing the challenges

Some of the challenges posed by the Internet can be addressed by judicial and administrative interpretation of existing laws. Others will be solved by technological measures, as noted above, including by technical standards worked out voluntarily by the commercial sector. Others may require adjustment to national legislation. National policymakers are guided by an international framework of copyright treaties, which have expanded in recent decades to keep pace with technology. Section II will summarize the relevant international legal instruments and present two examples of their implementation – the European Union example and the U.S. example.

II. COPYRIGHT AND THE INTERNET: THE INTERNATIONAL FRAMEWORK

Until recently, international copyright law rested on the Berne Convention for the Protection of Literary and Artistic Works and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) of 1995. Issues relating to sound recordings and performances (sometimes referred to as “related rights”) were addressed in the Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organizations (1961).

Since 1974, the international copyright instruments have been managed by a special United Nations agency – the World Intellectual Property Organization (WIPO). WIPO’s objective, as described in the treaty establishing it,²⁰ is to promote the protection of intellectual property throughout the world through cooperation among States and, where appropriate, in collaboration with other international organizations. Currently, WIPO consists of 180 member states.²¹ WIPO administers six copyright

¹⁸ Id. at 13-14.

¹⁹ Id. at 14.

²⁰ Convention Establishing the World Intellectual Property Organization (Stockholm, July 14, 1967).

²¹ Updated information regarding the WIPO membership can found at the WIPO website at <http://wipo.int/treaties/en/documents/word/c-wipo.doc>.

treaties and aims at “homogenizing national intellectual property protections with an ultimate eye towards the creation of a unified, cohesive body of worldwide international law.”²²

(a) The Berne Convention

As mentioned above, the first attempt to harmonize copyright law at a global level dates back to adoption of the Berne Convention in 1886. The Convention established a minimal level of copyright protection for the member nations to follow and adopted the “national treatment policy” (under which a member state must give the same protection to material copyrighted in other member states as it gives to material copyrighted under its own law). The treaty also established that the International Court of Justice in the Hague (“Hague Court”) would exercise jurisdiction over disputes between member nations, but the Treaty left nations free to declare their immunity from the jurisdiction, and many states have done so. Indeed, the Hague Court has never presided over a treaty compliance dispute to date.

To accommodate new social and technological developments, the Berne Convention was updated quite regularly: by the Act of Berlin (13 November 1908); the Additional Protocol of Berne (20 March 1914); the Act of Rome (2 June 1928); the Act of Brussels (26 June 1948); the Act of Stockholm (14 July 1967) along with the Protocol regarding Developing Countries; and, finally, the Act of Paris (24 July 1971), along with an Appendix regarding developing countries.

After the 1971 Paris Act, the international community for a while adhered to the strategy of “guided development” to respond to changing technology, rather than trying to establish new international norms. WIPO bodies (in the beginning often in cooperation with UNESCO) developed recommendations, guiding principles and model provisions aiming to assist governments in responding to new technologies. These recommendations mostly interpreted existing international norms, but they also included some new standards.²³

(b) The TRIPS Agreement

The General Agreement on Tariffs and Trade (“GATT”) has also addressed copyright issues, in parallel to WIPO. The goal of the GATT is to “promote the reduction of tariff barriers to the international movement of goods.” The GATT has been updated and revised regularly in the course of multinational discussions (“Rounds”). As copyright was becoming increasingly important in shaping international trade with the advent of the information society, the 1994 Uruguay Round of GATT produced TRIPS – the Agreement on Trade-Related Aspects of Intellectual Property Rights. The same Round also instituted the World Trade Organization (WTO).

In addition to copyright and related rights, TRIPS regulates patents and trademarks. In regards to copyright, the Agreement did not introduce any radical changes to the Berne system, but rather based member obligations on the substantive provisions (Articles 1 to 21) of the Berne Convention (except the provisions on moral rights). Rather, the Agreement explained and clarified existing copyright principles and focused on enforcement.²⁴ For example, it made it clear that databases and computer programs fall

²² Sarah Henry, *The First International Challenge to U.S. Copyright Law: What Does the WTO Analysis of 17 U.S.C. § 110(5) Mean to the Future of International Harmonization of Copyright Laws Under the TRIPS Agreement?*, 20 Penn St. Int'l L. Rev. 301, Fall, 2001.

²³ Ficsor, *supra* note 14, at 5.

²⁴ *Id.* at 17-18.

under the definition of copyrightable works under the Berne Convention (Article 10). It specified how to calculate the term of protection in certain cases (Article 12) and clarified limitations and exceptions (Article 13). The only substantive addition TRIPS introduced to the copyright framework was recognition of a rental right for certain categories of works (Article 11). TRIPS also established detailed rules for intellectual property enforcement procedures in WTO member countries, the first time that enforcement procedures in this field have been subject to international standards. Both the substantive obligations and the enforcement obligations of TRIPS are subject to the WTO dispute-settlement mechanism. The TRIPS Agreement entered into force for developed countries on January 1, 1995, and for most developing and transitional countries on January 1, 2000, although a further transition period applies to the least developed countries.

(c) The WIPO Copyright Treaty (WCT)

By the end of the 1980s, it became apparent that the non-binding standards of “guided development” favored by WIPO were insufficient to combat dramatically increasing piracy and that there was a growing divergence in national responses to the challenges of the digital revolution. The Internet’s “truly spectacular expansion”²⁵ raised a variety of unexpected challenges to the copyright regime, requiring a global response. Hence, WIPO initiated work on development of new binding norms to account for the advent of digital networks.²⁶ The process resulted in two new documents, which are sometimes referred to as the “Internet Treaties:” the WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT), which were adopted in 1996 and entered into force in March and May of 2002 respectively. As of August 2004, forty-eight states had entered the WCT, and forty-four had joined the WPPT.

The WCT, although a separate treaty rather than a modification of the Berne Convention, mostly complements Berne and adapts it to the digital environment, rather than overriding it or creating an independent framework. It requires that member states guarantee authors’ protection with respect to distribution, commercial rental, communication to the public and making available to the public of their works on-line. Explicit protection is provided for computer programs and databases. In a nutshell, the WCT requires a “Berne-plus-TRIPS-plus” level of protection.²⁷ Besides adapting old concepts (e.g. reproduction and distribution) to the Internet environment, the WCT introduced two major new concepts, imposing on national legislatures an obligation to provide liability for (a) circumvention of technological protection measures (Article 11) and (b) tampering with rights management information (Article 12). The Treaty also contains specific provisions regarding enforcement of rights (Article 14).²⁸

(d) The WIPO Performances and Phonograms Treaty (WPPT)

The WIPO Performances and Phonograms Treaty (WPPT) can be viewed as an “Internetization” of related rights (rights related to sound recordings and performances). It updates the Rome Convention of 1961 and aims at protecting the interests of performing artists (singers, musicians, etc.) and producers of phonograms. The WPPT ensures that these stakeholders have exclusive rights of reproduction,

²⁵ Id. at 25.

²⁶ Id. at 14.

²⁷ Id. at 426.

²⁸ The summary is abridged from http://europa.eu.int/comm/internal_market/copyright/conferences/wipo-conference_en.htm.

distribution, commercial rental and the on-line “making available” to the public of their performances or recordings. Furthermore, performers and phonogram producers are granted a right of remuneration for broadcasting and all forms of communication to the public of phonograms published for commercial purposes. Just like the WIPO Copyright Treaty, the WPPT contains obligations concerning technological measures, rights management information and enforcement. The Treaty recognizes, for the first time in an international instrument, that performers have certain moral rights for their sound performances and those that are fixed in phonograms. Like the WCT, the WPPT aims not at creating any new principles, but at preserving the balance struck in the Berne Convention.²⁹

After adoption of the “Internet treaties,” the WTO and WIPO concluded a working agreement to facilitate the sharing of information and administration of international intellectual property agreements. A little later, in 1998, the WTO and WIPO established a “joint technical cooperation initiative” to ensure developing nations’ timely compliance with the TRIPS Agreement.³⁰

(e) Implementation of the Internet treaties in the U.S.A. – the Digital Millennium Copyright Act (DMCA)

The Digital Millennium Copyright Act (DMCA) was adopted in October 1998 to implement the United States’ treaty obligations under the WCT and the WPPT and to “move the nation’s copyright law into the digital age.”³¹ In a nutshell, the DMCA (a) makes it a crime to circumvent anti-piracy measures built into copyrighted material, while permitting the cracking of copyright protection devices to conduct encryption research, assess product interoperability, and test computer security systems, and providing exemptions from anti-circumvention provisions for nonprofit libraries, archives, and educational institutions under certain circumstances; (b) outlaws the manufacture, sale, or distribution of code-cracking devices used to illegally copy software; (c) protects Internet service providers from copyright infringement liability for simply transmitting information, and limits the liability of nonprofit institutions of higher education -- when they serve as online service providers and under certain circumstances -- for copyright infringement by faculty members or graduate students, while requiring service providers to remove material from their systems that appears to constitute copyright infringement; and (d) requires that “webcasters” pay licensing fees to record companies.³²

(f) Implementation of the Internet treaties in the European Union – The Information Society Directive and other Directives

The “Information Society Directive” of the European Union, which entered into force on June 22, 2001, sets out the basic framework for implementation of the WIPO treaties in Europe.³³ It lays the

²⁹ Ficsor, supra note 14, at 423.

³⁰ Sarah Henry, supra, note 22, at 309.

³¹ U.S. Copyright Office, August 2001, *A Report of the Register of Copyrights Pursuant to paragraph 104 of the Digital Millennium Copyright Act (DMCA Section 104 Report)*, at (v), accessed on August 23, 2004 at <http://www.copyright.gov/reports/studies/dmca/sec-104-report-vol-1.pdf> (“DMCA Report”). The Copyright Office has published a summary of the DMCA: <http://www.copyright.gov/legislation/dmca.pdf>.

³² See DMCA Summary <http://www.gseis.ucla.edu/iclp/dmca1.htm>.

³³ European Parliament and Council, *Directive on the harmonisation of certain aspects of copyright and related rights in the information society (Information Society Directive)*, 2001/29/EC of 22 May 2001,

foundations for harmonization of member-state laws on copyright in digital networks. The Directive generally applies to: the legal protection of computer programs, the rental right, the lending right and certain rights related to copyright in the field of intellectual property, copyright and related rights applicable to broadcasting of programs by satellite and cable retransmission, the term of protection of copyright and certain related rights, and the legal protection of databases.³⁴ The Directive updates three exclusive copyright rights: reproduction, communication, and distribution. It lays down a number of exceptions to the right of reproduction and the right of communication (Article 5).

In addition to the Information Society Directive, since 1991 the EU has promulgated a series of copyright-related instruments with implications for the Internet. The Directives include:

- Directive 91/250/EEC of 14 May 1991 on the legal protection of computer programs, (Computer Programs Directive);
- Directive 92/100/EEC of 19 November 1992 on rental right and lending right and on certain rights related to copyright in the field of intellectual property (Rental Rights Directive);
- Directive 93/83/EEC of 27 September 1993 on the coordination of certain rules concerning copyright and rights related to copyright applicable to satellite broadcasting and cable retransmission (Satellite Broadcasting Directive);
- Directive 93/98/EEC of 29 October 1993 harmonizing the term of protection of copyright and certain related rights;
- Directive 96/9/EC of 11 March 1996 on the legal protection of databases (Database Directive);
- Directive 2001/84/EC of 27 September 2001 on the resale right for the benefit of the author of an original work of art;
- Directive 2000/31/EC of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce);
- Directive 2004/48/ec of 29 April 2004 on the enforcement of intellectual property rights (IP Enforcement Directive).

(g) Conclusion

None of the existing international or national instruments is by any means a comprehensive response to the copyright challenges associated with the Internet revolution. Much of the process of defining policy solutions is left to national policymakers themselves. However, the above-mentioned treaties present a solid framework for national efforts to address the most urgent issues. U.S. and EU implementation measures offer examples of incorporating the international consensus in two considerably different legal frameworks. Section III will examine in more detail some of the choices made by national governments in implementing the international treaties and will offer recommendations for countries contemplating copyright reform.

III. COPYRIGHT AND THE INTERNET: REFORM OF NATIONAL FRAMEWORKS

(a) Methodology of reform

The Internet continues to change so dramatically that it is probably impossible to resolve all its challenges in a single legislative act. It is important in shaping a national framework to provide enough

accessed August 23, 2004 at http://europa.eu.int/eur-lex/pri/en/oj/dat/2001/l_167/l_16720010622en00100019.pdf (“Information Society Directive”).

³⁴ See Information Society Directive summary at <http://europa.eu.int/scadplus/leg/en/lvb/l26053.htm>.

technologically-neutral flexibility in order to ensure an optimal balance between the interests of copyright holders and the interests of users.

Technologically-neutral language. Although the two recent WIPO treaties are popularly referred to as the “Internet treaties,” they avoid technology-specific language as much as possible and contain no Internet-specific language at all. Rapid changes in technology would soon render any technology-specific language obsolete. Although it was technology that triggered the Internet treaties, the Preamble [of which treaty] puts the term “technological” only fourth after *economic, social, and cultural* issues in summarizing the questions the treaty aims to address. As Mihaly Ficsor, one of the drafters of the Treaty explains, this choice was not arbitrary. Instead, it was meant to emphasize that the focus of the reform effort should not be on technology itself. The provisions of law “should not be technology-specific, but rather should be able to handle, in a more abstract manner, the specific type of economic, social and cultural issues that the technology had raised.”³⁵

Although the challenges brought about by the Internet are numerous, analysis of them in specific categories may simplify the legislative response. Professor Trotter Hardy suggested a helpful classification in his 1998 study *Sketching the Future of Copyright in a Networked World: (a) new subject matters; (b) new uses; and (c) decentralized infringement.*

The costs of transition. Legislative reform requires resources – of time, money and personnel. It requires knowledgeable and articulate professionals to formulate provisions. It takes unity and efficiency among legislators. Social institutions must be willing and able social to change patterns of daily interactions. Before deciding to undertake the process of legal revision, it is important for both developed and developing nations to review the cost of reform and the cost of non-reform. Frederick Schauer once noted that “some legal transitions that might otherwise be optimal should be foreclosed or at the very least impeded in the service of the values of reliance, stability, and the other virtues of repose.”³⁶ In a decentralized and self-regulated media such as the Internet, legislative transitions are most beneficial when other, more economical means cannot suffice to resolve the issue, and there is a wide consensus among stakeholders on how to proceed. Otherwise, it may be safer to leave the legislation as is, allowing case-by-case gap filling through contract and judicial interpretation. Assuming that judicial processes are up to the task, the “interpretative” approach may be more economical than legislative reform and should be considered first, before a radically new statute is contemplated.

(b) Key issues for national legislatures

(1) The right of reproduction – temporary copies, limitations and exceptions

Article 9(1) of the Berne Convention provides copyright holders with the exclusive right of authorizing reproduction of their works “in any manner or form.” When invention of the computer brought about storage of works in electronic memory, some debate arose regarding whether the reproduction right encompassed electronic copies. The WCT makes it clear that, under the Berne Convention, electronic copies, including temporary copies, *are* reproduction, and thus are controlled exclusively by the copyright holder, although certain reproductions may be allowed without authorization

³⁵ Ficsor, *supra*, note 14, at 413.

³⁶ Frederick Schauer, *Legal Transitions: Is There an Ideal Way to Deal with the Non-Ideal World of Legal Change?: Legal Development and the Problem of Systemic Transition*, 13 J. Contemp. Legal Issues 261, 265 (2003).

through exceptions or limitations.³⁷ Almost all countries now recognize (either explicitly by statute, under case law, or by interpretation) that temporary copies fall within the scope of the reproduction right. In the European Union and in the U.S., for example, all copies including incidental and temporary ones are included.³⁸ For some years, Japanese law had excluded temporary copies from coverage,³⁹ but that has largely changed.

There is not, however, universal consensus on the scope of applicable exceptions to the reproduction right.⁴⁰ Traditional copyright law recognizes certain narrowly-tailored exceptions to the exclusive rights of the copyright holder. Consideration of the scope of exclusive rights under the Internet treaties required examination of the scope of the exceptions as well. The Internet treaties offer no technology-specific language regarding exceptions and limitations. The treaties leave ultimate discretion to the states regarding the creation and scope of the exceptions. The two exemptions most commonly addressed to date are those for temporary copies (discussed here) and exhaustion of the distribution right (discussed in subsection (3), below).

The Berne Convention provides in Article 9(2) a three-step test for determining whether an exception to an exclusive right of reproduction is appropriate. Although Article 9 concerns reproduction, its approach to “exception-writing” is applicable to other cases: “It shall be a matter for legislation in the countries of the [Berne] Union to permit the reproduction of [literary and artistic] works [1] in certain special cases [2] provided that such reproduction does not conflict with a normal exploitation of the work and [3] does not unreasonably prejudice the legitimate interests of the author.” As Mihaly Ficsor points out, “the ‘three step test’ is sufficient and flexible enough to be applied consistently in the new environment.”⁴¹ Article 13 of the TRIPS Agreement made the three step test applicable not only to exceptions and limitations to the reproduction right but also to other rights recognized by the Berne Convention, and the WCT and WPPT extended the same standard to the new exclusive rights recognized by those agreements.

Within this framework, nations have taken different approaches to the exceptions. For example, in regards to the right of reproduction, the EU system uses the concept of “private copying” to allow home, non-commercial uses. Private copying is addressed through a *right of remuneration*, not through an exclusive right of the author. To ensure payment of remuneration, the law imposes special levies on copying equipment and supplies at the point of purchase. These levies go to collecting societies, which

³⁷ Ficsor, *supra* note 14, at 450; Eric H. Smith, “The Reproduction Right and Temporary Copies: The International Framework, the U.S. Approach and Practical Implications,” paper presented to the SOFTIC Symposium 2001, Tokyo, (Nov. 20-21, 2001), http://www.softic.or.jp/symposium/open_materials/10th/en/smith-en.pdf.

³⁸ Information Society Directive, *supra* note 33; Digital Millennium Copyright Act, October 12, 1998 (full text at http://thomas.loc.gov/cgi-bin/toGPO/http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=105_cong_public_laws&docid=f:publ304.105.pdf (“DMCA”).

³⁹ Ficsor, *supra* note 14, at 455.

⁴⁰ For a discussion of the European approach, see P. Brent Hugenholtz, “Legal Protection and Use of Digital Information – Recent Developments in Europe,” paper presented at the SOFTIC Symposium 2001, Tokyo (Nov 20-21, 2001).

⁴¹ Ficsor, *supra*, note 14 at 520.

distribute them among copyright holders according to a sampling method.⁴² The levy system is one response to the difficulty of monitoring infringements.

The U.S. law, in contrast, has the concept of “fair use.” In accordance with Section 107 of the U.S. Copyright Act, the public can use creative content for free and without authorization, if it can be shown, based on a balancing of four factors, that the use would not unfairly prejudice the copyright holder. The four factors are: (1) the purpose and character of use should be non-commercial and non-transformative; (2) the use should not supersede or supplant the market for the original works; (3) the portion used in relation to the copyrighted work as a whole should not be substantial; and (4) the effect of the use on the actual or potential market for the work should not prejudice the copyright holder.⁴³ It is not necessarily that all four factors speak in favor of a particular use but rather that the balance should present more “pros” than “cons.”

As much as national laws try to formulate technology-neutral, universal approaches to handling “private copying” and “fair use” of works, issues brought about by the digital revolution sometimes require specific attention. For example, incidental temporary copies of data (e.g. RAM copies, buffer copies) that are necessary for the operation of computers information processing and do not have any independent value – should they be exempt from authorization? If so, by what means? As discussed earlier, there is a consensus that these copies in all their variety do represent reproduction. In the U.S., representatives of the webcasting industry expressed concern that the case-by-case fair use defense is too uncertain a basis for making rational business decisions and proposed a blanket exemption for all temporary copies. This proposal, however, did not gain approval. It was decided that such a blanket exception could have unintended consequences. As the online business expands, temporary copies are gaining more importance. For example, the emerging practice of delivering software on demand for immediate use and subsequent disposal would almost entirely rely on temporary copies. In this model, the entire economic value of the transaction would consist of a temporary copy.⁴⁴ Although a blanket exception from the reproduction right for all temporary copies that are incidental to lawful uses may be too broad to accommodate international obligations and may shift the balance from protection of copyright holders, it may be beneficial to craft a special, more carefully tailored exception, to provide certainty for developers of these new business models.⁴⁵

For now, section 117(1) of the U.S. Copyright Act does not provide any more specific guidance than to permit acts that “are necessary for the use of the computer program by the lawful acquirer in accordance with its intended purpose.” For all works other than computer programs, the permissibility of making temporary copies under U.S. law is governed by the fair use doctrine discussed above. A similar approach is followed in the EU Information Society Directive, which leaves it up to the individual member states to craft specific provisions. The Directive requires states to enact an exemption for “temporary acts of reproduction, which are transient or incidental, which are an integral and essential part of a technological process whose sole purpose is to enable: (a) a transmission in a network between third parties by an intermediary or (b) a lawful use of a work or other subject matter... and which have no independent economic significance...”⁴⁶ Moreover, for computer programs, the permissible exceptions

⁴² *Id.* at 536-537.

⁴³ DMCA Report, *supra*, note 31, at xxv.

⁴⁴ *Id.* at 131.

⁴⁵ *Id.* at xxvii.

⁴⁶ Information Society Directive, *supra* note 33, Article 5(1).

regarding temporary reproductions are narrower than those for other works, and are provided by the 1991 Computer Programs Directive rather than by the Information Society Directive.

(2) The “making available” right

As was mentioned earlier, the Internet scrambled what had been, under the Berne system, a clear difference between copy-related and non-copy related exclusive rights, such as “communication to the public” and “distribution.” To address the issue, the WCT offered an overarching solution. It introduced a new concept of “making available,” and left it up to the national legislatures to define it.

The “making available” concept appears in the WCT twice: in Article 6 (Right of Distribution) and Article 8 (Right of Communication to the Public). Article 6(1) reads: “Authors of literary and artistic works shall enjoy the exclusive right of authorizing *the making available* to the public of the original and copies of their works through sale or other transfer of ownership.” Article 8, in turn, states that “... authors of literary and artistic works shall enjoy the exclusive right of authorizing any communication to the public of their works, by wire or wireless means, including *the making available* to the public of their works in such a way that members of the public may access these works from a place and at a time individually chosen by them.” This formulation gives legislatures full discretion to introduce a new right or to cover digital transmissions through one or both of the pre-existing rights of communication and distribution.⁴⁷ The ultimate importance of introducing the “making available” concept into the structure of the copyright protection is to ensure that digital transmissions of a work do not fall through the gaps between pre-existing rights.

Participating countries have used this discretion to adopt different ways of ensuring copyright protection in regards to digital transmissions. The EU approach favors the “communication to the public” right in regards to digital transmissions. The Information Society Directive, in Article 3(1), practically copied Article 8 of the WCT, basing the right to transmission on the right of communication to the public. In the EU, the right of “making available” is one of the “sub-rights” of the right of communication to the public.

The U.S. copyright law does not have a general “communication to the public” right. It offers, instead, rights of “public performance” and “public display.” The right of distribution and the rights of public performance and display are applied to digital transmissions.⁴⁸ Under U.S. law, distribution by transmission was incorporated under the general distribution right. At the same time, according to the U.S. approach, if a work is “publicly performed by transmission,” then there has been a public performance.⁴⁹ This may happen, for example, if a work is transmitted by “streaming” it over the Internet – no reproduction was made, so no copies were distributed. At the same time, the author’s right of public performance is protected.

Japanese law, in turn, took a third road and established a new separate “making available (transmittable) right.” Under Japanese law, since 1986, the right of wireless transmission and the right of wire transmission had been extended to any kind of transmission (both analog and digital, and both

⁴⁷ Ficsor, *supra*, note 14, at 478.

⁴⁸ *Id.* at 503.

⁴⁹ *Id.*

traditional broadcast and interactive transmissions).⁵⁰ When Japanese copyright law was modified in 1997, all that had to be done in order to introduce a general “public transmission” right was to eliminate the differences between wireless transmission and wire transmission. As a result of the 1997 amendment, Japanese law reads as follows: “The author shall have the exclusive right to transmit his work publicly, including the making transmittable of his work in the case of interactive transmission.”⁵¹

(3) The exhaustion concept in the context of online distribution

While the issue of temporary copies triggers discussion of adding new exemptions to accommodate inherent features of computers, there are also features of the digital environment that suggest that some “tangible world” exceptions may not be justified for the Internet. A prominent example is the question of exhaustion of the distribution right. According to Article 6 of the WCT, “Authors of literary and artistic works shall enjoy the exclusive right of authorizing the *making available* to the public of the original and copies of their works through sale or other transfer of ownership.” Under the European concept of “exhaustion” and its U.S. counterpart, the “first sale” doctrine, the exclusive right of distribution ceases after a copyright holder authorizes the first disposal of a copy of the work. A good-faith possessor of the copy can then dispose of it without seeking authorization of the copyright holder. For example, an owner of a book is free to sell it to a used-book store.

While in the tangible world only as many copies of a book can be distributed as were initially printed, in the digital world a copyright holder could place one copy of her work online and distribute it an unlimited number of times without ever disturbing the original. Does the copyright holder exhaust her right after disposition of the first copy?

Article 6 of the WCT permits members to limit the distribution right through the exhaustion principle, but there is no requirement to do so. In the EU, the question is addressed through complete elimination of the exhaustion principle for online transactions. Exhaustion applies only to distribution of tangible *goods*, while on-line distribution, which is regulated through the right of “communication to the public” rather than through a “distribution right” per se, is regarded as a “service.” Recital 29 of the Information Society Directive states that “the question of exhaustion does not arise in the case of services and on-line services in particular. The question appeared more complicated for the U.S. copyright system, which implemented the “making available” rights through a combination of the distribution, reproduction, public performance and public display rights. However, although the debate continues, the trend in the U.S. is the same as in the EU – the “first sale” (or exhaustion) doctrine should not apply to online transmissions.”⁵²

(4) Anti-circumvention provisions

As much as the WIPO approach was to amend and clarify the Berne treaty in the WCT, it was necessary to introduce some entirely new concepts. A major new principle adopted by the WIPO treaties is the principle of “anti-circumvention” of technical measures for copyright protection.⁵³

⁵⁰ Id. at 507-508, referring to ‘Copyright System in Japan,’ prepared by the Japanese Copyright Office (JCO), Agency for Cultural Affairs, Government of Japan, 2001 edition, published by the Copyright Research & Information Center (CRIC), 31.

⁵¹ See generally the description of the Japanese approach in Ficsor, *supra* note 14, at 503-504.

⁵² DMCA Report *supra* note 31.

⁵³ Ficsor, *supra* note 14, at 544.

While there is general consensus that the law should not require content producers to employ technical protection measures, there is also general consensus that, if companies choose to implement such measures, the law should support them by instituting liability for circumventing them. The WIPO Copyright Treaty (WCT) does not specify how anti-circumvention should be legally ensured. It only requires the Contracting Parties to provide “adequate 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 under this Treaty or the Berne Convention and that restrict acts, in respect of their works, which are not authorized by the authors concerned or permitted by law.”⁵⁴ Similarly, the WPPT requires member states to provide “adequate legal protection and effective legal remedies.”⁵⁵

“Effective” in regards to technological measures does not mean that such measures must be “bullet-proof” in order to be legally protected. (Indeed, if a measure were infallible, it would not require a legal protection.) A good example of an interpretation of “effective” as applied to technological protection can be found in Title 17, Section 1201 (a)(3)(B) of the U.S. Code, as added by the DMCA: a “technological measure *effectively* controls *access to* a work if the measure, in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work” (emphasis added). Further, Section 1201 (b)(2)(B) stipulates that a “technological measure *effectively* protects *a right of* a copyright owner under this title if the measure, in the ordinary course of its operation, prevents, restricts, or otherwise limits the exercise of a right of a copyright owner under this title” (emphasis added).

Legislative approaches to anti-circumvention are quite diverse. Overall, it is possible to talk about four kinds of anti-circumvention provisions: (1) liability for individual acts of circumvention of access control measures; (2) liability for individual acts circumventing rights control measures; (3) liability for preparatory acts consisting of manufacturing, selling, marketing and other trafficking in circumvention products; and (4) liability for preparatory acts consisting of offering circumvention services.

Liability for individual acts of circumvention imposes personal responsibility on individual end users, who are directly at fault for their acts. However, pursuit of individual users is often difficult. In addition, it is unlikely to afford the aggrieved party significant monetary relief. Liability for preparatory acts, in contrast, may target the problem “at its source.” At the same time, it is important to remember that circumvention devices may have legitimate uses, and there is a need to make sure that innovation is not stifled.

Nations have implemented different anti-circumvention measures. In Japan, for example, protection is granted against ‘preparatory acts’ and against the acts of businesses that circumvent protection measures in response to requests from the public, but, in general, not against individual acts of circumvention.⁵⁶ The U.S. approach addresses both individual and preparatory acts. The U.S. approach draws a distinction between tampering with “access controls” and tampering with “rights control.”

⁵⁴ WCT, Article 11.

⁵⁵ Ficsor, supra note 14, at 547.

⁵⁶ Ficsor, supra note 14, at 545. Japan’s Copyright Law prohibits “any person who, as a business, circumvents technological protection measures in response to a request from the public.” Art 120bis(ii). Other provisions on this topic are contained in Japan’s Anti-Unfair Competition Law.

“Access controls” limit access to a work, while “rights control” technologies protect the rights of the copyright owner to reproduce, distribute, publicly perform, publicly display, and so on. While U.S. law makes it illegal, subject to certain exceptions, to tamper with access control measures, it does not outlaw the act of circumventing rights control measures, on the theory that in nearly all cases this will involve an infringement of copyright, which is already illegal unless justified by some exception (notably fair use).⁵⁷

The EU Information Society Directive does not discriminate between access and rights control. It effectively bans all four types of circumvention-related activity. Unlike the DMCA, the Directive does not contain exceptions to the prohibition against circumvention.⁵⁸ The European approach places great emphasis on parties' voluntary arrangements and on freedom of contract.⁵⁹ Under the Directive, voluntary agreements between rights holders and other parties are encouraged, and the intervention of Member States is limited to cases when such agreements are absent. Such an approach may enable rights holders to price their products and services more cheaply, since they will not need to accommodate the cost of legitimate rights-circumvention in their business models.⁶⁰ However, whether companies doing business in Europe will actually keep their prices lower for this reason remains to be seen.

(5) Protection of Rights Management Information

WIPO introduced a second new principle, the principle of “rights management information.” Rights management information is information relating to a protected work and any applicable protection scheme. The concept is covered in Article 12 of the WCT, which requires member states to make it illegal (i) to remove or alter any electronic rights management information without authority; and (ii) to distribute, import for distribution, broadcast or communicate to the public, works or copies of works knowing that electronic rights management information has been removed or altered without authority.⁶¹ The concept has been so non-controversial that it might be advisable to simply reproduce Article 12 in national law without any substantive changes. Thus, for example, Japan in its Copyright Act and the EU in its Information Society Directive transposed all the elements of Article 12 with only a few some wording changes.⁶² In the U.S., section 1202(b) of the copyright law implemented Article 12 of the WCT, but extended the coverage to any rights management information, rather than only electronic information. The only other details that a nation would have to address would be defining liability for violations of the principle in a way that is most suitable to that nation’s particular legal system.

(6) Intermediaries’ Liability

The third entirely new issue posed by the Internet that may be ripe for being addressed in any legal system is the question of the liability of intermediaries, most specifically Internet Service Providers

⁵⁷ Symposium: the Law and Technology of Digital Rights Management, 18 Berkeley Tech. L. J. 697, 761, Spring 2003.

⁵⁸ *Id.*

⁵⁹ Casellati, *supra*, note 4, at 400.

⁶⁰ *Id.* at 401.

⁶¹ Ficsor, *supra* note 14, at 564.

⁶² *Id.* at 565-566.

(ISPs). Any act of information sharing on digital networks, even peer-to-peer sharing, involves one or more intermediaries. There are really two questions: whether intermediaries should be liable for acts of infringement that occur over their facilities, and if so, what duties such intermediaries should bear or what remedies should be available against them. In addressing these questions, policymakers should consider two opposing interests. On the one hand, pursuing an intermediary is potentially a more effective means of combating copyright infringement than pursuing individual users. On the other hand, liability for intermediaries could have unintended consequences, forcing intermediaries to incorporate the price of potential liability into their business models by charging more, thus making their services less accessible, and prompting them to interfere with the free flow of information and the independence of online expression, with adverse implications for the information society as a whole.

The WIPO treaties do not address intermediaries' liability, leaving the matter largely for national legislatures to decide within the context of the treaties' requirement that member states provide adequate and effective enforcement mechanisms for intellectual property rights. Even prior to the rise of the Internet, different legal systems had developed different approaches to the question of when one party should be held liable for copyright infringing acts committed by another party. Online and offline, the question of liability of intermediaries should be addressed with clear rules and a focus on what remedies should be available against intermediaries if and when they are considered liable.

In 1999, several record labels sued Napster and its affiliates for direct, contributory and vicarious copyright infringement after the company provided to the public free software called "MusicShare," allowing "peer-to-peer" file sharing over the Internet. A U.S. federal court held that Napster users, but not Napster itself, had directly infringed distribution rights, by uploading file names to the search index for others to copy, and reproduction rights, by downloading the copyrighted music files. Then the court held that Napster could be [was liable for?] contributorily infringing, because it knew or had reason to know of the direct infringement. In addition, the court held, Napster "materially contributed to the infringing activity" by providing software, server, and support service to users. Finally, the court held that Napster was likely to be liable vicariously, because it had "the right and ability to supervise the infringing activity" and also had "a direct financial interest in such activities."⁶³ The court emphasized that the financial benefit to Napster did not have to be immediate for it to be liable, noting that "financial benefit exists where the availability of infringing material acts as a draw for customers."⁶⁴

Even though the court found Napster liable on the basis of traditional vicarious and contributory liability doctrines, the U.S. proceeded, before the case was finally resolved, to legislate on the matter to avoid uncertainty. On the question of intermediaries' liability, the DMCA is probably the most detailed statute in the world. Its Section 512 covering the issue takes about nine pages. The Section adopts the "notice and take down" system and specifies four occasions in which service providers are not subject to monetary remedies for infringement:

- (a) "mere conduit" – the service provider is merely providing a conduit for the transmission or routing of infringing material, including copies automatically made in the course of the transmission;
- (b) "system caching" – where the service provider automatically makes and retains copies of material, such as frequently-visited remote websites, to improve network performance and reduce congestion for users;

⁶³ A&M Records v. Napster, 239 F.3d 1004, 1022 (9th Cir. 2001).

⁶⁴ Id. at 1023.

- (c) “hosting” - where the service provider, without receiving a direct financial benefit, provides access to infringing material posted on its system by a user, so long as the service provider does not know the material is infringing, is unaware of facts or circumstances from which infringement is apparent, or has not received a notification from the copyright owner; and
- (d) provision of search tools and hyperlinks - where the service provider, under conditions similar to those applicable in the preceding situation, provides an information location tool, such as a directory, pointer or hyperlink, that facilitates access to infringing material, even if posted outside its system; so long as the service provider does not know the material is infringing, is unaware of facts or circumstances from which infringement is apparent, or has not received a notification from the copyright owner.⁶⁵

The European Union in its Electronic Commerce Directive⁶⁶ has taken a similar approach, but in a much more concise manner. Article 12 of the Directive stipulates that, in the case of simple transmission, the provider of the service may not be held liable for the action of its subscriber so long as the provider (1) does not initiate the transmission; (2) does not select the recipient of the transmission; and (3) does not select or modify the information contained in the transmission. Article 13 states that, in the case of the intermediate and temporary storage of information with the sole objective of making onward transmission more efficient (caching), the service provider may not be held liable if the provider (1) complies with any conditions on access to the information; (2) complies with any rules regarding updating of the information, specified in a manner consistent with industrial standards; (3) does not interfere with technology used to obtain data on use of the information; and (4) acts expeditiously to remove or to bar access to the information as soon as the original information has been removed from the network or orders have been given for it to be removed. Finally, under Article 14, in the case of storage of information provided by a subscriber or customer, the provider may not be held liable if (1) the provider has no actual knowledge that the activity is illegal and, as regards claims for damages, is not aware of facts or circumstances suggesting illegal activity; and (2) the provider, upon obtaining such knowledge or awareness, acts expeditiously to remove or to disable access to the information. The Directive also denotes that Member States may not impose on providers any general obligation to monitor the information transmitted or stored or actively to seek facts or circumstances indicating illegal activity, but it also permits the courts to issue injunctions against infringing activity occurring online, in appropriate cases.⁶⁷

(c) *Importance of enforcement*

No matter how good the legal rules are, the law means nothing if it is not backed up by enforcement. A nation needs to have not only a fairly designed substantive copyright law, but also an adequate and proportionate procedural system allowing stakeholders to efficiently assert their rights and extra-legal institutions and policies promoting an understanding of and respect for the copyright law.

⁶⁵ As summarized by Ficsor, *supra* note 14, at 583.

⁶⁶ Directive of the European Parliament and of the Council, *On certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (E-Commerce Directive)*, 2000/31/EC, of 8 June 2000 (full text at http://europa.eu.int/eur-lex/pri/en/oj/dat/2000/l_178/l_17820000717en00010016.pdf).

⁶⁷ E-Commerce Directive, Summary, accessed August 23, 2004 at <http://europa.eu.int/scadplus/leg/en/lvb/l24204.htm>.

Enforcement through law. Article 14 (Provisions on Enforcement of Rights) of the WCT specifically requires that the Contracting Parties “ensure that enforcement procedures are available under their law so as to permit effective action against any act of infringement of rights covered by this Treaty, including expeditious remedies to prevent infringements and remedies which constitute a deterrent to further infringements.” This obligation echoes the requirements of the TRIPS Agreement, Art. 41. An effective system of institutional and procedural safeguards should –

- include civil, administrative and criminal remedies;
- provide access to effective dispute resolution mechanisms; and
- ensure that an optimal amount of financial and human resources are available to pursue the task.

The European Union in April 2004 adopted a separate Directive on the enforcement of intellectual property rights. Article 1 of this Directive emphasizes that *measures, procedures and remedies* necessary to ensure the enforcement of the intellectual property rights shall be *fair and equitable, not unnecessarily complicated or costly, as well as proportionate and dissuasive*.⁶⁸ The Directive requires that access to remedies be provided to all stakeholders concerned, including (a) holders of intellectual property rights, (b) all other persons authorized to use those rights, in particular licensees; (c) intellectual property collective rights-management bodies; and (d) professional defense bodies that are recognized as having a right to represent holders of intellectual property rights.⁶⁹ To simplify access to remedies, the Directive establishes presumption of authorship.⁷⁰ As regards to the possible legal remedies, the instrument lists injunctions,⁷¹ pecuniary compensation,⁷² and legal costs.⁷³

Enforcement through litigation. Recording companies in the U.S. have been conducting a vigilant litigation campaign. This campaign has proved that enforcement does matter. After the Recording Industry Association of America (RIAA) filed several hundreds lawsuits against individual downloaders starting in June 2003, the number of people sharing files on Kazaa dropped from 6.2 million in May to 4.3 million in August, according to Web traffic-trackers Nielsen//NetRatings.⁷⁴ Another market research firm, NPD Group, estimated that by the end of August people were downloading 30% fewer

⁶⁸ Directive of the European Parliament and of the Council on the enforcement of intellectual property rights (IP Enforcement Directive) 2004/48/EC, of 29 April 2004 (full text accessed August 23, 2004 http://europa.eu.int/eur-lex/pri/en/oj/dat/2004/l_195/l_19520040602en00160025.pdf) (“Enforcement Directive”).

⁶⁹ Id. Article 4.

⁷⁰ Id. Article 5.

⁷¹ Id, Article 11.

⁷² Id. Article 12-13.

⁷³ Id. Article 14.

⁷⁴ USA Today, *Hammering away at piracy*, Sept. 11, 2003.

songs than they were in the spring.⁷⁵ Forrester Research surveyed people ages 10-22, asking whether they would stop downloading if there were a serious risk of jail time or a fine; 68% said “yes.”⁷⁶

Enforcement through changing culture. In order to combat infringement one needs a carrot as well as a stick. The EU Copyright Directive emphasizes such methods of fighting infringement as Codes of Conduct⁷⁷ by professional associations and wide publicity of judicial decisions in copyright cases.⁷⁸ Further, it is important to devise efficient public campaigns to explain to average Internet users how copyright law is beneficial for them personally. For example, it may be useful to devise studies estimating the economic and social impact of the infringement on stakeholders outside the content industries. It may help to explain to users the growing link between copyright piracy and organized crime.⁷⁹ Overall, a variety of measures, from TV commercials to high school essay-writing competitions, may be of help, as long as these campaigns convince the general public to demand, rather than despise, an adequate system of protecting intellectual property. Finally, it will be necessary for content producers to offer the public legal means of downloading content at reasonable prices.

CONCLUSION

In shaping any copyright protection framework, policymakers have the delicate task of marching neither behind, nor ahead of the technological revolution. The Internet poses many challenges to the copyright protection system. Despite the speed of technological change, the goal of policy is evolutionary development.

On the international level, the WIPO Copyright Treaty (WCT), adopted in 1996 to complement the Berne Convention, and the TRIPS Agreement offer responses to the Internet’s challenges. Another instrument, the WIPO Performances and Phonograms Treaty (WPPT), updates copyright law’s twin concept – the concept of related rights. These treaties have been implemented in different ways in various jurisdictions. In the U.S., the core instrument of implementation is Digital Millennium Copyright Act (DMCA) of 1998 and in the European Union it is the Information Society Directive of 2001.

Among the issues covered by these legislative responses are:

- (1) interpretation of the reproduction right and revision of exceptions to accommodate temporary copying;
- (2) introduction of the ‘making available’ concept;

⁷⁵ Id.

⁷⁶ Id.

⁷⁷ Enforcement Directive, *supra* note 68, Article 17.

⁷⁸ Id. Article 15.

⁷⁹ A recent IIPA survey pointed out that while the risks involved in piracy are considerably less than those associated with drug dealing, the rewards are proportionately higher. While \$47,000 will buy a kilo of cocaine that can be sold at 100% profit, the same amount will generate 900% in profits if used to buy or produce 1,500 pirated copies of Microsoft Office software. Music & Copyright, March 17, 2004, Trade Losses of US Copyright Holders due to Music Piracy Rose 5.5% to \$2.26 bn in 2003, according to IIPA survey.

- (3) elimination of the exhaustion doctrine as regards to online transmissions;
- (4) anti-circumvention provisions;
- (5) the protection of rights management information; and
- (6) addressing the liability of intermediaries.

In addressing on a national level the questions posed by the Internet, it is necessary to preserve an optimal balance between authors' interests and the public's interests. It is desirable to use the most legislatively-economical measures and the most technology-neutral language possible. It is also important to remember that copyright legislation alone will not solve all the Internet's challenges. A solid, efficient enforcement system, both, procedurally and institutionally, is indispensable. Finally, it is important to treat "copyright-and-the-Internet" not as a merely as a legal issue, but also as a social one.

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