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The 2000-2001 *Northern Kentucky Law Review* would like to thank Adams, Steppner, Woltermann & Dusing; the Chase College Foundation; Dinsmore & Shohl; Graydon Head & Ritchey; Greenebaum Doll McDonald; Taft Stettinius & Hollister; and for their generous support of our student organization and specifically for their sponsorship of the *Symposium on Cyber Law: Issues Affecting the Internet and Its Governance*, held on February 3, 2001.
In a famous lecture delivered at one of the first academic Symposia on Internet law ever to be held, Judge Frank Easterbrook of the United States Court of Appeals for the Seventh Circuit vigorously questioned the need for scholars and students even to recognize “Internet Law” as a distinct and legitimate legal discipline. According to Judge Easterbrook, the legal problems that arise from disputes concerning the Internet should, in principle, be soluble entirely through application of more traditional legal doctrines, such as intellectual property law, contract and commercial law, tort law, or Constitutional law. Therefore, based upon his belief that “the best way to learn the law applicable to specialized endeavors is to study general rules,” Judge Easterbrook advised students and practitioners that to devote time or effort to studying “the law of the Internet” would make as much (or as little) sense as studying “the law of the horse.”

But why not study the “law of the horse,” one might ask? Judge Easterbrook explained that:

Lots of cases deal with sales of horses; others deal with people kicked by horses; still more deal with the licensing and racing of horses, or with the care veterinarians give to horses, or with prizes at horse shows. Any effort to collect these strands into a course on “The Law of the Horse” is doomed to be shallow and to miss unifying principles. Teaching 100 percent of the cases on people kicked by horses will not convey the law of torts very well. Far better for most students — better, even, for those who plan to go into the horse trade — to take courses in property, torts, commercial transactions, and the like, adding to the diet of horse cases a smattering of transactions in cucumbers, cats, coal, and cribs. Only by putting the law of the horse in the context of broader rules about commercial endeavors could one really understand the law about horses.

Now, I’m sure that many of you have already figured out that Judge Easterbrook did not deliver this lecture in Kentucky. Here in the Bluegrass State, many might take issue with Judge Easterbrook’s use of equestrian law as the paradigmatic example of a subject so excessively shallow and narrow that it cannot yield any unifying principles when studied, even to one who seeks only to understand the law about horses.

Judge Easterbrook, of course, is correct in some respects. Horse thieves in Kentucky, for example, must be prosecuted under the same broad criminal

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1 Assistant Professor of Law, Salmon P. Chase College of Law, Northern Kentucky University; J.D., 1996, Northwestern University School of Law; A.B., 1987, Princeton University.
3 Id. at 208 (borrowing a phrase originating with Karl Llewellyn and used in a speech by University of Chicago Dean Gerhard Casper concerning teaching methods).
4 Id. at 207.
5 Id.
statutes that prohibit grand larceny more generally. Thus, an attorney seeking to prosecute or defend an alleged horse rustler would be better advised to study general criminal law than to focus on equestrian law.

But the opposite can also be true. I am unaware, for example, of any principle of tort law or commercial law that would resolve the question whether a person who receives injuries while nursing an injured thoroughbred race horse is entitled to receive workers' compensation benefits. The answer to this question — that no such benefits obtain — may be derived only from specific doctrines pertaining to the "law of the horse." Similarly, general principles of taxation may not be sufficient to prescribe whether sales tax must be paid when a thoroughbred race horse is sold. In Kentucky, no such tax need generally be paid on livestock sales. But under "the law of the horse," thoroughbreds are not livestock, "since we Kentuckians do not customarily consume horseflesh at the dinner table." Thus, under unique "law of the horse" principles, the livestock exemption does not apply, and sales tax must be paid after all.

The "law of the horse" also extends to the regulatory arena. In Kentucky, horses are subject to pervasive regulation by the Kentucky Racing Commission's Division of Racing and Security. The Racing Commission is a streamlined division of the Kentucky Public Protection and Regulation Cabinet. It is charged with enforcement of Ch. 230 of the Kentucky Revised Statutes (which govern horse racing). Since last year, the Racing and Security division has done the work that was formerly done by the three separate Divisions of Thoroughbred Racing, Standardbred and Quarter Horse Racing, and Security.

So the law of the horse may in fact be more complex and comprehensive than Judge Easterbrook first thought. Indeed, studying the "law of the horse" directly — and not just in the context of broader legal norms of general applicability — may actually be necessary if one really wants to understand the law about horses. But can the same be said about the law of the Internet?

On February 3, 2001, the Northern Kentucky Law Review held a symposium which demonstrated that the answer is yes. On that day, recognized experts in the evolving field of Cyberlaw discussed solutions to new legal problems that have arisen — or will arise — solely out of the operation of the Internet. Some

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7 Cf. Michael v. Cobos, 744 S.W.2d 419 (Ky. 1987) (denying compensation claim, on ground that conditioning and exercising of race horses which had returned to farm for rehabilitation from injury constituted "agricultural" activity, exempt from workers' compensation).


9 Id. (citing Stoner Creek Stud, Inc. v. Revenue Cabinet, 746 S.W.2d 73 (Ky. Ct. App. 1987)).

10 Id.


12 For a greater elaboration on this theme, see generally Lawrence Lessig, The Law of the Horse: What Cyberlaw Might Teach, 113 Harv. L. Rev. 501 (1999) (surveying ways that Internet architecture regulates human behavior, and suggesting that studying such "regulation-by-code" can yield fresh insights about regulation by instruments of law).
of these problems have no analogue in the physical world. Others shed new light on old problems, in much the same way that studying a foreign language often yields fresh insights into the structure and descriptive limitations of one’s own native tongue. This issue of the *Northern Kentucky Law Review* gathers the insights of each of these speakers, as well as one student author, in full length analysis of the issues.

Professor Phil Weiser’s article discusses the evolving mechanisms of Internet governance. In response to the oft-recited canard that the government should not regulate the Internet, Prof. Weiser observes that the Internet is, and always has been, pervasively regulated and government-financed. Thus, the question is not whether to regulate, but how government can best foster the growth and beneficial usage of the Internet as a tool for human and commercial interaction. In response to this question, Prof. Weiser suggests that the very novelty of the Internet offers a unique opportunity for experimentation with new regulatory models, including hybrid models that combine private standard setting and industry self-regulatory organizations with conventional statutory governance enforced by courts or administrative agencies.

Picking up on Prof. Weiser’s suggestion, Rosemary Harold, Esq., addresses one especially significant challenge to the federal government’s historical model of telecommunications regulation: technological convergence. For historical reasons, Congress and the FCC have always regulated conventional telephony as a “common carrier” service, while subjecting cable television to an entirely different set of regulations as a quasi-broadcast service. Today, however, these historical regulatory distinctions are being eradicated by technological convergence, as telephone lines and cable television lines are competing against each other to deliver the same broadband Internet services to residential and small business users. This competition has led to increasing calls for regulatory parity across technologies. In this context, Ms. Harold illuminates the highly politicized debate over whether competitive non-facilities-based Internet service providers should be entitled to obtain “open access” to proprietary cable facilities, in symmetry with their existing rights to obtain such “open access” to proprietary telephone common carrier facilities.

The commentary of Dennis R. Williams discusses the open access/forced access debate in light of a recent case, *Comcast Cablevision Inc., v. Broward County, Florida,* and gives consideration to the First Amendment issues presented.

Professor Ethan Katsch, writes about new, and highly efficient, approaches to dispute resolution that the Internet has already generated. As e-commerce becomes increasingly popular, commercial e-disputes will likely proliferate as well. But e-disputes may be easier to resolve than flesh-and-blood disputes, through inexpensive online dispute resolution. Indeed, online dispute resolution may be desirable even for resolving controversies originating in the “physical”

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world. Prof. Katsch evaluates several existing approaches to online dispute resolution, and also suggests other potential opportunities for moving dispute resolution — one of law’s basic reasons for being — online.16

Mathias Strasser’s article discusses the effect of peer-to-peer software applications (such as Napster) on traditional copyright law. In essential agreement with Judge Easterbrook, Mr. Strasser posits that basic copyright protection on the Web should be governed by the same principles that govern copyright protection in the “real” world. Applying these principles, Mr. Strasser concludes that peer-to-peer software application providers should rightly be subject to infringement liability when software applications are marketed primarily as tools to engage in copyright infringement, and are in fact used to infringe.17 Today, newer, post-Napster peer-to-peer applications (such as Gnutella and Freenet) may successfully elude copyright enforcement by relying on highly decentralized architecture. If so, however, then Mr. Strasser posits that such decentralization ultimately threatens to erode the benefits of the rule of law on the Internet, to the detriment of everyone.

Jeff Landen’s comment responds to Mr. Strasser’s argument, asserting that the existing copyright law (as applied in the Napster case) will not be sufficient when applied to peer-to-peer architectures and other evolving technologies.

We are pleased to be able to bring you this collection of esteemed authors in this fascinating field of law. We hope that you find it informative and useful. Thank you for supporting the Northern Kentucky Law Review.

BEYOND NAPSTER: HOW THE LAW MIGHT RESPOND TO A
CHANGING INTERNET ARCHITECTURE

by Mathias Strasser

INTRODUCTION

I. LOCAL CENTERS

II. INDIRECT COPYRIGHT LAW ENFORCEMENT

   A. Regulation of Obscene and Defematory Speech
   B. Works of Authorship
      1. Copyright Doctrine
      2. 17 U.S.C. § 512
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III. PEER TO PEER ARCHITECTURE

   A. The Demise of the Local Centers
   B. Possible Legal Responses
      1. Hybrid P2P Architectures
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   C. Conclusion

CONCLUSION

INTRODUCTION

This Article examines the potential impact of Napster, the popular MP3 file-swapping service that up to 50 million people use to download music from the Internet, and similar technologies — commonly known as peer-to-peer (“P2P”) architectures — on the copyright law system. The topic is hotly debated in the news and subject to fierce battles in courts as well as in Washington. Musicians

1 Harvard Law School LL.M. 1999, Vienna University School of Law Dr. Jur. 1997; Vienna University School of Law Mag. Jur. 1996. More information is available at the author’s website, located at <http://www.strasser.priv.at/mathias>. I would like to thank Anusha Rasalingam for her useful comments, Ian Clarke for his valuable explanations of the Freenet technology and Darran Winslow for organizing the symposium, which was very helpful to me in developing my ideas on the topic.


3 See Webopedia, Peer-to-Peer Architecture (visited Mar. 11, 2001) <http://webopedia.internet.com/TERM/p/peer_to_peer_architecture.html> [hereinafter Webopedia, Peer-to-Peer] (defining the term “peer-to-peer architecture” as: “[a] type of network in which each workstation has equivalent capabilities and responsibilities. This differs from client/server architectures, in which some computers are dedicated to serving the others. Peer-to-peer networks are generally simpler, but they usually do not offer the same performance under heavy loads.”).


are split on both sides of the controversy: While some artists view the service offered by Napster as the advent of the apocalypse, others speak out in favor of the company. Interestingly, the record industry itself has shown an ambivalent attitude: On one hand, on December 6, 1999, a number of major labels sued Napster in court. On February 12, 2001, they scored an important victory when the Ninth Circuit in substance affirmed the district court's decision, holding that Napster is under a duty to monitor its system for copyright violations and to take action against its subscribers when it has specific knowledge that its subscribers are engaged in infringing activities. On the other hand, however, Bertelsmann AG, which, following the intended merger of Bertelsmann Music Group ("BMG"), its music division, with EMI Group PLC would own the largest record company in the world, late last year surprised observers when it announced that it would support Napster financially and turn it into a fee-based subscription service. Further, Bertelsmann declared, once the technical prerequisites for such a service are in place, the suit brought by BMG against Napster would be dropped. Bertelsmann has been trying to market its plan to other record companies but so far has had little success. On the contrary, in

Anna Wilde Mathews and Ted Bridis, Music Labels Urge Congress to Stand By in Online Feud, WALL ST. J., Mar. 8, 2001, at A24 (indicating that at the current time record companies have Congress' ear and the companies are encouraging Congress to "stay out of the digital music fight while they roll out their own competing online services.")

See Keith Perine and Michael Learmonth, Metallica, Napster Go to Washington, THE INDUSTRY STANDARD (July 11, 2000) <http://www.thestandard.com/article/display/0,1151,16734,00.html>. See also Christopher Jones, Metallica Rips Napster, WIRED NEWS (Apr. 13, 2000) (commenting on the suit brought by the rock group Metallica against Napster as well as several universities including: University of Southern California, Yale University, and Indiana University) <http://www.wired.com/news/politics/0,1283,35670,00.html> and Margaret Kane, Dr. Dre Sues Napster - and Users? ZDNET NEWS (Apr. 26, 2000) (discussing the lawsuit filed by musician Dr. Dre against Napster alleging that Napster violated his copyrights by allowing users to trade digital copies of his songs).


The labels that brought suit against Napster include: Bertelsmann AG ("BMG"); Vivendi Universal S.A.; Warner Music Group, Inc.; EMI Group plc; Sony Music Entertainment, Inc.; and several others.

See A & M Records, 239 F.3d 1004 (9th Cir. 2000).

See generally Jeff Leeds, Ex-Justice Department Attorney to Join Bertelsmann, L.A. TIMES, Feb. 1, 2001, at C6 (discussing Bertelsmann's attempt to structure the deal to overcome EC concern that reducing the number of record conglomerates from five to four would hurt consumers).


The only two other companies that have joined forces with BMG are Edel Music AG and TVT
early February, Vivendi Universal S.A. and Sony Music Entertainment, Inc. announced their intention to launch a subscription service of their own called Duet in the summer of this year. Meanwhile, several other subscription services have been announced. What impact, if any, the Ninth Circuit's decision will have on the negotiations between the labels and Napster's fate is currently unclear. Recent indications by Senator Orrin Hatch, chairman of the Senate Judiciary Committee, that he may be willing to support Napster through legislative action adds yet another aspect to this discussion, which raises myriad policy issues whose resolution is likely to shape the future of producing and distributing music.

One interest group that watches the record industry's battle against Napster with great attention is the movie industry, which obviously is concerned that, once broadband Internet connections become more widely available, it will be exposed to a similar threat.

While Napster itself has a limited scope and, as I will show in this Article, is extremely vulnerable to legal action (irrespective of whether one agrees with the
Ninth Circuit’s analysis), other file-sharing software based on P2P technology, such as Gnutella and Freenet are likely to amplify the problem as they enable people to engage in the widespread dissemination of virtually any type of copyrighted material without allowing the respective copyright holders to prevent infringement from occurring.

The thesis of this paper is that, while from a policy perspective, the P2P technologies underlying Napster, Gnutella and Freenet potentially benefit society in a number of ways and thus should be welcomed, there is no reason why information transmitted via P2P architectures should be exempt from copyright law. Despite the desirability of regulating P2P architectures, however, obstacles are likely to result from the fact that in order to afford copyright holders effective protection, extremely far-reaching measures would need to be adopted (and conceivably, the Internet might have to be “switched off”), for which there may not be political support.

The following analysis will proceed in three steps: Part I will take a closer look at the Internet’s architecture as it currently stands. As it turns out, while much of that architecture is decentralized, contrary to conventional wisdom, this does not apply to all aspects of the Internet. In fact, closer analysis suggests that, in many ways, it may be more accurate to characterize the Internet’s present architecture as a web of “local centers.” As we will see, it is this web of local centers that principally enables the government to enforce copyright law. Part II will show that, while the government has long since recognized the regulatory potential of the Internet’s local centers, it has exploited this potential very carefully. While trying not to regulate the Internet in a manner that might have a chilling effect on Internet speech, it is increasingly relying on its local centers for the enforcement of copyright law. I will call this strategy “indirect” copyright law enforcement. Part III will argue that the main difference between the Internet’s current architecture and P2P architectures is that the latter are truly decentralized and consequently do not expose local centers. Given the government’s reliance on local centers for the purpose of enforcing copyright law, the question is what impact P2P architectures might have on the viability of indirect copyright law enforcement as a means of protecting the interests of copyright holders. In answering this question, a distinction will be made between “hybrid,” “plain-vanilla” and “law-defying” P2P architectures, and both the regulability and the legal status of each will be addressed. While copyright law is essentially in good shape to deal with Napster and Gnutella, it is impossible to regulate Freenet on the basis of the currently applicable law. Although it would be possible to amend the Copyright Act in a way that would make Freenet amenable to regulation (which, from the perspective of intellectual property theory, might be desirable since there is no reason why information transmitted via particular types of architectures should be exempt from regulation), it is doubtful that the drastic measures that would need to be implemented to achieve that goal would find sufficient political support. Nevertheless, the paper’s

19 See A & M Records, 239 F.3d 1004 (9th Cir. 2000).
conclusion will be that, even if no such measures were adopted, it would be a mistake to speak of a victory of technology over law. Rather, however the battle may end, the winner would be the values upon which our copyright system is founded.

I. LOCAL CENTERS

The Internet is often considered prototypical of a decentralized network.22 This characterization, however, while accurate with respect to the Internet as a whole, does not apply equally to all aspects of the network. The notion that the Internet is a decentralized network is as old as the Internet itself. Therefore, to understand in what sense the Internet might be decentralized, it is helpful to go back to the early days of the Internet. The Internet has its roots in the so-called ARPAnet, which was created in 1969 under the auspices of the U.S. Department of Defense and originally connected the Stanford Research Institute, the University of California at Los Angeles, the University of California at Santa Barbara, and the University of Utah.23 In 1986, ARPAnet was replaced by a network called NSF, which eventually developed into the Internet as we know it today.24 The government’s goal at the time ARPAnet was created was to set up a network that would enable computers in disparate locations to exchange military data.25 Given the context in which the Internet has evolved, one of the foremost concerns was to provide it with as robust an infrastructure as possible so as to enable it to resist attacks and catastrophic events.26 To achieve this goal, the fathers of the Internet decided to give the network a “decentralized” architecture. In a famous paraphrase, an architecture that would not depend on central administrative headquarters would ensure that in the event of a nuclear war, the only things that would survive would be “cockroaches and the Internet.”27 What the creators of ARPAnet thus envisaged by “decentralization” was that the edges connecting the endpoints of the network would not run through one or more


25 See Reno, 521 U.S. at 850.

26 Id. See also Religious Tech. Center v. Netcom On-Line Communications Servs., Inc., 907 F. Supp. 1361, 1370 n.13 (N.D. Cal. 1995) (noting that “[t]he decentralized network was designed so that if one link in the chain be closed off, the information will be dynamically rerouted through another link. This was meant to allow the system to be used for communications after a catastrophic event that shuts down part of it.”).

central nodes responsible for establishing and/or coordinating communications between the end points. Instead, all nodes would be linked with each other through a web of connections so that if one node were destroyed, the remaining nodes still could interact with each other.\(^28\) Since no nuclear war has occurred, the primary benefit that decentralization was meant to convey has not materialized. And yet, it has had certain implications that are still visible today.

The first and maybe most obvious manifestation of the Internet's decentralized architecture is its ownership structure. Ownership of the nodes and edges that make up the Internet is spread among a vast number of persons and entities. Anyone who possesses a computer that is linked with the Internet owns a part of the network, and yet no one is able to control more than a fraction of the whole, namely the lines that run across its territory. This distinguishes the Internet from traditional networks, which frequently are government-owned in their entirety or under the control of one or more dominant entities.

Another, and for purposes of this analysis more important, aspect of the Internet's decentralized architecture is its open design. In that regard, two aspects have to be distinguished. First, openness means that anyone with access to the Internet can send data across the network. This distinguishes the Internet from TV and radio networks, in which all content is broadcast from the center of the network to its ends.\(^29\) An open network design would be meaningless, however, if, once data has been inserted into the network, the network could monitor and filter the data on the basis of its content or the identity of its sender. Therefore, an essential precondition for, and the second aspect of, openness is that the network itself is content-neutral and that the available bandwidth is allocated equally among all nodes. This aspect distinguishes the Internet from telephone networks, where there is only a fixed number of channels, and where, once all channels are in use, no further lines for additional communications can be established.\(^30\)

To fully appreciate the implications of the Internet's open design and to understand why it is virtually impossible for any one person or entity to control data transmitted via the network, a slightly closer look at the transmission process is useful: Every node of the Internet has an IP address that uniquely identifies it vis-à-vis other nodes.\(^31\) The IP address space is administered under the supervision of the Internet Corporation for Assigned Names and Numbers ("ICANN").\(^32\) At present, IP addresses consist of 32-bit numbers, usually

\(^{28}\) See, e.g., David Mayr, *This History of the Net* (visited Mar. 11, 2001) <http://members.magnet.at/dmayr/history.htm> (noting that "if one node was destroyed, the rest of the nodes would still be able to communicate.").

\(^{29}\) See “Broadcasting” *THE ENCYCLOPEDIA BRITANNICA* (15th ed.).

\(^{30}\) See “Telecommunications Systems” *THE ENCYCLOPEDIA BRITANNICA* (15th ed.).

\(^{31}\) See, e.g., Webopedia, *Node* (visited Mar. 23, 2001) <http://webopedia.internet.com/TERM/n/node.html> (defining "a node [as] a computer or some other device, such as a printer." And noting that, "every node has a unique network address... ").

\(^{32}\) See ICANN, *About ICANN* (visited Mar. 23, 2001) <http://www.icann.org/general/abouticann.htm>. Classes of IP addresses have been allocated to Regional Internet Registries, which are responsible for particular geographic regions – “InterNIC”, for example, is responsible for North America, “RIPE NCC” is responsible for Europe, and “AP-NIC” is responsible for the
represented in dotted decimal notation, such as "123.456.789.001," allowing for a total of approximately 4.3 billion such addresses. Before data is sent across the network, it is divided into pieces. Each piece is then put in a virtual envelope on which the node of origin notes both its own IP address as well as the address of the node of destination. If the destination forms part of the same local network as the origin, the origin sends the envelopes to the destination directly. Otherwise, it hands them over to a router. Routers are nodes that specialize in forwarding envelopes from one part of the Internet to another. If the IP address stated on an envelope belongs to a neighboring local network, the router sends the respective envelope to that network. Otherwise, it forwards it to a router that is located closer to the local network where the envelope is headed. Which routers are picked depends on a number of factors, including which routers are available at any given moment, the bandwidth of the various lines on hand as well as cost considerations. As a result, the network may take different routing decisions with respect to envelopes even if they transport fragments of the same piece of data. Hence, although all envelopes ultimately arrive at the same destination, each of them may travel a different itinerary. The recipient's system waits until all envelopes have arrived and then reassembles the original piece of data. Because of the piecemeal manner in which data is thus sent across the Internet and because each piece may take a different route, it is extremely difficult to intercept information and to filter it on the basis of its content. In that sense, openness is built into the basic architecture of the Internet.

The reason why the Internet's open design is intrinsically linked with its decentralized architecture is obvious: Openness prevents central control. The Asian Pacific region—and which allocate their allotted IP addresses to a number of Local Internet Registries operating within their perspective region. The Local Internet Registries, which usually operate on a national basis, in turn assign the IP addresses to Internet Service Providers ("ISPs"). See The Address Supporting Organization, Regional Internet Registries (visited Mar. 23, 2001) <http://www.aso.icann.org/oirs>. See Internet Assigned Numbers Authority, IP Address Services (visited Mar. 23, 2001) <http://www.iana.org/ipaddress/ip-addresses.htm>.

While this number may seem huge, because of the hierarchical way in which the Internet address space is structured and because of the many "reserved" addresses at the higher hierarchy levels, the number of available combinations is actually a scarce resource. As a result, a new version of the Internet address space (version 6), which is based on 128-bit numbers, is currently being developed. Id.

See Mayr, supra note 28.

Id.

If the address indicates that the destination is located in the same local network as the origin but the origin does not know the destination's exact location, the origin will first send a request to the other nodes forming part of the local network, using a protocol known as the Address Resolution Protocol ("ARP"), to which the destination will respond by providing its exact contact information. See Webopedia, ARP (visited Mar. 23, 2001) <http://webopedia.internet.com/TERM/A/ARP.html>.

An additional consequence of the open design of the Internet and at the same time further evidence of its decentralized architecture is its scalability. To connect one's computer with the Internet, all one has to do is link it with another computer that already forms part of the network and assign to it an IP address. By contrast, because, as discussed, the existing nodes of the Internet need not know whether an IP address is valid until data is actually transmitted to it, the new node
lack of central control, in turn, has certain implications for the legal system. First, it has a speech-enabling effect. Because anyone can send data across the Internet without revealing his or her identity and because the transmission of that data occurs in a way that makes monitoring impossible, the Internet opens up new opportunities for speech. At the same time, however, the fact that it is hard to monitor information exchanged via the Internet also means that it is hard for the government to enforce laws regulating such information, including copyright law.

For purposes of this analysis, it is important to understand that the fact that the Internet has made it harder for the government to enforce copyright law does not mean that it automatically has become any easier for people to commit copyright infringement. To see why, it is helpful to consider the relationship between copyright law enforcement and the Internet more closely: Copyright law endorses the widespread dissemination of certain types of information (that is, original ideas) but affords particular persons (that is, authors) certain exclusive rights to control the dissemination of fixations of that information (that is, expressions of these ideas). Traditionally, the government has enforced copyright law by threatening people who infringe upon any of the aforesaid exclusive rights with sanctions. In other words, it has enforced copyright law directly. This strategy works reasonably well in the real world. To be sure, some people may be indifferent to the threat of sanctions, and some crimes may never be detected. The majority, however, will abide by the rules. Obviously, the same strategy is not terribly effective when applied in the context of the Internet. Given the Internet's open access, anyone can send whatever information he or she wants over the network without revealing his or her identity and consequently, without having to be concerned about sanctions. But the point is that the government need not regulate people's behavior directly in order to achieve a substantially similar level of compliance in cyberspace as it does in real space. The reason is that, while the Internet enables people to exchange unauthorized copies of copyrighted material over the Internet anonymously, they can do the exact same thing in the real world. In other words, whether I give an unauthorized copy of a CD to a friend while meeting her in a café or whether I email her the songs contained on the CD over the Internet does not make a difference. It does not make a difference to her, and it certainly does not make a difference to the artist who recorded the CD. Both acts may hurt the artist economically, but the government can prevent neither. In other words, small-scale copyright infringement that occurs within the circle of one's friends is something that artists have to live with both in real space and in cyberspace. The only reason why artists may have to fear the Internet is because it potentially enables people to engage in copyright infringement on a much larger scale than is possible in the real world. But large-scale copyright infringement is anything but easy. The reason is that, for large-scale copyright infringement to occur, the Internet community at large (as opposed to a private club of copyright pirates, need not be entered into any sort of central database, as is the case, for example, whenever a new telephone connection is established. If need be, the network will verify the existence of the node and determine its location by using the ARP. See, e.g., Reno, 521 U.S. at 852.

39 See U.S. Const. art. 2, § 8.
such as me and the friend whom I give a copy of my CD, to speak in terms of our example) has to be able to find unauthorized copies of works of authorship.

Locating information in a decentralized network, however, is a daunting task. Just assume that there were no telephone directories and imagine how hard it would be under these circumstances to find a friend in a big city whose address and phone number one does not know. Therefore, if we just look at the Internet’s basic features (ignoring such things as the Domain Name System (the “DNS”), the World Wide Web (the “Web”) and search engines), our preliminary conclusion is that the Internet’s net impact on copyright law enforcement is marginal: On the one hand, there is the Internet’s open design, which makes it hard for the government to track down infringers. On the other hand, there is its decentralized architecture, which makes it hard for people to engage in infringing activities in the first place.

Of course, the Internet had to resolve the information location problem in order to confer meaningful benefits upon society. Therefore, the quintessential question that one has to ask in order to understand how copyright law can be enforced in the context of any given Internet architecture is how that particular architecture resolves the Internet’s information location problem and whether the means by which it does so are amenable to regulation. Ironically, the Internet currently tackles the problem that its decentralized architecture has created by betraying the principle of decentralization, that is, by layering a centralized administrative structure, known as a client-server architecture, on top of its basic architecture. In a client-server architecture, some nodes (the servers) have a greater functionality than others (the clients). Because clients depend on interactions with servers to be useful and because any server can deal with many clients at the same time, each server might be described as a “local center.” In the following, I will describe the Internet’s local centers in greater detail and show that they not only resolve the information location problem but also enable the government to preserve its regulatory interest in copyright law.

The two most prominent examples of the Internet’s current architecture of local centers are the DNS and the Web. Let us begin by considering the DNS, which, although arguably a less enlightening example than the Web, ought to be mentioned first for systematic reasons. As the ARPAnet developed into the Internet, it became clear early on that IP addresses were a rather inconvenient, if


41 Id.


44 Introduced in 1983 and administered initially by a person named Jon Postel (who occupied this role until his death), the DNS was later transferred to the Network Information Center and ultimately, in 1998, became the responsibility of the newly founded Internet Corporation for Assigned Names and Numbers (“ICANN”), which has been the subject of much controversy ever since. See Management of Internet Names and Addresses, 63 Fed. Reg. 31741 (1998).
not wholly impractical, way for human beings to identify nodes of the network. Just imagine how hard it would be to memorize a website or an email address by a 12-digit decimal number. To resolve that problem, the DNS was invented. The DNS supplements the Internet’s address space by a name space that is divided into a number of domain names. Each domain name is uniquely mapped to an IP address. Special DNS registries, such as Network Solutions, Inc., allow the operator of each node of the Internet to reserve a domain name for the node’s IP address. Internet Service Providers (“ISPs”) as well as other companies using the Internet for business purposes usually register the nodes that they operate under suggestive domains names that indicate the type of service offered by them. To a certain extent, this practice has alleviated the information location problem created by the Internet’s decentralized architecture. For example, thanks to the DNS, people looking for MP3 files simply have to enter the term “MP3.com” into their web browsers. Since the aforesaid domain name has been reserved by an entity offering MP3 files, the term “MP3.com” automatically directs people to a website where they may download such files. Myriad other domain names are equally linked with the IP addresses of the type of websites that one would expect to find under the respective terms. It is important to understand that the ability of the DNS to guide people through the IP address jungle rests on a set of distributed yet centrally managed databases that are stored on a number of so-called domain name servers. For each node that forms part of the domain name system, two domain name servers, a primary and a secondary name server, exist, which are permanently hooked up with the Internet and which store the respective node’s domain name and corresponding IP address. One domain name server may store the domain names and IP addresses of many nodes. A handful of higher-ranking “root” domain name servers know the IP addresses of the subordinate servers. Before a piece of data can be sent to a node identified by a domain name, the node of origin first must contact a root domain name server and then one of the two domain name servers that know the destination’s IP address. Following that, the data is transmitted on the basis of the IP address of the node of destination in the manner described above.

Conceptually, each domain name server is a local center within the Internet’s decentralized architecture. By managing IP addresses on a centralized basis, the DNS enables people to locate nodes a lot more efficiently than they otherwise would be able to. Just as the real world has invented phone directories that collect names, addresses, and phone numbers of people so that one can locate

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45 See Mayr, supra note 28.
46 See Webopedia, DNS, supra note 42.
50 Id.
one's friends, the DNS collects the domain names and IP addresses of nodes of the Internet so that one can find websites that host the type of information or that provide the kind of services in which one is interested. The implication, of course, is that because the DNS helps people locate any kind of website, including virtual swap meets that host copyrighted material, it creates an essential precondition for large-scale copyright infringement. At the same time, however, domain name servers are easy targets for the government. To prevent copyright infringement, all that the government has to do is disable the DNS entries of all IP addresses associated with nodes on which copyrighted material is stored. Doing so is not a problem given that domain name servers are and, in order to serve their purpose, have to be readily accessible. Once the DNS entry of a node storing copyrighted material has been disabled, however, people are no longer able to find it. People who already know the node will be able to go back to it and access the material only if they have memorized its IP address. While some people may keep track of the IP addresses of nodes that they access frequently or that they otherwise find useful, the majority of Internet users are unlikely to do that. Therefore, one effective strategy that might allow the government to preserve its regulatory interest in copyright law is to regulate the operators of DNS registries, for example, by requiring them to visit the sites whose domain names and IP addresses they store in their databases and to refuse to register or to cancel registrations of sites that provide unauthorized copies of copyrighted material or that are otherwise engaged in illegal activities. Alternatively, if that were considered too burdensome, the government might require DNS registries to take the aforesaid measures only upon receipt of notifications of claimed infringement from copyright holders. In sum, the DNS does not change the relationship between copyright law and the Internet at all. While it has made it easy for people to locate copyrighted material, it has made it easy for the government to prevent people from committing infringement by regulating domain name servers.

Although conceptually the contrast between the DNS and the transmission of data using IP addresses is a good example of how the Internet's highly decentralized basic architecture has been supplanted by a structure of local centers, the Web is an even better example because it is one of, if not the, commercially most important Internet service today. At first glance, one might think of the Web as paradigmatic of a truly decentralized network. After all, as the Supreme Court has observed, anyone is able to set up a website without having to seek the permission of a central authority and without being required to enter the site into a central database. But the lack of a registration requirement, as we have seen, is merely a consequence of the fact that the infrastructure

51 Id.

52 One challenge is that the DNS servers that contain the IP addresses of particular hosts at which copyright infringement occurs may be located in foreign jurisdictions, which may have different or even no copyright laws. For the analysis of this Article, however, this is irrelevant since international harmonization eventually will lead to a resolution of these issues.

53 See, e.g., Reno 521 U.S. at 853 (quoting from the district court's findings at 929 F. Supp. 824, 838, that "no single organization controls any membership in the Web, nor is there any centralized point from which individual Web sites or services can be blocked from the Web.").
underlying the Web, that is, the Internet itself, has a decentralized architecture. It does not say how the Web, which, as a service provided via the Internet, is conceptually different from the Internet, tackles the information location problem. Closer reflection leads to the insight that the Web (just like the DNS) equally resolves that problem by providing a number of local centers.

The Web's principal local centers that help people locate information are search engines.\(^{54}\) In the words of the Digital Millennium Copyright Act (the "DMCA"), search engines are websites that provide "information location tools," that is, they collect information on material available at other websites (for example, by inviting webmasters to register their sites or by "spidering the Web") and enter this information into central databases that are accessible by the Internet community at large.\(^{55}\) Search engines are thus an even closer analogy to real world phone directories than the DNS. The fact that search engines provide central platforms capable of directing vast numbers of people to the websites that are most likely to contain the information that they are looking for benefits society in many ways. At the same time, however, it also makes them useful tools in the hands of pirates looking for unauthorized copies of copyrighted material. More so than the DNS, search engines enable large-scale copyright infringement. And yet again, the same feature of search engines that enables people to commit copyright infringement enables the government to prevent infringement from occurring by prohibiting search engines from linking to unlawful websites, either generally or at least once they have been notified that a particular site hosts unlawful material. Once a pirate website has been removed from a search engine's database, people can access it only if they already know its domain name or IP address. By contrast, people who have never accessed the site before, are unlikely to be able to locate it.

What has been discussed regarding the DNS and search engines applies more generally to any local center within the Internet. Under the Internet's current client-server architecture, clients cannot engage in any type of activity, including copyright infringement, without the assistance of a server. The dependence of clients on servers is especially apparent when one uses a client to connect to a server in order to gain access to a document, stream a media file or execute a script. In these situations, the client merely sends requests to and receives standardized responses from the server, without doing any of the work that is involved in generating the response. But the same is true of interactions between two or more clients, which, in the context of the Web (as in the context of a number of other Internet services), are always mediated by a server. When people meet in a Web-based chat room, for example, they may get the impression that they are able to communicate with each other directly. In reality, however, their communications run through the website, which controls the process. The provider of the chat service may decide to exploit its control over the service in one way or another, for example, by barring chatters that violate certain rules of


\(^{56}\) Id.
conduct, a service that many web-based chat rooms perform, or by imposing restrictions on the topics that chatters are allowed to discuss. Yet, even if no restrictions were imposed, the website would still exercise a certain amount of control in connection with coordinating the service. The same basic observation applies with respect to any website that provides a platform for people, including swap meets that enable people to store unauthorized copies of copyrighted material, thereby making them available for a potentially unlimited number of other people. Swap meet servers differ from chat rooms in that interactions between clients do not occur in real-time; rather downloads of a file may occur a long time after the file has been uploaded. But even so, the principle remains the same: The availability of the platform is an essential precondition for interactions to take place. Each website is hence a local center within the Internet. This opens up yet another venue for the government to preserve its regulatory interest in copyright law. To prevent a website from hosting copyrighted material and from providing a platform for people to engage in large-scale infringement, it simply has to disable the website or require or induce companies that host websites to monitor their subscribers and to punish them if they violate the law.

In summary, then, we have seen that, while the Internet’s decentralized architecture renders traditional copyright law enforcement moot, the administrative structure of local centers that has emerged within that architecture nevertheless enables the government to preserve the authority of the legal system. By holding the operators of these local centers responsible for any copyright infringement that occurs within their spheres of influence instead of going after the actual infringers, the government may achieve a similar effect as if it enforced the law directly. One might call this “indirect” copyright law enforcement.

II. INDIRECT COPYRIGHT LAW ENFORCEMENT

Let us now take a closer look at the currently applicable law and see to what extent it enables the government to rely on “indirect” copyright law enforcement to protect copyright holders. As we will see from a survey of the relevant case law and statutes, while the government has long since recognized the value of the Internet’s local centers as vehicles for the enforcement of laws regulating information, it has used the potentially great power that the Internet’s client-server architecture affords it in a very responsible manner. On the one hand, it has exercised caution and tried not to create a framework that might cause ISPs to police their realms of authority in a manner that might have a chilling effect on Internet speech. On the other hand, it has more or less expressly entrusted the enforcement of copyright law to ISPs, search engines, and the Internet’s other local centers. In the latter respect, governments all over the world are increasingly relying on the Internet’s local centers for the satisfaction of their regulatory interests. Although the way the government regulates speech in the Internet context is not directly relevant to the issue of indirect copyright law enforcement, the fact that creative activity is itself a form of speech warrants a brief look at the regulatory framework governing the dissemination of obscene and defamatory speech via the Internet before examining the currently applicable copyright law.
A. Regulation of Obscene and Defamatory Speech

Cases involving the dissemination of obscene and/or defamatory speech over the Internet fall within the ambit of the Communications Decency Act of 1996 (the "CDA"). Section 230(c)(1) provides that “[n]o provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider.” In effect, this provision affords providers of interactive computer services complete immunity from liability for obscene and defamatory speech disseminated by their subscribers. Given the way in which the CDA defines the concept of “interactive computer service,” namely by reference to the client-server architecture of the Web, the immunity covers not just Internet Access Providers (“IAPs”), but any ISP and thereby virtually any entity that operates a website or other local center within the Internet’s current architecture. As a result, as far as the direct regulation of speech is concerned, the government has done the exact opposite of entrusting ISPs with law enforcement responsibilities. By not only not requiring them to suppress unlawful speech but instead relieving them of all responsibility for its dissemination, it has destroyed any incentive for ISPs to prevent their subscribers from disseminating potentially harmful information.

At first glance, the government’s decision not to rely on ISPs for assistance with the enforcement of content-regulating laws in the online world might seem curious. After all, as discussed, the government could require or otherwise induce ISPs to take precautionary measures to prevent the dissemination of unlawful speech by their subscribers. For example, it could require that ISPs use special software to pre-screen messages before allowing their users to post them on a bulletin board and that the software refer suspicious cases to an editor. Prodigy is an example of an ISP which, at one point, used to rely on such software. Even fully manual screenings may be feasible in certain circumstances. MP3.com, for example, allows new artists to set up their own websites and to fill them with text, pictures and music. Yet, its staff manually reviews all submissions before approving them, a process that may take up to three days. If the imposition of a screening obligation were considered too burdensome, the government still could require ISPs to review messages on a case-by-case basis upon receipt of complaints from aggrieved parties.

In addition to the intrinsic benefit of heightening compliance with existing laws, requiring or inducing ISPs to take a more active role in supervising their

59 See Zeran v. America Online, 129 F.3d 237, 332 (4th Cir. 1997) (rejecting the claim that an ISP immunized by § 230 from publisher liability for defamatory statements should be liable as a distributor of such statements, explaining that “distributors are considered to be publishers for purposes of defamation law.”).
60 Id. at 330 (defining “interactive computer service” as “any information service, system, or access software provider that provides or enables computer access by multiple users to a computer server . . . ”).
subscribers and policing their systems would be beneficial also in light of the fact that, compared with the real world, the Internet amplifies the potentially adverse effects of obscene and defamatory speech. This point is aptly illustrated by several cases that have been decided in the wake of the CDA. Zeran v. America Online provides a particularly drastic example. In that case, an unidentified person posted defamatory messages on an AOL bulletin board advertising the sale of T-shirts carrying offensive slogans related to the April 25, 1995, Oklahoma City bombing. The messages directed interested customers to the telephone number of a person named Kenneth Zeran, who had nothing to do with the T-shirts, specifically instructing them to ask for “Ken” and to “please call back if busy.” Given the vast number of subscribers to AOL’s service, Zeran soon received a high volume of abusive telephone calls, including several death threats. When the anonymous person posted additional messages over the course of the following days and the Oklahoma City radio station eventually aired the original message, attributing it to “Ken” and urging listeners to call the number to express their discontent, Zeran’s phone rang approximately every two minutes. Unfortunately, because Zeran relied on his phone for business purposes, he could not pursue what otherwise would have been an obvious, if inconvenient, solution to the problem, namely to disconnect his phone line. Despite these constraints, Zeran did not remain inactive. Immediately after the anonymous poster had published his first message, Zeran contacted AOL, asking it to remove the defamatory statements. However, despite AOL’s assurances that it soon would close the account from which the defamatory statements were posted, the anonymous subscriber was able to continue to post messages for an entire week. In addition, much to Zeran’s dismay, AOL refused to publish a retraction on the ground that this would have been contrary to its corporate policy. As a result, Zeran finally brought suit, among other things, against AOL. The court, however, on AOL’s motion for judgment on the pleadings, dismissed Zeran’s claims stating that Section 230(c)(1) acted as a complete bar to holding AOL responsible for any damage that Zeran may have suffered.

And yet, the drastic nature of cases such as Zeran notwithstanding, a number of reasons suggests that the government’s decision to afford ISPs immunity for harmful speech disseminated by their subscribers rests on sound policy. First, it would ask too much of ISPs to expect them to know and to be able to apply the nuances of the Supreme Court’s case law dealing with the First Amendment to

63 Id. at 329.
64 Id.
65 Id.
66 Id.
67 Id.
68 See Zeran, 129 F.3d at 329.
69 Id.
70 See id. at 328.
71 Id.
72 Id.
statements published by their subscribers. But even assuming, which seems unlikely, that ISPs were sufficiently familiar with the law, the detailed factual inquiry that is necessary to determine whether a statement is obscene or defamatory would make manual or even semi-automatic screenings of postings a daunting task given the high volume of messages posted every day. The use of software would not resolve the aforesaid problems. Nor does the example of MP3.com change the analysis. The reason is that postings to MP3.com are more limited both in scope (music) and number (the average MP3.com artist typically posts only a handful of songs), which makes manual screenings more workable compared with general-purpose message boards. Finally, a notice-and-take down mechanism pursuant to which ISPs might be required to suppress speech only upon receipt of notifications by aggrieved parties, although arguably a sensible approach in the area of copyright law, would be especially inappropriate for dealing with allegedly obscene and defamatory speech given that the First Amendment requires that controversial speech be treated with particular care. Secondly, however, and more importantly, a rule holding ISPs responsible for their subscribers inevitably would lead to overinclusive results. The reason, as courts have repeatedly recognized, is that threatening a publisher with liability for its editors’ actions has the effect of inducing the publisher to err on the safe side, thereby censoring more speech than necessary. Therefore, if an ISP had to be concerned that it might be held responsible for unlawful information disseminated by its subscribers, it would have a powerful incentive to monitor and vigorously censor such information, especially information that might be considered controversial (and that hence would be especially worthy of legal protection). Such a result, however, would not only be problematic from a policy perspective because it would have a chilling effect on speech, it also would jeopardize the goals that the government sought to achieve in adopting the CDA.

The purpose of the Act is to encourage the widespread use of the Internet as a medium for expressive speech. If ISPs, out of fear of being held responsible for other people’s political views, were to impose restrictions on their subscribers’ speech, the Internet’s potential as a medium for speech and intellectual discourse

73 Id. at 333 (dismissing the viability of a notice-and-take-down liability rule for ISPs). Each notification would require a careful yet rapid investigation of the circumstances surrounding the posted information, a legal judgment concerning the information’s defamatory character, and an on-the-spot editorial decision whether to risk liability by allowing the continued publication of that information. Although this might be feasible for the traditional print publisher, the sheer number of postings on interactive computer services would create an impossible burden in the Internet context.

74 See infra Part II.B.

75 See Zerran, 129 F.3d at 333 (noting that “[b]ecause service providers would be subject to liability only for the publication of information, and not for its removal, they would have a natural incentive simply to remove messages upon notification, whether the contents were defamatory or not.”). See also Philadelphia Newspapers v. Hepps, 475 U.S. 767, 777 (1986) (noting that fears of unjustified liability have a chilling effect on speech).

76 Cf. 47 U.S.C. § 230(a)(e) (1999) (noting that “the Internet and other interactive computer services offer a forum for a true diversity of political discourse, unique opportunities for cultural development, and myriad avenues for intellectual activity.”).
would be diminished. To be sure, as a result of the current regime, some harmful speech that ISPs would be able to censor, especially in drastic cases such as Zeran, will go unrestricted. In a society that values free speech, however, this is inevitable.

In sum, our brief analysis of the CDA shows that the government is well aware of the utility of the local centers that have emerged within the Internet’s client-server architecture for the enforcement of laws regulating information. In particular, it has recognized that it may enforce these laws indirectly by threatening ISPs with liability for their subscribers’ actions. However, in adopting the CDA, the government has deliberately decided not to follow this approach as far as obscene and defamatory speech is concerned. Significantly, the government’s decision rests not on the perception that such speech is less malign when disseminated via the Internet than when disseminated in the real world. Rather, it reflects the fundamental insight that the creation of a mere potential for liability, however remote, affords ISPs powerful incentives to take drastic actions against their subscribers with adverse effects on the Internet’s speech-enabling effect.

B. Works of Authorship

If the government has chosen not to rely on “indirect” law enforcement for the purpose of preventing the dissemination of obscene and defamatory speech via the Internet, it has taken the exact opposite approach in the area of copyright law. The difference between these two areas of law is of course that unlike the common law of defamation and statutes that criminalize child pornography, copyright law is not concerned with suppressing speech. Rather it seeks to afford authors certain exclusive rights with respect to their works. Other than that, however, the background is quite similar. By holding ISPs responsible for their subscribers’ actions, the government can prevent the latter from engaging in unlawful activity, although it cannot regulate them directly.

In the following, I will first consider copyright law as it stood prior to the adoption of the DMCA and then analyze the various provisions of Title II of the DMCA. A comparison of the two regimes is necessary to understand the full impact of the DMCA, which, while purporting to leave pre-existing law unaffected, constitutes a significant step towards entrusting the ISP industry with the task of enforcing copyright law.

At the outset, it should be noted that there are two conceivable ways in which the government might entrust ISPs with the responsibility to prevent large-scale copyright infringement, both of which, as we will see, are reflected in the currently applicable law. On the one hand, it might adopt a rule of strict liability holding ISPs directly liable for any infringement that occurs within their respective spheres of influence. On the other hand, it might require them merely to supervise their surroundings and impose liability on an ISP only if it acts in a

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78 See U.S. CONST. art. 2, § 8.
reproachable manner, for example, if it acts negligently or participates in infringing activities or if there is some other reason why it seems fair and just to hold it liable.

1. Copyright Doctrine

_Playboy Enters., Inc. v. Frena_ appears to be the first decision addressing the liability of an ISP for copyright infringement committed by its subscribers. The case came before the court because Playboy had sued Frena, the operator of a bulletin board service (a “BBS”). While the BBS system is independent of the Internet, the position of BBS operators is so similar to that of ISPs that the courts’ case law regarding the liability of BBS operators is directly relevant to the question of whether ISPs can be held responsible for their subscribers. What prompted Playboy’s action was that a subscriber to Frena’s BBS had posted pictures from the “Playboy” and “Playmate” magazines to the BBS without having obtained Playboy’s consent. The software running the BBS made the pictures available to other subscribers. The court, on a motion for summary judgment, held that Frena was liable for infringing on Playboy’s exclusive right to publicly distribute and display the pictures. _Playboy_ is good news for copyright holders: By holding a BBS operator liable for copyright infringement committed by one of its subscribers, the court’s decision suggests that there is a legal basis for indirect copyright law enforcement and that the regulation of ISPs is a legitimate strategy for the government to protect copyright holders.

The court’s holding, however, is open to attack on several grounds. First, in marked contrast to the care with which the government has approached the Internet’s potential for free speech in the context of the CDA, _Playboy_ does not discuss the First Amendment implications of imposing liability for copyright infringement on ISPs at all. The lack of any such discussion reflects the fundamentally different approach that courts have taken in the area of copyright law compared with the regulation of obscene and defamatory speech. One reason for the different attitude that courts have shown in this area is the widespread perception that the built-in limitations of copyright law, such as the idea/expression dichotomy, the merger doctrine, and the open-ended fair use

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80 See Webopedia, Bulletin Board Service (visited Mar. 24, 2001) <http://webopedia.internet.com/TERM/b/bulletin_board_system_BBS.html> (defining a BBS as “an electronic message center. Most bulletin boards serve specific interest groups. They allow you to dial in... review messages left by others, and leave your own message if you want... In the United States alone, there are tens of thousands of BBSs”).
82 Id.
83 Id. at 1563.
84 See 20 AM. JUR. POF. 3d. 431 § 5.

There exists the general rule that abstract ideas, apart from their reduction to concrete form, cannot be monopolized or owned. Copyright, like patent, is a way of protecting abstract ideas after the ideas have been reduced to concrete form. Copyright protects the form or means of expressing an idea, but authors may not copyright their ideas or the facts they narrate. Thus, the protection of the Copyright Act is limited to the
doctrine, sufficiently accommodate free speech concerns and that hence requiring ISPs to monitor possible infringements by their subscribers is less problematic from a free speech perspective than requiring them to censor speech that potentially contains harmful elements. This distinction, however, while convincing on its face, does not withstand closer scrutiny. While copyright law itself may be sufficiently flexible to avoid conflicts with the First Amendment, threatening ISPs with liability for failing to take action against copyright infringement committed by their subscribers is potentially problematic from a policy perspective for the same reason that the immunity provided by the CDA for obscene and defamatory speech is beneficial: The threat of liability affords ISPs an incentive to err on the safe side and to take action against their subscribers even when no illegality has occurred.

In addition, it is doubtful whether Playboy is consistent with copyright law as it stood at the time of the decision. The main reason is that uploading and downloading information from and to a BBS and its dissemination to other BBS systems is a fully automated process in which the operator of the BBS is not involved at all other than by starting and running the BBS software on its computer. Since the operation of a BBS does not require any interference by the operator of the system, Frena's position is strikingly different from that of a reseller of copyrighted material who distributes a work without the author's permission. Unlike the latter, who takes an active role in the distribution of the work, the former remains completely passive. Phrased differently, an ISP's business consists of providing a service, such as a BBS, not of disseminating a "material embodiment" of copyrighted material. At a minimum, this difference

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particular expressions of ideas, not the ideas themselves. . . . This is referred to as the idea expression dichotomy.

Id. (emphasis added).

See 20 AM. JUR. POF. 3d. 431 § 6.

In some cases it is so difficult to distinguish between an idea and its expression that the two are said to merge. When there is only one way of expressing an idea, or very few ways, even expression is not protected, since protection of the expression would effectively accord protection to the idea itself. This is referred to as the merger doctrine.

Id. (emphasis added).

See generally 18 AM. JUR. 2d §§ 80-87 (discussing the general concepts of the American fair use doctrine while noting its open-ended nature).

See Religious Tech. Center v. Netcom On-Line Communications Servs., Inc., 907 F. Supp. 1361, 1377 (N.D. Cal. 1995) (noting that "[t]he copyright concepts of the idea/expression dichotomy and the fair use defense balance the important First Amendment rights with the constitutional authority for 'promoting the progress of the science and useful arts.'").

See Alfred C. Yen, Internet Service Provider Liability for Subscriber Copyright Infringement, Enterprise Liability, and the First Amendment, 88 GEO. L.J. 1833, 1883 (2000) (arguing against holding ISPs liable for copyright infringement committed by their subscribers on the theory that a different rule "would give ISPs powerful incentives to protect their economic interests by removing subscribers' material from the Internet, even when a good case for copyright infringement does not exist. Such indiscriminate censorship conflicts with First Amendment principles." Id at 1837.).

See 2 NIMMER ON COPYRIGHT § 8.11 [A].
would have deserved closer analysis by the court. The lack of any such analysis in the court’s decision has been criticized on various occasions.  

Finally, since the argument on which the court’s holding rests is applicable not just to the operator of the particular BBS or sub-network of the Internet whose subscribers have committed copyright infringement, but instead applies equally to every owner of a computer that is directly or indirectly connected with the BBS, Playboy would create unreasonable liability. Read literally, it would expose the Internet at large to liability. Such a result, however, would not only be undesirable but it would make liability for copyright infringement meaningless.  

In 1995, the Information Infrastructure Task Force (the “IITF”) set up by President Clinton revisited the question of whether ISPs should be held responsible for copyright violations that occur within their realm of authority. Endorsing Playboy, the IITF Report argued in favor of indirect copyright law enforcement as a strategy of affording copyright holders legal protection. To support its proposal, the report listed various policy reasons, noting, in particular, that ISPs “and, perhaps, only they — are in the position to know the identity and activities of their subscribers and to stop unlawful activities.”  

Despite Playboy and the IITF Report’s recommendation to enforce copyright law indirectly by targeting ISPs rather than by going directly after their subscribers, it remained unclear how that goal should be accomplished on the basis of the then-applicable law. Finally, in Religious Tech. Ctr. v. Netcom On-Line Communication Servs., Inc., a case that was decided in the same year as the IITF Report was published, a court took a closer look at different legal bases for holding ISPs responsible for their subscribers’ actions.  

To understand RTC, it is useful to summarize briefly the conditions under which a person generally may incur liability for copyright infringement committed by a third party. Aside from engaging in infringing activities itself, a person may become liable for somebody else’s infringement under the doctrines of “vicarious liability” and “contributory liability.” The notion of “vicarious liability” has its roots in the tort law principles of respondeat superior and enterprise liability. In the intellectual property statutes, vicarious liability is not

90 See Religious Tech. Center, 907 F. Supp. at 1370 n.16 (noting that “Playboy has been much criticized”).  
91 See Religious Tech. Center, 907 F. Supp at 1369-70, 72; see also Yen, supra note 88, at 1842 (noting that “other courts have found this result (Playboy’s result) extreme and have refused to follow . . .”).  
93 Id.  
94 Id.  
expressly mentioned. Contributory liability is codified in the Patent Act but not in the Copyright Act. The fact that Section 106 of the Copyright Act affords authors the exclusive right “to authorize” to exercise any of their other exclusive rights, however, reflects the influence of the concept. In the absence of a statutory basis for contributory and vicarious liability, courts have developed and refined each of these concepts in their case law.

In essence, a person is vicariously liable for harm done by a person who infringes upon an author’s exclusive rights if it: (i) has the right and ability to supervise the infringer; and (ii) receives a direct financial benefit from the infringer’s actions. Courts have pointed to various policy rationales for imposing vicarious liability in these circumstances. First, there is no doubt that it appeals to one’s ordinary sense of fairness to hold a person who has the right and ability to supervise an infringer and who, in addition, benefits from the infringer’s conduct responsible for any damage that may result from the infringement, rather than letting the aggrieved party bear that damage. 

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98 The Copyright Act contains merely one provision that imposes liability on a person for acts done by a third party: Section 905(3) mentions as one of a mask owner’s rights the right “to induce or knowingly to cause another person to” exercise any of the other rights of a mask owner. 35 U.S.C. § 905(3). The scope of this provision, however, is limited to semiconductor mask works and is irrelevant for other copyrighted works.

[T]he lack of clarity in [the] area [of vicarious and contributory copyright infringement] may, in part, be attributable to the fact that an infringer is not merely one who uses a work without authorization by the copyright owner, but also one who authorizes the use of copyrighted work without actual authority from the copyright owner.

Id.

100 See Kalem Co. v. Harper Brothers, 222 U.S. 55 (1911) (holding the producer of an unauthorized film dramatization of the copyrighted book Ben Hur contributorily liable for his sale of the motion picture to jobbers, who in turn arranged for the commercial exhibition of the film). See also Shapiro, Bernstein & Co. v. H.L. Green Co., 316 F.2d 304, 307 (2d Cir. 1963) (holding the owner of 23 stores that leased premises to a record manufacturer and dealer for the purpose of operating the record departments of the stores, which then sold “bootleg” records, vicariously liable because of the store owner’s beneficial relationship with the dealer).

101 See, e.g., Pinkham v. Sara Lee Corp., 983 F.2d 824, 834 (8th Cir. 1992) (noting that “In this circuit, we have also spelled out the elements of “vicarious liability”: “[1] the right and ability to supervise the infringing activity; and (2) [a]n obvious and direct financial interest in exploitation of copyrighted materials.” (citations omitted)). Unlike in the context of the principal-agent relationship, vicarious liability in copyright law does not depend on whether the infringing conduct occurs within the scope of agency. See Shapiro, 316 F.2d at 308 (explaining that “the courts have not drawn a rigid line between the strict cases of agency, and those of independent contract . . .”). See also the legendary “dance hall” cases, in which the proprietors of dance halls were held liable for copyright infringement committed by the orchestras that they had hired, irrespective of whether the bandleaders had the status of employees or independent contractors. See Dreamland Ball Room, Inc. v. Shapiro, Bernstein & Co., 36 F.2d 354 (7th Cir. 1929); Famous Music Corp. v. Bay State Harness Horse Racing & Breeding Ass’n, Inc., 554 F.2d 1213 (1st Cir. 1977).

102 See, e.g., Artists Music, Inc., v. Reed Publ’g, Inc., 31 U.S.P.Q.2d 1623, 1626 (S.D.N.Y. 1994) (explaining that “the purpose of imposing vicarious liability is to punish one who unfairly reaps the benefits of another’s infringing behavior.”); Polygram Int’l Publ’g v. Nevada/TIG Inc., 855 F.
second common argument is that because the supervisor-beneficiary is the least-cost avoider of any damage done by the infringer, it is economically efficient to entrust it with the responsibility to avoid such damage. Finally, independently of whether it is fair or efficient to do so, one might argue that imposing vicarious liability is socially desirable because it affords the supervisor-beneficiary an incentive to monitor the infringer actively. Unfortunately, however, the aforesaid policy arguments lead to inconclusive results when applied to the question of whether ISPs should be held responsible for the conduct of their subscribers. On the one hand, it would appear to be a lot easier for ISPs to supervise their subscribers than for copyright holders to monitor the Internet at large for violations of their exclusive rights, which would seem to be especially true as far as blatant cases of copyright infringement are concerned. In addition, there should be relatively little, if any, controversy that it is desirable to afford ISPs an incentive to do whatever is in their power to prevent copyright infringement. At the very least, one might argue, ISPs should be required to take action to close a subscriber's account upon receipt of a notification that clearly demonstrates that one of their subscribers is engaged in the unauthorized dissemination of copyrighted material. The latter approach, which essentially would be a notice-and-take-down mechanism, would be consistent with the least-cost avoider rationale in a twofold sense: While it would shift the burden of identifying copyright violations to copyright holders and organizations representing them, such as ASCAP or BMI, which are likely to be better equipped to identify infringements than the ISP industry, it would entrust ISPs with the actual enforcement of copyright law once an instance of infringement has been detected and brought to their attention. On the other hand, there are the free speech concerns discussed above that would result if an ISP, out of an understandable desire to avoid liability, decided to err on the safe side and disabled not just unauthorized copies of works of authorship but other material as well.


When an individual seeks to profit from an enterprise in which identifiable types of losses are expected to occur, it is ordinarily fair and reasonable to place responsibility for those losses on the person who profits, even if that person makes arrangements for others to perform the acts that foreseeably cause the losses.

Polygram Int'l Publ'g at 1325.

103 See, e.g., Polygram Int'l Publ'g, 855 F. Supp. at 1325 (noting that "[t]he enterprise and the person profiting from it are better able than either the innocent injured plaintiff or the person whose act caused the loss to distribute the costs and to shift them to others who have profited from the enterprises.").

104 See, e.g., Shapiro, 316 F.2d at 308 (noting that "[defendant] has the power to police carefully the conduct of [the infringer] . . .; our judgment will simply encourage it to do so, thus placing responsibility where it can and should be effectively exercised."); Polygram Int'l Publ'g, 855 F. Supp. at 1325 (noting that "placing responsibility for the loss on the enterprise has the added benefit of creating a greater incentive for the enterprise to police its operations carefully to avoid unnecessary losses.").

105 See, e.g., Information Infrastructure Task Force, supra note 92 (noting that ISPs "are . . . in a better position to prevent or stop infringement than . . . copyright owner[s]").

106 See Yen, supra note 88, at 1865-72.
While the question of whether vicarious liability should be imposed on a third party hinges upon the relationship between the third party and the direct infringer, liability for contributory copyright infringement is based on the relationship between the third party and the infringing activity. It requires that the third party: (i) know of the infringing activity; and (ii) induce, cause or materially contribute to it.\textsuperscript{107} Courts do not require a showing of actual knowledge to establish contributory infringement. Rather, it is sufficient if the contributory infringer has reason to know of the direct infringement.\textsuperscript{108} Therefore, a central question in all contributory infringement cases is under what circumstances an ISP may be considered to have reason to know that its subscribers are engaged in infringing activities. Things are complicated by the Supreme Court's decision in \textit{Sony}, which has established the rule that the sale by a manufacturer of a staple article of commerce capable of substantial noninfringing uses that consumers may use for, among other things, infringement is not sufficient to render the manufacturer contributorily liable.\textsuperscript{109}

In \textit{RTC}, the court tried to sort out the conflicting policy rationales outlined in the previous paragraphs on the basis of facts that were similar to those lying at the heart of \textit{Playboy}. The background of the case was as follows: \textit{RTC}, which held copyrights in certain writings of L. Ron Hubbard, the founder of Scientology, sued Dennis Erlich, a former church member who, following his withdrawal from the church, had become a subscriber to a BBS that was dedicated to discussions of Scientology, alleging that Erlich had posted excerpts of various copyrighted works of Hubbard's to the BBS without having obtained Hubbard's permission to do so.\textsuperscript{110} Significantly, plaintiffs sued not just Erlich, that is, the direct infringer, but also Tom Klemesrud, the operator of the BBS, who had a direct contractual relationship with Erlich, and Netcom, which was the Internet access provider that provided other subscribers to Klemesrud's BBS with access to the allegedly infringing material.\textsuperscript{111} In other words, although the direct infringer (Erlich) was well-known and even a party to the proceedings (which, in copyright cases involving the Internet, is not always the case), plaintiffs found it convenient to add the two ISPs (Klemesrud, Netcom) to their action.\textsuperscript{112}

On Klemesrud's and Netcom's respective motions for summary judgment and judgment on the pleadings, \textit{RTC} started out where \textit{Playboy} had left off, that is, the court examined whether the two entities were liable for direct copyright infringement, and more specifically, for having violated plaintiffs' right to

\textsuperscript{107} See Gershwin Publ'g Corp. v. Columbia Artists Management, Inc., 443 F.2d 1159, 1162 (2d Cir. 1971); Fonovisa, Inc. v. Cherry Auction, Inc., 76 F.3d 259, 264 (9th Cir. 1996); Casella v. Morris, 820 F.2d 262, 365 (11th Cir. 1987).


\textsuperscript{109} See Sony, 464 U.S. at 442.


\textsuperscript{111} Id.

\textsuperscript{112} Part of the reason may have also been that although RTC had contacted Klemesrud and Netcom before initiating its action and asked them to terminate Erlich, both refused to do so either at all or without RTC at least proving that it owned the disputed copyrights. See Religious Tech. Center, 907 F. Supp. at 1366.
publicly distribute and display Hubbard's works. In its discussion of this question, the court departed from the rule established in Playboy. In the court’s view, the “automatic and indiscriminate” operation of the BBS software prevented it from holding the two ISPs directly liable. In addition to the various criticisms outlined above, the court pointed to an interesting causational argument: Had Netcom and Klemesrud taken measures to prohibit the unauthorized posting of Hubbard’s works, the court reasoned, Erlich could have distributed its works through countless other ISPs, which would have produced the exact same result. As a result, the court concluded, there was no reason why the particular ISPs that Erlich had chosen to carry the material should be liable.\(^{13}\) This argument may sound surprising given that ordinarily the enforcement of a law does not (and should not) depend on whether a potential infringer might find other, equally unlawful, ways to achieve the same result.\(^{14}\) However, as we will see Part III, the court’s observation might gain a special significance in the policy debate over how the law should respond to P2P architectures.\(^{15}\) The court’s dismissal of Playboy and its consequent rejection of RTC’s claim that Klemesrud and Netcom were directly liable for Erlich’s copyright infringement has been well-received.\(^{16}\)

The court next examined the status of the ISPs as related defendants. With respect to the question of vicarious liability, the court granted Klemesrud’s and Netcom’s respective motions on the ground that RTC had failed to show that they derived direct financial benefits from Erlich’s infringing activities.\(^{17}\) In doing so, the court elegantly sidestepped the complex question of whether, from a policy perspective, it would be desirable to hold ISPs vicariously liable for any copyright infringement committed by their subscribers. Regarding the issue of contributory liability, it was uncontested that the ISPs’ failure to cancel the infringing postings amounted to substantial participation in Erlich’s activities.\(^{18}\) In addition, while it was clear that neither Klemesrud nor Netcom had knowledge of the infringement before they were put on notice by RTC, the court found that, if RTC could prove that one of them gained knowledge following receipt of such notification, the respective entity conceivably would be held liable for contributory infringement.\(^{19}\) It is important to note, however, that the court’s finding was influenced by the fact that the works from which Erlich took the

\(^{13}\) Id. at 1373 (regarding Netcom) and 1381 (regarding Klemesrud).

\(^{14}\) See Napster, 114 F. Supp. 2d at 910 n.16 (stating that “arguing that third-parties also facilitate unlawful activity does not constitute valid defense to claims of contributory and vicarious copyright infringement.”).

\(^{15}\) See infra, Part III.B.

\(^{16}\) See House Comm. on the Judiciary, Digital Millennium Copyright Act of 1998, H. Rep. No. 105-551(1), at 9 (going so far as to characterize RTC as “the leading and most thoughtful judicial decision to date”).

\(^{17}\) See Religious Tech. Center, 907 F. Supp. at 1377 (regarding Netcom) and 1382 (regarding Klemesrud). But see Information Infrastructure Task Force, supra note 92 (claiming that “[s]ervice providers reap rewards for infringing activity”).


\(^{19}\) Id. at 1374-75, 82 (regarding Klemesrud).
excerpts contained copyright notices. In addition, the court made it abundantly clear that notification by itself does not establish knowledge for purposes of contributory copyright infringement in all cases. On the contrary, as the court pointed out, instances “where there is at least a colorable claim of fair use,” or “[w]here an ISP cannot reasonably verify a claim of infringement,” might merit a different analysis.

In effect, RTC is a lot more ISP-friendly than Playboy. First, a court applying RTC standards is unlikely to hold ISPs either directly or vicariously liable for copyright infringement committed by their subscribers. In addition, while RTC leaves open the theoretical possibility that ISPs might be held contributorily liable on the theory that they had reason to know of their subscribers’ infringing activity after receiving a notification of infringement from copyright holders, the court’s qualification that no liability will be imposed where the alleged infringer has a colorable fair use defense or where it would be unreasonable to require an ISP to investigate the legitimacy of an infringement claim affords ISPs two powerful open-ended defenses against the imposition of contributory liability.

Other courts have followed RTC. Its influence is especially evident in Sega Enters. Ltd. v. MAPHIA. In that case, Sega, which owned copyrights in certain computer games, had sued MAPHIA and Sherman for infringing Sega’s copyrights by operating a BBS that allowed subscribers to up- and download unauthorized copies of a number of games developed by Sega. The court granted Sega’s motion for a preliminary injunction, stating that MAPHIA and Sherman were likely to be found liable, among other things, for direct copyright infringement. Later, however, on a motion for summary judgment, the same court arrived at the exact opposite conclusion, finding that “Sherman cannot be liable for direct infringement.” One way of explaining the court’s conflicting analyses is that at the time the court issued the preliminary injunction, Playboy, to which it cited in its earlier decision, had already been decided, whereas the court’s decision in RTC was still outstanding. When RTC came out, the Sega court reversed its analysis, expressly noting in its later decision that it found RTC “persuasive.” It should be noted that the court also cited to RTC in support of its holding that Sherman was liable for contributory infringement. However, the court’s citation to RTC in this context does not refute our earlier analysis that the treatment by RTC of the issue of contributory copyright infringement is

120 Id. at 1374.
121 Id.
122 Id.
125 Id. at 688 (concluding that “Sega is likely to succeed in establishing that Defendant’s MAPHIA bulletin board activities represent direct and contributory infringement under the Copyright Law”).
126 Sega, 948 F. Supp. at 932.
127 Id.
128 Id. at 933, 932.
extremely favorable to ISPs. The main reason why Sherman did not benefit from this decision is that it actively solicited subscribers to engage in copyright infringement, which made it easy for the court to reach its decision on the issue of contributory liability. Finally, while the court did not touch on the question of vicarious liability, the facts of the case would seem to have made a good case for holding Sherman liable on that theory as well.

Marobie-Fl., Inc. v. National Ass'n of Fire Equip. Distrbis. is another case relying on RTC. Marobie, the owner of the copyright in certain clip-art developed for use by the fire service industry, had sued National Association of Fire Equipment Distributors ("NAFED") for using Marobie's clip-art on its website without having obtained Marobie's permission to do so. In addition, Marobie also sued Northwest, the ISP that hosted NAFED's website, alleging direct, vicarious and contributory copyright infringement. The court, on motions for summary judgment, rejected Marobie's claim that Northwest was liable for direct infringement. In addition, citing to RTC and observing that Northwest received a fixed fee from NAFED for the web-hosting services that it provided to NAFED, it held that Northwest was not vicariously liable, either. Similar to RTC, however, the court found itself unable to decide Marobie's claim for contributory infringement on summary judgment.

In conclusion, the majority view among courts is that ISPs are not directly liable for copyright infringement committed by their subscribers. It should be noted, however, that all decisions dealing with the issue were made at the district court level and that Playboy, the only decision that arrived at the opposite result, has not only never been overruled but, on the contrary, has been endorsed by the IITF Report. As a result, there remains a possibility that courts revisiting the issue in the future may find ISPs directly liable for infringing activities attributable to their subscribers. As far as the status of ISPs as related defendants is concerned, while courts have exempted ISPs receiving fixed fees from vicarious liability, they have indicated a willingness to hold them contributorily liable, albeit only in limited circumstances, such as in cases that clearly involve copyright infringement and in which they have been put on notice of the infringement. The overall lack of clarity is unsatisfactory for ISPs but especially for copyright holders. To them, the fact that the law does not create an incentive, let alone duty, for ISPs to cooperate with copyright holders in their fight against online copyright infringement makes indirect copyright law enforcement look like a rather blunt regulatory weapon in the hands of the government.

129 Id. at 933 (noting that "Sherman actively solicited users to upload unauthorized games, and provided a road map on his BBS for easy identification of Sega games for downloading").
131 Id. at 1171.
132 Id.
133 Id. at 1178.
134 Id. at 1179.
135 Id.
2. 17 U.S.C. § 512

The adoption by Congress of the DMCA in 1998 clearly has changed the landscape. As we will see in a moment, Title II of the DMCA, entitled Online Copyright Infringement Liability Limitation Act, which has been codified as Section 512 of the Copyright Act, has created a legal basis for indirect copyright law enforcement, thereby enabling copyright holders to rely on ISPs for the protection of their interests. To be sure, at first glance, Section 512 does not seem to change anything compared with RTC. In particular, it imposes no formal requirement that ISPs assist copyright holders with the prevention of large-scale infringement by policing their subscribers. Nor does it formally overrule RTC, which, as we have seen, suggests that ISPs are liable for their subscribers’ actions only in very limited circumstances. Rather, the goal of Section 512 is to clarify the circumstances in which ISPs may become liable for infringing activities of their subscribers. To that end, the DMCA creates a number of safe harbors for ISPs that satisfy certain conditions. Section 512(k) expressly provides that an ISP’s failure to qualify for the statutory safe harbors “shall not bear adversely” on the ISP’s eligibility for other defenses. If an ISP charged with liability for copyright infringement can show that its activities fall within one of the safe harbors, it cannot be held liable for damages, nor can its service be shut down. It still may be the addressee of an injunction, however, aimed at stopping infringing activities by its subscribers. The effect of these provisions is to assure ISPs that, if they conduct their operations within the scope of the safe harbors, their subscribers’ actions will have no impact on their business.

The following discussion will show that, contrary to the impression one might get from a casual analysis of Section 512, the various safe harbors in

137 See, e.g., SENATE COMM. ON THE JUDICIARY, DIGITAL MILLENNIUM COPYRIGHT ACT OF 1998, S. REP. NO. 105-90, at 2 (noting that the DMCA will “provide certainty for copyright owners and Internet service providers with respect to copyright infringement liability online”) and 8 (explaining the need for legislative action on the ground that “without clarification of their liability, service providers may hesitate to make the necessary investment in the expansion of the speed and capacity of the Internet”). Whether Section 512 really achieves the legislature’s goal is subject to doubt. Contrary to what one would expect from a statute aiming to create legal certainty, the manifold conditions of eligibility attached to Section 512 would seem to do anything but create certainty. One example is the requirement that ISPs adopt, and inform their subscribers of, a policy that provides for the termination “in appropriate circumstances” of repeat infringers. 17 U.S.C. § 512(i)(1)(A) (1999). The provision offers no further guidance as to what exactly that term might mean. The legislative history merely points out that “there are different degrees of online copyright infringement, from the inadvertent and noncommercial, to the willful and commercial.” See SENATE COMM. ON THE JUDICIARY, DIGITAL MILLENNIUM COPYRIGHT ACT OF 1998, S. REP. NO. 105-90, at 61. The same is true of a number of other provisions, which refer, for example, to “standard technical measures,” 17 U.S.C. § 512(i)(1)(B) (1999), and “generally accepted industry standard communications protocol,” 17 U.S.C. § 512(b)(2)(C)(ii) (1999).
138 In that respect, the DMCA differs from the CDA, which affords ISPs complete immunity from liability for any obscene and defamatory statements published by their subscribers.
connection with the myriad conditions attached to them and viewed against the background of RTC and Playboy have the practical effect of compelling ISPs to assume a much more active role in the enforcement of copyright law than they would be required to under the RTC standards.

What, then, are the various safe harbors, and how do they relate to RTC? There are essentially three safe harbors. Section 512(a), entitled "Transitory Digital Network Communications," covers instances where an ISP serves merely as a passive conduit for copyrighted material. Among other things, Section 512(a) requires that: (i) the transmission of the material occur on the basis of an "automatic technical process without selection of the material by the service provider" and without "modification" of the same; (ii) any copies made during the process "not [be] maintained on the system for a longer period than is reasonably necessary for the transmission"; and (iii) such copies "not ordinarily [be] accessible by anyone other than the intended recipients." ISPs that comply with the aforesaid conditions, however, are unlikely to be liable under RTC standards. On the one hand, as noted, Section 512(a) requires that qualifying ISPs not select or modify any of the material passing through their systems. In other words, their systems have to deal with all information without regard to its copyright status. So long as most information flowing through the Internet, however, is either not copyrighted or is disseminated with the express or implied consent of the respective copyright holders, ISPs cannot be said to derive a direct financial benefit from the occasional transmission of infringing material (that is, in addition to any benefits that they may reap as a result of transmitting bits and bytes generally), thereby failing the RTC test for vicarious liability. On the other hand, since ISPs that comply with Section 512(a), by definition, neither select nor modify any of the information passing through their systems and in addition do not retain it for a longer period than what is reasonably necessary for the communication, they are unlikely to be aware of any infringing material that might pass through their systems, thereby failing the RTC test for contributory liability. In sum, therefore, Section 512(a) does not add anything to the substance of RTC but merely paraphrases its holding.

Similar considerations apply with respect to the safe harbor of Section 512(b), entitled "System Caching." Following the example of Section 512(a), Section 512(b) requires that the caching occur on the basis of an "automatic

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145 Id.
147 Cf. Nimmer, supra note 89 (discussing the problem in the context of dueling notifications and pointing out that it is difficult to imagine a notification of infringement as to a transitory communication, for the precise reason that it is transitory - after the fact, it is too late to tell the ISP that the matter that already transmitted through its facilities was infringing; and before the fact, how could a copyright owner gain knowledge in advance as to, for instance, an e-mail that someone has not yet sent, but that will contain infringing material?).
technical process\textsuperscript{149} and that the material not be modified in the course of the process.\textsuperscript{150} In addition, it provides that whenever infringing material finds its way into an ISP's cache, the ISP has to "respond expeditiously to remove, or disable access to," the infringing material as soon as the material has been taken off the originating site and that fact has been brought to the ISP's attention.\textsuperscript{151} Again, RTC leads to the exact same results. First, RTC suggests that, prior to the receipt of a notification of claimed infringement, ISPs are unlikely to be considered to be aware of the existence of infringing material on their systems.\textsuperscript{152} Therefore, ISPs complying with Section 512(b), that is, ISPs that either have not been put on notice by copyright holders or take action immediately after receiving such notice, are not liable for contributory infringement. Similarly, for the reasons discussed in connection with Section 512(a), such ISPs are not liable for vicarious infringement, either.

The third type of safe harbor is available to ISPs that either host material for someone else or that operate search engines which point to infringing material. The relevant rules are contained in Sections 512(c) and (d). Both sub-sections clearly are modeled on the concepts of "vicarious" and "contributory" copyright infringement. In fact, they track the RTC tests even more closely than the safe harbors discussed earlier. Both provisions require first of all that ISPs neither have "actual knowledge," nor are "aware of facts or circumstances from which infringing activity is apparent."\textsuperscript{153} The knowledge standard has been described as a "red flag test."\textsuperscript{154} In substance, however, it appears to be substantially in line with the RTC standard for contributory liability.\textsuperscript{155} In addition, the provisions require that qualifying ISPs not derive "a financial benefit directly attributable to the infringing activity, in a case in which it has the right and ability to control such activity,"\textsuperscript{156} which again mirrors the RTC standard for vicarious liability.

The fact that Section 512 does not, and presumably does not even intend to, go beyond the judicially developed doctrines of contributory and vicarious liability is not all that surprising given that the stated main goal of the DMCA is

\textsuperscript{152} See Religious Tech. Center, 907 F. Supp. at 1374 (noting that "[i]t is undisputed that Netcom did not know that Erlich was infringing before it received notice from plaintiff").
\textsuperscript{153} 17 U.S.C. § 512(c) & (d) (1999).
\textsuperscript{154} See, e.g., Irina Y. Dmitreva, I Know It When I See It: Should Internet Providers Recognize Copyright Violation When They See It?; 16 SANTA CLARA COMPUTER & HIGH TECH. L.J. 233, 251 (noting the House Judiciary Committee Report of 1998 on WIPO Copyright Treaties Implementation Act and Online Copyright Infringement Liability Limitation "defined a 'red flag' as 'information of any kind that a reasonable person would rely upon'").
\textsuperscript{155} See Religious Tech. Center, 907 F. Supp. at 1374, 1374 (dismissing as "unsupportable" Netcom's claim that it should not be held contributorily liable because it lacked unequivocal knowledge while hinting that Netcom might escape liability in cases where there is "at least a colorable claim of fair use" or when it would not be "reasonable" to investigate a claim of infringement). The DMCA standard is also compatible with the Sega decision, where "it [was] undisputed that Sherman had knowledge that his users were copying the games." Sega, 948 F. Supp. at 933.
to create legal certainty (even though it may not achieve that goal fully), rather than to alter the instances in which courts may find ISPs liable for copyright infringement. However, as mentioned earlier, an ISP’s lack of knowledge, lack of right and ability to control, and lack of a direct financial benefit is not enough to qualify it for the various safe harbors (except sub-section (a), which concerns ISPs that act as passive conduits). Rather, to find shelter under Section 512, an ISP has to comply with a series of additional conditions, which, as will see in a moment, deviate quite substantially from RTC.

What, then, are these conditions? First, an ISP that wishes to qualify for one of the safe harbors (other than the safe harbors for transitory digital network communications and caching) must designate an agent to whom copyright owners that feel infringed in their rights may direct notifications of infringement. The Copyright Office is responsible for keeping a current directory of the contact information of all such agents that is open to the public for inspection. The requirement to designate an agent who is accessible by the public obviously is not part of traditional vicarious liability principles and as such is a first, albeit vague, indication that the DMCA seeks to assist copyright holders in relying on ISPs for the prevention of infringements upon any of their exclusive rights.

The second condition requires that the ISP, upon receipt of a notification via its agent, “respond expeditiously to remove, or disable access to,” the allegedly infringing material. Again, such a requirement is foreign to RTC and to copyright law generally. To be sure, RTC does make it seem advisable for ISPs to cooperate with copyright holders after being notified that one of their subscribers is engaged in infringing activities. However, as we have seen, an ISP’s failure to do so does not necessarily expose it to liability. So long as it can argue that its subscriber has a colorable claim of fair use or that it otherwise cannot reasonably determine whether the subscriber’s activity amounts to infringement, it will not be liable. In comparison with the rather lenient rule of RTC, the notice-and-take-down mechanism of Section 512 is much more stringent. Its practical effect is similar to that of a temporary restraining order or a preliminary injunction without notice. The reason is that in order to preserve its eligibility for the various safe harbors, an ISP has to take action against its subscriber before it has had a chance to inform the subscriber of its intention to remove, or disable access to, its account and even before the subscriber has had a chance to present its own case to the ISP. Strictly speaking, the effect of the provision goes even further than that of an injunction in that it requires the ISP to take action without regard to the merits of the infringement claim. ISPs who seek to qualify for Section 512 hence have to sanction their subscribers upon a mere suspicion of copyright infringement. To encourage ISPs to comply with

157 See U.S.C. § 512(c)(2) (1999). See also, U.S. Copyright Office, Directory of Service Provider Agents for Notification of Claims of Infringement (visited Mar. 25, 2001) <http://www.loc.gov/copyright/onlineisp/list/> (listing service providers who have filed designations of agents for notification of claims of infringement pursuant to Section 512(c) of the Copyright Act.)

158 Id.


160 It should be noted that this provision does create certain problems. By requiring that ISPs who
the aforesaid condition, Section 512(g) provides further that ISPs shall have no liability vis-a-vis subscribers against whom they take action even though it later turns out that they are completely innocent.\footnote{While a subscriber whose content is removed or to which access is disabled may serve a counter-notification on the ISP in which it may demand that the allegedly infringing material be restored, the ISP, if it wishes to continue to qualify for the safe harbors of Section 512, has to ignore its subscriber’s demand so long as the purported copyright owner rejects the counter-notification at any time before the ISP has restored the allegedly infringing material. See 17 U.S.C. § 512(g)(2)(B) & (C) (1999) (noting the detailed procedures that the ISP has to follow).} This constitutes yet another deviation from general principles, pursuant to which a principal breaching a contract with its agent upon an unfounded suspicion raised by a third party would become liable towards the agent and is a further indication that the DMCA seeks to turn ISPs from private entities into quasi-public officers whose task it is to enforce rules of copyright law against their subscribers.

In addition, even if an ISP complies with all of the above conditions, it still risks exposing itself to liability unless it has a policy, of which it has to notify its subscribers, to terminate repeat infringers.\footnote{See 17 U.S.C. § 512(i)(1)(A) (1999).} Finally, ISPs are required to accommodate “standard technical measures . . . used by copyright owners to identify or protect copyrighted works.”\footnote{17 U.S.C. § 512(i)(1)(A) & (2) (1999).}

The combined, if unstated, effect of the various statutory safe harbors and the corresponding conditions of eligibility is to compel ISPs to crack down on their subscribers in instances where a court following RTC would not hold them liable for copyright infringement. While it is true that from a strictly legal perspective

\footnote{The fact that Section 512 entrusts the promulgation of substantive provisions of copyright law to an alliance of “copyright owners and service providers” is troubling for three reasons, which are mentioned here solely for the sake of completeness without exploring them in greater detail since they are not directly relevant for this Article: First, intellectual property law is all about balancing creators’ exclusive control against public access. By entrusting the promulgation of standard technical measures only to copyright owners, that is, creators and their representatives, Section 512 leaves the public at large out of the question. Second, unlike Congress, the U.S. Constitution does not bind copyright owners. In other words, they are not required to, and there is no guarantee that in promulgating standard technical measures, they will, bear in mind the guidelines set forth in the Intellectual Property Clause of the Constitution that intellectual property law shall promote “the Progress of Science and the Useful Arts.” U.S. CONST. art. 2, § 8. Finally, the reference by Section 512 to a “multi-industry standards process” appears to be problematic in light of the fact that a huge number of artists and creators are not members of any industry organization. As a result, Section 512 seems to be at odds with the values of the Supreme Court’s decision in Sony, which held that in an action for contributory infringement against manufacturers of copying devices, “the copyright holder may not prevail unless . . . he speaks for virtually all copyright holders with an interest in the outcome.” Sony, 464 U.S. at 446. In addition, it is unclear whether an industry consensus ever will emerge. Unfortunately, Section 512 does not say what is to happen in this case.}
compliance with Section 512 is voluntary, and while Section 512(l) expressly states that an ISP's failure to qualify for the statutory safe harbors shall not have an adverse impact on its ability to invoke other defenses of copyright law (including those provided by RTC), the fact that Section 512 stops short of formally requiring ISPs to enforce copyright law against their subscribers cannot obscure the fact that as a practical matter ISPs have no choice but to comply with the conditions attached to the various safe harbors. The reason, as we have seen, is that the courts' case law regarding the liability of ISPs for copyright infringement committed by their subscribers is unsettled: There is not just RTC, which is extremely ISP-friendly. There is also Playboy, which never has been expressly overruled. And while it seems more likely than not that future courts decisions will follow RTC rather than Playboy, this is by no means certain. So long as the conditions under which courts will hold ISPs liable for copyright infringement committed by their subscribers are unclear, rational ISPs have no choice but to comply with the statutory framework of Section 512. A prudent ISP that decided to conduct its affairs without taking advantage of Section 512 would have to take out insurance and make provision in its books for the possibility that it may become liable for damages. Since its competitors could avoid this by complying with Section 512, they would be able to offer their services at significantly cheaper rates. Economically, therefore, ISPs are forced to comply with Section 512 or to ignore it at their own risk. In that sense, the provision has created a powerful legal basis for indirect copyright law enforcement.

To understand the full import of Section 512, it is important to note that the incentive structure created by that provision is self-enforcing: So long as ISPs adjust their conduct by the requirements of Section 512, courts will have no opportunity to clarify the exact circumstances in which ISPs are liable for their subscribers' conduct under the doctrines of contributory and vicarious infringement. Thus, Section 512 prolongs the uncertainty, which in turn reinforces the incentive for ISPs further to comply with Section 512.

Finally, it is interesting to see that Section 512(k) defines the concept of "ISP" as including essentially any entity that provides services in connection with the Internet and that Section 512(d) expressly mentions search engines.

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164 Cf., e.g., Dmitreva, supra note 154, at 250 (citing Agreement on Digital Copyright Liability, 55 PAT., TRADEMARK & COPYRIGHT J. 564 (1998)).
166 See Yen, supra note 88, at 1883 (asking "why any ISP would undergo the expense of complying with the DMCA's statutory requirements to shield itself from liability which does not exist" and stating that "[the answer, of course, is risk aversion").
167 See 17 U.S.C. § 512(k)(1)(B) (1999) (defining the term "service provider" as "a provider of online services or network access, or the operator of facilities therefore"). While 17 U.S.C. § 512(k)(1)(B) merely speaks of "provider[s] of online services or network access," leaving open the question of what "online services" are, the fact that the provision mentions online services and network access separately suggests that the concept of "online services" goes beyond the provision of network access and encompasses any type of service provided via the Internet. This interpretation is reinforced by 17 U.S.C. § 512(d), which implicitly assumes that the concept of "service provider" includes entities "referring or linking users to an online location containing infringing material or infringing activity." 17 U.S.C. § 512(d) (1999).
As we have seen in our discussion of the Internet's current architecture, the ability of search engines to resolve the information location problem makes them by far the most effective targets for indirect copyright law enforcement. The legislative materials specifically recognize that "[i]nformation location tools are essential to the operation of the Internet" and that search engines are "particularly helpful" to Internet users because of their ability to "filter[] out irrelevant and offensive material." This quote is interesting because it suggests that, in adopting the DMCA, the government was not just concerned with the lack of legal certainty but that it has consciously created a basis for indirect copyright law enforcement.

A quick look across the Atlantic shows that Section 512's endorsement of indirect copyright law enforcement is a phenomenon that is by no means limited to the United States. The European Union, for example, has recently enacted legislation that is strikingly similar to Title II of the DMCA, although its provisions are somewhat less detailed. EC Directive 2000/31, which deals, among other things, with the liability of ISPs for information stored on and transmitted via their systems, establishes three safe harbors that are closely modeled on the respective sub-sections of Section 512, although they impose fewer conditions of eligibility. Article 12, entitled "Mere Conduit," and Article 13, entitled "Caching," which cover transitory transmissions and the temporary storage of information, respectively, impose similar requirements as Section 512(a) and (b). Article 14, entitled "Hosting," deals with the storage by ISPs of information provided by their subscribers. Unlike Section 512(c) and (d), however, Article 14 codifies merely the "red flag" test for contributory copyright infringement, requiring that an ISP "not have actual knowledge of illegal activity or information and, as regards claims for damages, is not aware of facts or circumstances from which the illegal activity or information is apparent." By contrast, the provision does not deal with the issue of vicarious liability. The lack of any guidance as to this issue may be a result of the fact that vicarious liability is a common law tort concept, whereas the Member States of the European Union are predominantly civil law jurisdictions, which generally

170 Id.
172 It should be noted that on their face, the provisions of the directive apply not just to copyrighted material but any type of "illegal activity or information," including obscene and defamatory statements. This obviously creates free speech issues. The absence of a binding human rights charter at the EU level, however, allows the directive to sidestep the issue by shifting the difficult task of balancing the need for copyright protection with the freedom of expression to the Member States. It does so by stating that "this Directive is not intended to affect national fundamental rules and principles relating to freedom of expression." Directive, supra note 171, Recital 9.
regulate third-party liability along different lines. In addition to the aforesaid, Article 15 provides that Member States shall not, in their national laws, impose a general obligation on ISPs to monitor any information that they transmit or store, nor a general obligation actively to seek facts or circumstances indicating illegal activity.\(^{174}\) However, it goes on to provide that, "upon obtaining . . . knowledge or awareness," of unlawful activity or information, ISPs shall "act[] expeditiously to remove or to disable access to the information."\(^{175}\) This pair of provisions is equally consistent with Section 512, which imposes no general monitoring obligation on ISPs but merely requires them to act once they have obtained knowledge. Assuming, as the directive hints in its recitals, that the law in the various Member States is similarly unsettled as it was in the United States prior to the adoption of the DMCA, the provisions of EC Directive 2000/31 may have a similar effect as Section 512, thereby endorsing the use of indirect copyright law enforcement as a means of protecting copyright holders.

C. Conclusion

In summary, it is apparent that the government has long since realized that by targeting regulations at the Internet's local centers, especially ISPs, it can preserve its regulatory interest in the enforcement of laws regulating information. A comparative analysis of the CDA and Title II of the DMCA suggests that, in exploiting the Internet's client-server architecture for regulatory purposes, the government has taken a balanced approach, trying to avoid the creation of incentives that might cause ISPs to act in a way that might have a chilling effect on Internet speech, while strongly encouraging them to take an active role in the enforcement of copyright law. The system of indirect copyright law enforcement created by Section 512 of the Copyright Act and EC Directive 2000/31 speaks to the increasing reliance by governments all over the world on the Internet's client-server architecture for the purpose of affording copyright holders legal protection.

III. PEER-TO-PEER ARCHITECTURES

The remainder of this Article will be dedicated to a closer analysis of P2P architectures and the question of what impact their emergence might have on the concept of indirect copyright law enforcement, which, as described in Part II, is the predominant means by which governments currently afford copyright holders legal protection in the Internet.

Owing to its recent origin, there is as yet no commonly accepted definition of the concept of "P2P."\(^{176}\) As the term suggests, however, the unifying characteristic of all P2P architectures is that they allow people to interact as

\(^{174}\) See Directive, supra note 171, art. 15.

\(^{175}\) Id.

\(^{176}\) See Clay Shirky, What Is P2P ... And What Isn't? (Nov. 24, 2000) <http://www.openp2p.com/pub/a/p2p/2000/11/24/shirky1-whatisp2p.html>. However, Webopedia, the primary online dictionary for computer and Internet technology, has proffered a definition of peer-to-peer architecture. See Webopedia, Peer-to-Peer, supra note 3.
peers. The term "peer" is meant to convey that each node of a P2P network has substantially the same functionality, that is, each node is capable of acting both as a client and as a server. In that respect, P2P architectures differ from the Internet's current client-server architecture, in which some nodes, the clients, have a much narrower functionality than others, the servers. Clients\(^{177}\) merely send requests to and receive responses from servers,\(^{178}\) which in turn are responsible for processing the requests that they receive and are normally capable of performing a wider range of tasks.

Because P2P architectures do not make a distinction between clients and servers, they have no local centers. To be sure, in practice, some nodes may become vastly more popular than others, in which case they may become the equivalent of local centers, but conceptually all nodes are equal. This raises two questions. The first question is: How, in the absence of local centers, do P2P architectures tackle the Internet's information location problem? As we have seen, the Internet currently resolves this problem by means of a client-server architecture in which certain local centers (search engines) provide central directories that enable people to locate the information that they are looking for. Consequently, we need to ask how this problem is resolved in P2P architectures, which, by definition, have no local centers. The second question is what impact the lack of local centers might have on the viability of indirect copyright law enforcement as a regulatory strategy for affording copyright holders effective legal protection. The two questions are obviously interrelated in the sense that in order to analyze how the government might regulate P2P architectures, one has to understand how they work and, in particular, how they resolve the information location problem.

\section*{A. The Demise of the Local Centers}

Let us therefore begin by taking a closer look at some of the technical aspects of P2P architectures. In this connection, it is useful to draw a distinction between three different types of P2P architectures. I will refer to them as "hybrid," "plain-vanilla" and "law-defying."

The classic example of a hybrid P2P architecture is Napster, the MP3 file-swapping service invented by Shawn Fenning, which has pioneered the P2P

\footnote{\textit{See} Webopedia, \textit{Client} (visited Mar. 26, 2001) \url{http://webopedia.internet.com/TERM/c/client.html} (defining client as: "The client part of a client-server architecture. Typically, a client is an application that runs on a personal computer or workstation and relies on a server to perform some operations. For example, an e-mail client is an application that enables you to send and receive e-mail.").}


A computer or device on a network that manages network resources. For example, a \textit{file server} is a computer and storage device dedicated to storing files. Any user on the network can store files on the server. A \textit{print server} is a computer that manages one or more printers, and a \textit{network server} is a computer that manages network traffic. A \textit{database server} is a computer system that processes database queries.

\textit{Id.}
phenomenon. By way of background, one should note that “MP3,” or “MPEG-3,” as the technology is properly called, is a standard file format for the digital storage of audio recordings. Because MP3 technology uses compression algorithms, audio data encoded in MP3 format is only about one-twelfth of its raw size. This enables people to transmit MP3 files over existing Internet lines in reasonable amounts of time. Napster’s hybrid P2P architecture makes the location and transmission of MP3 files over the Internet a lot easier than it otherwise would be. The term “hybrid” is meant to stress the fact that Napster is a P2P architecture only in some respects but not in others. It is a P2P architecture in the sense that each node of its network has the same basic functionality, that is, each node is not only able to receive certain types of information, namely MP3 files, from other nodes, but in addition may, and in fact is encouraged to, store and send MP3 files to other nodes. As a result, unlike a Web-based chat room that is coordinated by an intermediary, Napster enables people to exchange MP3 files directly. Napster thus differs fundamentally from the Web’s client-server architecture in that it manages the storage and exchange of information on a P2P basis. However, as mentioned earlier, before one can download information from a decentralized network, one first must find nodes that possess the desired information. In hybrid P2P architectures, such as Napster, the location of information does not occur on a P2P basis. Rather, people locate information by sending search requests to a central database. Similarly to a conventional search engine, Napster provides a directory, which, at any given moment, contains the IP addresses of all then-active nodes of its network, that is, of the computers of all users logged on to Napster at any given point, along with the names of the MP3 files stored on these nodes. Whenever

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179 *Cf.* *Napster*, 114 F. Supp. 2d at 902 (describing Napster as “a peer-to-peer file-sharing system”).


The file extension for MPEG, audio layer 3. Layer 3 is one of three coding schemes (layer 1, layer 2 and layer 3) for the compression of audio signals. Layer 3 uses perceptual audio coding and psychoacoustic compression to remove all superfluous information (more specifically, the redundant and irrelevant parts of a sound signal. The stuff the human ear doesn't hear anyway). It also adds a MDCT (Modified Discrete Cosine Transform) that implements a filter bank, increasing the frequency resolution 18 times higher than that of layer 2.

The result in real terms is layer 3 shrinks the original sound data from a CD (with a *bitrate* of 1411.2 kilobits per one second of stereo music) by a factor of 12 (down to 112-128kbps) without sacrificing sound quality.

*Bitrate* denotes the average number of bits that one second of audio data will consume.

Because MP3 files are small, they can easily be transferred across the Internet. Controversy arises when copyrighted songs are sold and distributed illegally off of Web sites. On the other hand, musicians may be able to use this technology to distribute their own songs from their own Web sites to their listeners, thus eliminating the need for record companies. Costs to the consumer would decrease, and profits for the musicians would increase.

*Id.*

181 *Id.*

182 At any one time, Napster’s directory comprises thousands of entries. In total, it is estimated that
a user logs on to Napster, the system automatically scans the hard drive of the user’s computer and enters the node’s IP address along with the names of the MP3 files stored on that node into its central directory. When another user subsequently looks for a particular MP3 file, its computer sends a request to Napster's system, which then checks its central database to see whether the requested MP3 files are stored on another node and, if so, sends that node's IP address to the user that made the inquiry. As a result, while Napster is a P2P architecture as far as the storage and exchange of information is concerned, it manages the task of locating information in a very non-P2P manner, namely by means of a central database, which, as one might imagine, is a local center of sizeable dimensions. Napster is hence a hybrid that combines elements of a client-server architecture with elements of a true P2P architecture.

Although Napster has been widely perceived as signaling the advent of the apocalypse to the record industry, the way it uses P2P technology pales when compared with what I call plain-vanilla P2P architectures, such as Gnutella, and law-defying P2P architectures, such as Freenet. Unlike Napster, Gnutella and especially Freenet are still under development, and the underlying technologies are still evolving. Nevertheless, it is obvious that on the technical score, Gnutella and Freenet differ from Napster in several critical respects.

First, unlike hybrid P2P architectures, plain-vanilla and law-defying P2P architectures are completely decentralized, which means that they handle not only the storage and exchange but also the location of information on a P2P basis. In that respect, plain-vanilla and law-defying P2P architectures are similar to each other. And yet, despite this similarity, there are also certain significant differences.

In networks based on plain-vanilla P2P architectures, nodes locate all information on a P2P basis rather than by means of a central database. One question faced by users of plain-vanilla P2P architectures thus is how they should find the information that they are looking for. The answer is by no means obvious. In terms of the example that I gave in the discussion of the Internet’s current architecture, the problem is similar to finding a friend in a big city, assuming one knows neither the friend's address nor her phone number and assuming further that there are no directories in which one might look up this information. One possible solution to the problem would be to walk around the city and to ask people whether they know the person. In big cities such as New York, however, this method obviously would face enormous obstacles. The Internet is like a big city, and so the complications would be quite similar. An even less promising approach, however, would be to ask a random person in the street whether he or she knows one’s friend and, if not, kindly request him or her to pass the inquiry on to another person living in the same city and to ask that person to proceed in the exact same manner and ultimately to pass the

more than 50 million people from part of the Napster community.

183 See Napster, 114 F. Supp. 2d at 906.
184 Id. at 907.
185 See Gnutella, supra note 20.
186 See The Freenet Project, supra note 21.
information back to where the request came from. And yet, although this search strategy would be rather hopeless as far as the real world is concerned, it is precisely the strategy that plain-vanilla P2P architectures such as Gnutella use to locate information. To find data in a Gnutella-type network, users direct their search requests to the next best node of the network, which may or may not be their own computer. The node so contacted then checks whether it has the desired information. If so, it simply sends the information back to the node from which the request has originated. Otherwise, it forwards the request along with the IP address of the original node to another node on the network, which in turn proceeds in the exact same manner, that is, it checks whether it has the information and, depending on whether it does, either returns the information or forwards the package to another node. This way, a request chain is formed that may involve any number of nodes of the network. To prevent the formation of loops, nodes reject requests that they have already processed. In addition, to minimize the likelihood that requests for non-existing information clog the network, search requests time out after a certain number of "hops." Once the request chain has reached a node that possesses the desired information, that node establishes a connection with the node that has initiated the chain. This it can do because it has received the initial node's IP address along with the search request. Therefore, all that the destination node has to do is put the information in a virtual envelope and send it to the node of origin. The important point is that, unlike hybrid P2P architectures, plain-vanilla P2P architectures operate on a true P2P basis, that is, they entrust both the location and the exchange of information to the nodes of the network acting as peers.

Law-defying P2P architectures such as Freenet operate according to similar principles. As mentioned, the principal similarity is that both in law-defying and in plain-vanilla P2P architectures, information is located and exchanged on a P2P basis. There are several important differences between these two types of architectures, however, and together they explain why it is more appropriate to call Freenet a law-defying P2P architecture rather than a plain-vanilla P2P architecture. One of the main differences is that in Freenet, a node that possesses information requested by another node does not send it to that other node directly. Rather, the information is routed through all nodes of the request

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188 Id.
189 Id.
190 Id.
191 Id.
192 For information on Freenet, see generally Ian Clarke et al., Freenet: A Distributed Anonymous Information Storage and Retrieval System, in WORKSHOP ON DESIGN ISSUES IN ANONYMITY AND UNOBSERVABILITY (Hannes Federrath ed.) (2001); Theodore H. Hong, Performance, in PEER-TO-PEER: HARNESSING THE POWER OF DISRUPTIVE TECHNOLOGIES (Andy Oram ed.) (2001); The Freenet Project, supra note 21.
193 See Hong, supra note 192.
chain, each of which keeps a copy of the information before passing it on.\textsuperscript{194} In other words, instead of passing the information directly from the end of the request chain back to its origin, the node that possesses the information hands it over to its immediate neighbor, which in turn passes it on to the next node of the chain until the information finally arrives at the node from which the request has originated. The way in which information is routed through Freenet is a consequence of the fact that each node knows only the IP addresses of the immediately preceding and succeeding nodes.\textsuperscript{195} From the node's perspective, all other nodes are anonymous. This explains why, contrary to Gnutella, where a node that holds information requested by another node can transmit the information by establishing a direct connection with that node, in Freenet, the information must be routed through each and every node through which the search request has passed.\textsuperscript{196} Node anonymity is a central feature of Freenet. In fact, as we will see later, it may well be regarded as the key distinguishing factor between law-defying and plain-vanilla P2P architectures.

There are certain other features of Freenet, which, although not critical to its characterization as a law-defying P2P architecture, nevertheless ought to be mentioned for reasons of completeness as they, too, have a certain law-defying effect. First, all data circulating through Freenet is encrypted.\textsuperscript{197} As a result of this feature, one can locate and use a particular piece of data only if one is in possession of the key necessary to identify and unlock that data.\textsuperscript{198} The exact way in which Freenet uses encryption is complicated and would go beyond the scope of this Article. In brief, there are three different types of keys. Keyword-signed keys ("KSKs") consist of encrypted text that identify certain data.\textsuperscript{199} Each node that receives a search request containing a KSK compares the KSK with the KSKs associated with the data kept on that node. For example, this Article stored on Freenet might be identified by a key composed of the terms "text/law/Beyond Napster." While the aforesaid terms would indicate that they refer to a copy of this Article, the corresponding KSK is likely to be an incomprehensible string of alphanumeric symbols. To enable other people to find the Article on Freenet, I would have to inform them of the unencrypted version of the key. This would allow them to generate the corresponding KSK, which they could then use as the basis of their search request. To enable different people to use the same terms to describe their respective information, Freenet allows users to combine KSKs with so-called signed-subspace keys ("SSKs") and thereby to create unique identifiers.\textsuperscript{200} For example, if I wanted to publish this Article under a KSK that is already used by somebody else, I could create my own arbitrary SSK and combine it with the already existing KSK to create a new identifier. The combination of the two keys would uniquely identify

\begin{itemize}
\item \textsuperscript{194} Id.
\item \textsuperscript{195} Id.
\item \textsuperscript{196} Id.
\item \textsuperscript{197} Id.
\item \textsuperscript{198} Id.
\item \textsuperscript{199} See Hong, supra note 192.
\item \textsuperscript{200} Id.
\end{itemize}
the Article. Finally, Freenet employs so-called content-hash keys ("CHKs") to encrypt the data identified by KSKs and/or SSKs. Therefore, in our example, if I wanted to share the Article with other people, not only would I have to publish the KSK and, if applicable, my SSK pointing to the Article so as to enable people to locate and retrieve the Article, but I would also have to let them know the Article's CHK in order to allow them to unlock the file once they have obtained it.\footnote{Id.}

Another noteworthy respect in which Freenet differs from Gnutella concerns the way in which it routes search requests. In Gnutella, as mentioned earlier, search requests are routed arbitrarily: A node that receives a request simply contacts any other node of the network. By contrast, Freenet uses a more sophisticated algorithm to determine which of a node's neighboring nodes is most likely to possess particular types of information and routes requests accordingly.\footnote{Id.} This obviously makes searches more efficient. However, it is not a critical feature of law-defying P2P architectures as it has no impact on their regulability.

Before turning to the question of how various types of P2P architectures might be regulated, one should note that P2P architectures potentially may benefit society in various ways. First, the traditional way of searching the Internet by indexing websites and storing their content or metadata identifying that content in databases works well only so long as most websites offer static content. Pursuant to a recent trend, however, more and more websites offer dynamic content in addition to, and sometimes even instead of, static content. If that trend continues, and in all likelihood it will, the databases of the big search engines will become outdated more quickly, and consequently people will have a harder time locating information effectively. Search engines operating on the basis of P2P principles might be able to resolve this problem. To see why, one has to recall that in a plain-vanilla P2P architecture search requests are not entered into central databases. Rather, each request is forwarded from one node of the network to another on a P2P basis. The benefit of this feature is that it enables websites that offer dynamic content to check their own internal databases for the requested information whenever they receive a search request for that information instead of being represented in a search engine's central database only by the information that they had on display when that database was last updated.

Another benefit, although one that is specific to the way in which Freenet operates, concerns the allocation of information. In Freenet, as noted earlier, each node through which a piece of data is routed in response to a request for information keeps a copy of the data before passing it on to the next node of the request chain. As a result, information circulating through Freenet is constantly allocated from areas of the network where demand for such information is low to areas where demand is high. This leads to a more efficient utilization of network resources.

\footnote{Id.}

\footnote{Id. (explaining that "[t]he routing algorithms for storing and retrieving data . . . are designed to adaptively adjust routes over time to provide efficient performance while using only local, rather than global, knowledge.").}
B. Possible Legal Responses

Having thus explored the nature of P2P architectures and how they differ from the Internet's current architecture of local centers, let us now take a closer look at the regulability and legal status of each of the various types of P2P architectures introduced in the previous section.

1. Hybrid P2P Architectures

Regulability

Hybrid P2P architectures, such as Napster, are the least problematic case. As we have seen, they resolve the Internet's information location problem on a client-server basis. As a result, it should be possible to regulate them in much the same way as the Web's current architecture, namely by indirect copyright law enforcement, that is, by targeting the central element of these architectures — for example, Napster's directory — rather than by going after the direct infringers.

The straightforwardness of regulating hybrid P2P architectures stands in marked contrast with the widespread and, especially in the early days of Napster, popular belief that, since all copyrighted material traded via Napster is stored on other people's computers, Napster itself is immune to legal action. Whether that proposition is true from the perspective of the currently applicable law is a question that we will come back to in a moment (the Ninth Circuit's recent decision certainly suggests that it is not). For our purposes, however, the answer to this question does not matter. Whatever the current legal status of Napster, the system is certainly not immune to being regulated. The reason is that Napster's functionality hinges upon its central directory, which, as we have seen, is a local center of sizeable dimensions. As a result, however, even assuming that Napster were not liable for copyright infringement on the basis of the currently applicable law, it would be no problem for the government to regulate Napster, anyway, for example, by adopting a law that expressly requires that Napster and similar P2P file-swapping services check the names of all of their users' MP3 and other files against a database of copyrighted works before entering them into their directories or that they cooperate with copyright owners in identifying possible infringement in some other manner or maybe even that they cease providing their service altogether. Conceptually, therefore, Napster is extremely vulnerable to regulation.

Legal Status

The district court's analysis of Napster in A&M Records, Inc. v. Napster, Inc., which, in substance, was recently affirmed by the Ninth Circuit, stands for the proposition that hybrid P2P architectures such as Napster are not only perfectly amenable to indirect copyright law enforcement but that the law already provides the means to regulate such architectures. To see why, it is helpful to

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203 Napster, 114 F. Supp. 2d 896.
204 See Napster, 239 F.3d 1004
take a closer look at the facts of the case and the courts’ legal analysis. The case resulted from an action brought by a number of record companies alleging that virtually all of the MP3 files available on Napster were sound recordings in which they owned the copyright and that, because Napster enabled people to freely exchange these files with each other, it was liable for copyright infringement. The district court, on the record labels’ motion for a preliminary injunction, held that Napster was liable both for contributory and for vicarious copyright infringement. As a result, it issued a preliminary injunction, obliging Napster to prevent its subscribers from engaging in infringing activities. The Ninth Circuit agreed with the district court’s analysis on virtually all counts but vacated the sweeping injunction that the lower court had entered, directing it instead to issue a more narrowly crafted injunction pursuant to which Napster should be obliged to act only upon obtaining specific knowledge of infringing activities. The district court has subsequently entered a new injunction against Napster.

In analyzing the issues before it, the district court first found that the vast majority of Napster’s subscribers use the company’s service in order to download MP3 files that contain copyrighted sound recordings. This, the court held, amounted to direct copyright infringement. Napster went to great length to convince the court that a significant number of people made a fair use of its service. Napster pointed to essentially two potential fair uses: First, its file-sharing platform was — and, even if it were not, it conceivably could be — used for the purpose of transferring lawfully obtained MP3 files from one’s computer at home to one’s office computer, a practice that Napster referred to as “space-shifting.” Secondly, people used the service to download files for the purpose of “sampling” them before making a decision as to which songs, if any, they liked sufficiently so as to warrant a purchase. In raising the fair use defense, Napster hoped to persuade the court that its service was “capable of substantial noninfringing uses” and that it hence was immunized under the “staple article of commerce” doctrine developed by the Supreme Court in Sony.

We will revisit

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205 See Napster, 114 F. Supp. 2d at 900–01.
206 Id. at 911.
207 Id. at 927.
208 See Napster, 239 F.3d at 1029.
209 Id.
211 See Napster, 114 F. Supp. 2d at 902–03.
212 Id. at 911.
213 Courts determine whether a use is fair on the basis of four factors set forth in 17 U.S.C. § 107. These factors are: (i) the purpose and character of the use; (ii) the nature of the copyrighted work; (iii) the amount and substantiality of the portion used in relation to the work as a whole; and (iv) the effect of the use upon the potential market for the work or the value of the work. See generally Napster, 114 F. Supp. 2d at 912 (noting the four factors of fair use).
214 Id. at 904.
215 Id. at 909.
216 Id. at 912-17.
the applicability of this doctrine in a moment in connection with the court’s analysis of the questions of contributory and vicarious infringement. With respect to the question of direct infringement, however, the district court disagreed with Napster’s assertion that the aforesaid activities of its users were fair,\(^2\) and the Ninth Circuit affirmed the lower court’s analysis.\(^2\) In reaching this conclusion, the Ninth Circuit, among other things, noted that MP3 files contained sound recordings, which are highly artistic creations, and that downloading MP3 files for whatever purpose, including sampling and space-shifting, was not transformative, both of which cut against a finding of fair use.\(^2\) In addition, the court observed that people used Napster primarily for commercial purposes, namely to save themselves the expense of purchasing CDs, which further undermined Napster’s fair use defense.\(^2\) In this connection, it is interesting to see that the Ninth Circuit also cited to the No Electronic Theft Act, a criminal law statute that defines financial gain as including “the receipt of other copyrighted works.”\(^2\) With respect to “sampling,” the court particularly made the point that even if some Napster users ultimately decided to purchase the songs that they sampled, the decision to authorize sampling nevertheless remained with the copyright holders.\(^2\) Finally, as yet another reason against the application of the fair use doctrine to the activities of Napster’s customers, the court pointed out that Napster’s service impaired the ability of copyright holders to commercialize their products.\(^2\) While Napster had presented expert evidence at trial that seemed to suggest the contrary, the district court decided that the report presented was not reliable and thus chose to rely on the expert opinions presented by the record companies, which supported the court’s findings. The Ninth Circuit found no error in the district court’s selective reliance on experts’ reports.\(^2\)

Having established that Napster’s subscribers were engaged in direct copyright infringement, the district court next turned to the question of whether Napster had incurred contributory liability, and once again, the Ninth Circuit agreed, except as otherwise noted.\(^2\) The court’s discussion of this question is largely in line with RTC. With respect to the first element of the test for contributory infringement, the court found that Napster’s executives knew that its service was used to make illegal transfers of copyrighted MP3 files.\(^2\) In

\(^{217}\) Id. at 916.

\(^{218}\) See Napster, 239 F.3d at 1011.

\(^{219}\) Id. at 1017.

\(^{220}\) Id. at 1026.


\(^{222}\) See Napster, 239 F.3d at 1019.

\(^{223}\) Id. at 1014.

\(^{224}\) Id. at 1017.

\(^{225}\) Id. at 1020 (noting that “Napster, by its conduct, knowingly encourages and assists the infringement of plaintiffs’ copyrights.”).

\(^{226}\) Id. (stating that “[i]t is apparent from the record that Napster has knowledge, both actual and constructive, of direct infringement.”).
reaching this conclusion, the court was aided by the existence of incriminating corporate documents and the fact that the Recording Industry Association of America (the "RIAA") had formally put Napster on notice that its subscribers were engaged in infringement.\(^\text{227}\) With regard to the question of material contribution, the court equated Napster's service with that of a swap meet operator, which the Ninth Circuit previously had found contributorily liable for the infringing activities committed by vendors to which the operator had rented the premises to carry on business.\(^\text{228}\) It is interesting to note that the court dismissed Napster's argument that the provision of directory service was akin to hyperlinking.\(^\text{229}\) In the court's view, rather than dissecting the functionality of Napster's service and assessing the pieces separately, it had to be construed as an "integrated service designed to enable users to locate and download MP3 files."\(^\text{230}\) Placing the emphasis on the overall nature of the system, the court held that there was a "reasonable likelihood" that Napster was liable for contributory infringement.\(^\text{231}\)

The Ninth Circuit affirmed the district court's analysis in all but one respect: According to the Ninth Circuit, the lower court erred in requiring Napster to prevent all copyright infringement committed by its subscribers.\(^\text{232}\) In its analysis, the Ninth Circuit repeatedly pointed to the Supreme Court's decision in \textit{Sony}. In that case, the Supreme Court held that a manufacturer of a staple article of commerce cannot be held contributorily liable for infringing activities committed by purchasers of the article so long as the article is capable of substantial noninfringing uses.\(^\text{233}\) Applying this doctrine to Napster, the Ninth Circuit observed that, even though at the time the record companies' brought their action most Napster users were engaged in infringement, Napster potentially may serve noninfringing purposes as well.\(^\text{234}\) Although the court could not point to any noninfringing uses as of the time of its decision, it reckoned that such uses might become apparent in the future.\(^\text{235}\) In this connection, the Ninth Circuit, as it had been widely expected, dismissed the district court's narrow reading of \textit{Sony}, pursuant to which only commercially

\(^{227}\) \textit{Id.} at n.5.

\(^{228}\) \textit{See Napster}, 239 F.3d at 1022.

\(^{229}\) \textit{Id.} at 1021. Hyperlinking is not considered infringement. \textit{See Intellectual Reserve, Inc. v. Utah Lighthouse Ministry}, 75 F. Supp. 2d 1290, 1293 (D. Utah 1999) (holding that posting links to infringing websites did not contribute to infringement by those websites' operators); \textit{Bernstein v. J.C. Penney, Inc.}, 26 Med. L. Rep. 2471 (C.D. Cal. 1998) (paraphrasing defendant's apparently successful argument that "multiple linking does not constitute substantial participation in any infringement where the linking website does not mention the fact that Internet users could, by following the links, find infringing material on another website").

\(^{230}\) \textit{Id.} at 1022.

\(^{231}\) \textit{Id.} at 1020.

\(^{232}\) \textit{Id.} at 1027 (noting that "Napster . . . bears the burden of policing the system within the limits of the system.")


\(^{234}\) \textit{See Napster}, 239 F.3d at 1019 (indicating that Napster has noninfringing uses such as: chat rooms, message boards, and Napster's "New Artist" program).

\(^{235}\) \textit{Id.} at 1021.
significant uses were relevant for purposes of the analysis. Given the potential for noninfringing uses, the Ninth Circuit stated, Napster's generalized knowledge of infringing uses was not enough to justify holding it liable as a contributory infringer. Hence, it directed the district court to issue a new injunction obliging Napster to act only in instances where it has specific knowledge of infringing activities.

With respect to the question of whether Napster had incurred liability for vicarious infringement, the district court reached a similar conclusion as with respect to the issue of contributory liability, and once again the Ninth Circuit affirmed. Emphasizing again the similarity between Napster and a swap meet operator, the district court noted that Napster had both the ability to supervise its users and a direct financial interest in their infringing activities. The latter observation is interesting because it constitutes a novel element compared with the discussion in RTC. It will be recalled that RTC refused to impose vicarious liability upon Klemesrud and Netcom on the ground that they did not derive direct financial benefits from Erlich's copyright infringement. In the court's view, however, Napster's case was different. Citing to several precedents in which courts had stated that it is not necessary to show that an entity earns revenue in order to establish that it derives direct financial benefits from someone else's unlawful behavior so long as it is clear that the entity has economic incentives for tolerating such behavior, the court stressed that Napster's business plan envisaged the accumulation of a huge subscriber base by initially providing a free service that is attractive to consumers with the intention to cash in on that subscriber base at a later point. Bertelsmann's announcement that it would start to charge for Napster's service in the summer of 2001 confirms the court's finding.

Equally interesting is the district court's discussion of the applicability of Section 512 of the Copyright Act to Napster. Earlier on in the case, before the record labels made their motion for a preliminary injunction, Napster had moved for summary judgment, claiming that its service fell within the scope of the transitory digital network communications safe harbor of Section 512(a). In dismissing Napster's motion, the court observed that, while some aspects of Napster may fall within the scope of Section 512(a), its central directory had to be construed as an information location tool within the meaning of Section 512(d). The significance of the court's classification obviously lies in the stricter eligibility criteria provided by Section 512(d), which Napster failed for two independent reasons. First, Napster had actual knowledge of the fact that its

236 Id. at 1020.
237 Id. at 1027.
238 See Napster, 114 F. Supp. 2d at 920-21.
239 Id. at 921.
240 See Cohen, Details, Reactions, supra note 11.
service was used for infringing activities. Secondly, as discussed, the court later found that it was vicariously liable as well.

Napster suggests that it is possible to regulate hybrid P2P architectures on the basis of the currently applicable copyright law. In particular, since Napster and other entities operating hybrid P2P architectures are presumably as interested in avoiding liability as ISPs generally, the incentives created by Section 512, which, as we have seen, encourage ISPs to cooperate with copyright holders in the prevention of large-scale copyright infringement, should work equally well in the context of hybrid P2P architectures.

The Napster decision should be welcomed for yet another reason. As discussed, Napster’s design, and in particular the fact that it merely provides directory services but steadfastly refuses to transmit data, might be seen as an attempt by Napster to steer clear of legal liability. Obviously, in light of the court’s holding in Napster, this attempt has been unsuccessful. However, Napster’s executives still might have been influenced by the popular, albeit incorrect, belief that an ISP may become exposed to liability for copyright infringement only if it somehow comes into contact with infringing material (which, after all, was the case in Playboy, Sega and RTC). By clarifying the doctrinal basis of ISP liability, Napster has made it clear that whether an ISP will be held liable for infringing actions of its subscribers focuses not just on whether it transmits infringing material but depends more generally on its relationship with the infringing activity and/or the infringer. Once providers of hybrid P2P architectures realize that turning a blind eye on copyright infringement committed by others risks exposing them to liability, the existing law should be sufficient to induce them to assist copyright holders with the prevention of infringement.

2. Plain-Vanilla P2P Architectures

Regulability

Next are plain-vanilla P2P architectures, such as Gnutella. Because these architectures lack a client-server structure, they do not expose local centers that the government might use as targets for “indirect” copyright law enforcement. However, this does not mean that plain-vanilla P2P architectures are immune to copyright law enforcement. As we have seen, when two nodes of a Gnutella-type network exchange data, they do so directly and therefore have to know each other’s identity. The fact that Gnutella-type nodes are identifiable, however, means that it is possible for copyright holders to detect nodes that store copyrighted material. Again, whether the mere storage of copyrighted material amounts to infringement on the basis of the currently applicable law is a question that goes to the legal status of plain-vanilla P2P architectures. Even if it did not, however, the law might be amended to that effect. For the question of whether plain-vanilla P2P architectures are regulable, this is all that matters. Assuming,

244 Id. at 922.
then, that the storage of copyrighted material on a node of a plain-vanilla P2P architecture were illegal, it is obvious how organizations representing copyright holders, such as the RIAA, could enforce their entitlements. They could, for example, use robots to spider the network so as to identify the IP addresses of nodes that store copyrighted material. Whenever their robots encountered a suspicious node, they could trigger the notice-and-take-down mechanism of Section 512 and, if the node operator ignored the notice, commence a legal action. In addition, they could sue the ISP providing the node operator with access to the Internet, which would be a classic example of indirect copyright law enforcement. The RIAA already uses automatic search robots to identify pirate websites. Although the number of nodes of plain-vanilla P2P architectures is likely to be a lot greater than that of ordinary websites existing within the Internet’s current client-server architecture, the use of search robots to detect copyright infringement combined, if necessary, with sufficiently drastic penalties for node operators that refuse to cooperate might be able to ensure substantial compliance.

Legal Status

As far as the legal status of operators of Gnutella nodes is concerned, it is important to understand that the only way in which copyrighted material may find its way onto one of these nodes is by way of a deliberate act of the respective node operator. The node operator either may have downloaded the material from another node or may have copied it onto its node in some other manner. Absent some justification, such as a fair use defense, both of these acts clearly constitute copyright infringement. The download of copyrighted material infringes upon the respective author’s exclusive right to reproduce the material. In addition, making the material available for other people to download violates the author’s rights both to publicly display and to distribute the material. This legal analysis is in line with the Ninth Circuit’s recent affirmation of the respective findings of the district court in Napster.

As a result, operators of nodes of Gnutella-type networks storing copyrighted material on their nodes are likely to be found strictly liable, without there being any need for copyright holders to inquire whether the operators have knowledge or control and whether they derive financial benefits from the infringing activities. Since the staple article of commerce doctrine does not apply to these situations, it cannot rescue node operators. Nor can Section 512(c) of the Copyright Act save them because all material stored on their nodes resides there at their own direction, rather than “at the direction of a [third-party] user.” In addition, the ISPs providing such node operators with access to the Internet are exposed to liability under the


\[247\] See Napster, 239 F.3d at 1014 (noting that “Napster users who upload file names to the search index for others to copy violate plaintiffs’ distribution rights. Napster users who download files containing copyrighted music violate plaintiffs’ reproduction rights”).

contributory infringement doctrine once they are put on notice but fail to take action.

The discussion so far suggests that both hybrid as well as plain-vanilla P2P architectures are amenable to indirect copyright law enforcement. Furthermore, both types of architectures enable the government to protect copyright holders on the basis of the currently applicable law.

3. Law-Defying P2P Architectures

Regulability

Lastly, there are law-defying P2P architectures. The most prominent example of this type of P2P architecture is Freenet. Freenet deserves to be called a law-defying P2P architecture because, unlike hybrid and plain-vanilla P2P architectures, law-defying P2P architectures cannot be regulated within the current legal framework. This is so for a number of reasons: The greatest obstacle to regulating Freenet is that all nodes of its network are anonymous. Node anonymity, as discussed, means that when data is sent across Freenet in response to a request for information, each node that forms part of the request chain knows only the identities of the immediately preceding and succeeding nodes but does not know any other node of the chain. In particular, the node that initiates a request for data does not know the identity of the node that ultimately responds to the request by sending the data back through the chain and vice versa. This makes it impossible for outside observers that are on the look-out for copyrighted material to identify nodes engaged in infringement. It also prevents them from knowing whether any data received in response to a request has originated with the node to which the request was first sent or another node further down the line. Unlike in the context of Gnutella, organizations representing copyright holders hence cannot use robots to detect infringing activities.

Secondly, all data stored on Freenet nodes is encrypted. Aiming to provide node operators with “plausible deniability” so as to shield them as much as possible from allegations of contributory copyright infringement, Freenet encrypts all data inserted into the network as well as the keys to such data before allowing any of this information to be stored on its nodes. This feature makes it virtually impossible for anyone who does not have the appropriate key, including node operators, to know which data is stored on particular nodes. While node operators can determine whether their own nodes host a particular piece of data by encrypting the key to that data and by comparing the result with the keys stored on the nodes, they cannot, at least not with a reasonable amount of effort, generate a clean list of all data available on these nodes. To that end, the node operators would have to run a so-called “alphabetical attack,” meaning they would have to encrypt all possible keys and compare them with the keys stored on their nodes. For example, a node operator could determine whether a particular MP3 file is among the information kept on its node but it could not

249 For a general description of Freenet, see Hong, supra note 192.
determine which other MP3 files are stored on the node. Because it is hard to charge node operators with knowledge, it is hard to make a case of contributory copyright infringement. It should be noted that Freenet's use of encryption, in addition to making it unregulable, also prevents users from searching the network efficiently. The reason why Freenet is essentially unsearchable is because any search mechanism, in order to confer meaningful benefits on users, would have to be able not only to determine whether a search string is identical with the information stored on a particular node but also whether the string is similar to that information. To do so, however, the search program would have to have access to a clean version of the information, which in Freenet is currently not the case. Therefore, while it is possible to search Freenet for data if one knows the exact key to that data, one cannot search it with the same flexibility as, say, the Web.

Finally, recall that when a user requests data via Freenet, each node through which the data passes caches it, that is, it keeps a copy of the data before passing it on to the next node. As we have seen, caching, unlike node anonymity and encryption, confers certain benefits upon society. For example, it leads to a more efficient utilization of network resources. From the perspective of the legal system, however, caching (in combination with node anonymity and encryption) is a nightmare. The reason is that, if copyright holders used search robots to detect infringing material for the purpose of removing it from the network, the material would be replicated on each node of the request chain. Of course, if the identity of the nodes through which the material is routed were known, search robots could notify the operators of these nodes, which, although a greater hassle than sending just one notification, might be doable. Yet, because the IP addresses of Freenet nodes are unknown and their operators are unable to access the information stored on them without having the necessary keys, this is not an option.

Legal status

Since Freenet is not regulable on the basis of the currently applicable law, the question is whether any changes should be made to the law so as to make law-defying P2P architectures amenable to regulation. In this connection, three questions have to be distinguished: First, should law-defying P2P architectures be regulated at all? Secondly, how would the law have to be amended in order to achieve this goal? Finally, would there be sufficient political support to adopt these measures? These questions will be addressed in turn.

Whether or not one believes that P2P architectures should be subject to the same rules as the Internet's current architecture is a political question that is hotly debated among Internet users.250 As for Freenet, it is an architecture that is being developed with the ideological goal of defying all forms of "censorship of information." To understand the full import of this goal, one should note that the Freenet community construes the concept of "information" extremely expansively. To them, "information" includes not only political speech but also categories of speech that ordinarily are afforded only a limited amount of legal

250 See The Freenet Project, supra note 21, for a list of arguments compiled by Ian Clarke.
protection, such as fighting words, defamation, copyrighted material and child pornography. Although Freenet developers recognize that laws regulating the latter types of speech often have benign intentions, they point out that the decision as to whether a particular piece of information falls into one category or another requires difficult line-drawing. In light of the fact that all decision-making power is, in principle, open to abuse, they believe that the better approach is not to regulate information at all and instead to rely on the Internet's "self-regulatory" forces. There is a lot that might be said about this ideology, but since this Article is more concerned with the impact of the technology on the existing law, I will only briefly point out why I believe that the Internet, as it currently stands, does not provide an appropriate forum for self-regulation. The main reason is that self-regulation is a legitimate governance form only if it is ensured that those affected by a rule have a say in its creation. Otherwise, the term "self-regulation" would be a misnomer as applied to whatever rules the purported self-regulating community may adopt. In the Internet, however, this essential precondition for self-regulation is presently not satisfied. While harm done "virtually" may have "real" effects, not every real-space person is a resident of cyberspace. This is especially true with respect to defamation cases, in which a person may suffer real damage even if it is slandered virtually, for example, by a posting on an Internet message board. The example of Zeran is especially instructive. The same consideration applies to copyright infringement, however, where the availability of a song via Napster for free may, and, as the district court in Napster found, in all likelihood will, reduce consumers' incentives to buy the song in a store. And it also applies to child pornography in the sense that it is certainly conceivable that a pedophile stimulated by pornographic material available via websites may decide to abuse more children. In circumstances such as these, however, where the potential victims are not necessarily members of the community that adopts its own rules, there is no guarantee, and, if experience is any guidance, there is not even a particular likelihood that the rules adopted by the self-regulatory body will take adequate account of all the interests concerned.

Therefore, in my view, instead of not regulating law-defying P2P architectures at all, a better approach would be to regulate them but to do so only to the extent that this is necessary to enable the government to protect copyright holders and only unless and until the legislature decides that it is more desirable in the context of the Internet to afford authors some other type of copyright protection, such as statutory royalties, or not to protect them at all.

How, then, might one attempt to regulate law-defying P2P architectures? An obvious remedy might be to scrutinize the liability of operators of nodes of such architectures under the concept of contributory copyright infringement. The obstacle here, of course, is that because all data stored on Freenet nodes is encrypted, node operators do not have actual knowledge of any infringement in which their nodes might be involved. One might argue that general knowledge is enough but in that case to prevail on a claim for contributory infringement, one would have to show that Freenet is used almost exclusively for infringing purposes. Since such a showing is extremely difficult to make, it is unlikely that copyright holders will be able to convince courts that the mere operation of nodes of law-defying P2P architectures amounts to contributory copyright infringement.
A more promising approach might be to amend Section 512 of the Copyright Act to require that ISPs who wish to qualify for one of the statutory safe harbors use technologies that enable the government to enforce copyright law. Section 512 would be a good place for such a requirement since operators of nodes of P2P architectures plainly fall within the definition of “service provider” set forth in Section 512(k). The exact “conditions of regulability” that node operators would have to satisfy obviously would need to be defined carefully, preferably with the assistance of experts. However, one would imagine that compared with the complexity of Section 512, any conditions of regulability that might be inserted into Section 512 would be rather simple. For example, one central condition might be that nodes of P2P architectures be identifiable. This would allow organizations representing copyright holders to use search robots in order to locate copyrighted material. In addition, the aforesaid requirement would be consistent with other parts of Section 512. Such as Section 512(i)(1)(B) already requires that ISPs accommodate “standard technical measures” designed to protect copyright holders, the same provision might require them to comply with the conditions of regulability outlined above. Alternatively, if one took the view that a safe harbor provision is unlikely to be effective since the majority of users of P2P architectures are children and students, who are less sensitive to the threat of legal liability than commercial ISPs and as against whom the incentivization framework of Section 512 thus might be unavailing, the legislature might consider adopting an express ban on all law-defying P2P architectures. Whatever approach one were to adopt, the real challenge would not so much consist in drafting provisions that require operators of nodes of P2P architectures to accommodate law enforcement or that ban law-defying P2P architectures but to enforce these provisions. This insight brings us to the last and undoubtedly most fundamental dilemma raised by Napster and the P2P phenomenon: So long as the government imposes only marginal penalties for sharing copyrighted material over the Internet or imposes severe penalties but without being prepared to enforce them if necessary, people will show a greater willingness to ignore the legal restrictions imposed and will instead continue to engage in copyright infringement. In fact, given the district court’s finding in Napster that the widespread use of Napster has already created a firm belief among Internet users that there is nothing wrong with “sharing” copyrighted material with one’s peers, anything short of drastic remedies is unlikely to have a lasting impact. The more drastic the penalty, however, and the more stringently it is enforced, the less likely is it to be accepted by society at large. Just imagine the public outcry that would occur if a college student were locked up in prison for any appreciable amount of time just because it downloaded his or her favorite hit single from Freenet.

In sum, it appears that it is virtually impossible to regulate law-defying P2P architectures. While the law conceivably might be amended so as to make them amenable to regulation, it is doubtful whether there is sufficient political support to adopt the necessary amendments to the Copyright Act.

C. Conclusion
Summarizing the insights that we gained in Part III, P2P architectures differ fundamentally from the Internet's current client-server architecture in that they manage without local centers. The lack of local centers, however, has a fundamental impact on the government’s ability to rely on indirect copyright law enforcement as a method of affording authors legal protection. While “hybrid” P2P architectures such as Napster do rely on local centers for certain purposes and hence are amenable to indirect copyright law enforcement and while “plain-vanilla” P2P architectures such as Gnutella, by enabling search robots to identify nodes of the network that store copyrighted material, equally accommodate the interests of copyright holders, it would seem impossible to regulate law-defying P2P architectures on the basis of the currently applicable law. To enable the government to enforce copyright law in the context of this latter type of P2P architecture, the Copyright Act would have to amended and drastic penalties would need to be introduced. From today's perspective, it is doubtful that this will ever happen.

CONCLUSION

As we have seen in this Article, although Napster, from a technical perspective, is not all that different from a website that offers unauthorized copies of MP3 files, it has opened Pandora's box and started a development that successor technologies such as Gnutella and especially Freenet stand by to complete. At the end of this development, there may be a new type of Internet architecture which, while potentially conferring a number of benefits upon society, shatters the legal system on the basis of which copyright holders are currently rewarded for their efforts and induced to engage in creative activity. Widespread intellectual property theories predict that in the absence of economic stimuli, creators will refuse or be unable to engage in the production of a sufficient amount of attractive ideas. Very soon, we will see whether these predictions hold true. The record industry and the movie industry are certainly not to be envied during this unstable transition period.

However the battle may end, for us lawyers, the emergence of P2P architectures means that we may have to rethink the basis on which we currently analyze intellectual property law issues. One thing is for certain, though: Even if the current legal framework governing the creation and exploitation of ideas should change, the core values of intellectual property law almost certainly will prevail. The main such value is that intellectual property law should benefit society at large. Copyright law does just that: While it affords authors a limited amount of protection for a specified period of time, it does so for the benefit of the public at large. The basic idea here is that protecting creators against the unauthorized copying of their creations benefits society because it rewards them, which, in turn, affords them an incentive to engage in the production of attractive ideas. This is one way in which copyright law is supposed to benefit society. Another benefit to society that courts and scholars have emphasized time and again results from the overarching principle of copyright law that the grant of copyright protection to intellectual creations must not unduly restrict the public’s access to humanity’s common pool of ideas. One widely known manifestation of this principle is the open-ended fair use doctrine, which carves out important
exceptions to the copyright holders' monopoly. This value, however, will survive the P2P battle, irrespective of whether copyright law itself will survive it. The reason, as discussed, is that there is no doubt that the government, if it wanted to, could regulate even law-defying P2P architectures. It is true that in order to afford copyright holders effective legal protection against these architectures, extremely far-reaching measures would be required, and conceivably, the Internet might need to be outlawed altogether. But that does not change the fact that the adoption of such measures would be possible. Therefore, if Congress ultimately decides not to prohibit law-defying P2P architectures (which is likely), the reason is not that it cannot do so. Rather, the reason is that, in order to achieve this goal, it would have to adopt measures so drastic that they necessarily would create an undue burden on the public's interest in using the Internet for the free exchange of information and creative ideas. Thus, the deciding factor would be the political desire to preserve public's access to the pool of knowledge held in common by society. And that means that, no matter what course the legislature may take, it will be consistent with the values of copyright law. In light of this, one should not hail a victory of technology over law. All that matters is that the public interest will prevail.
BEYOND NAPSTER: AN ENFORCEMENT CRISIS IN COPYRIGHT LAW?

by J. Jeffrey Landen

I. INTRODUCTION

The United States Court of Appeals for the Ninth Circuit observes, near the end of its February 12, 2001 decision in A&M Records, Inc. v. Napster, Inc. that the various statutory sanctions under existing copyright legislation represent a more than adequate legislative solution to the problem created by copyright infringement. Perhaps so, when they are applied to a target as big and obvious as Napster. But the difficulty of applying those and other sanctions for infringement to the peer-to-peer (P2P) file-sharing technologies which come after Napster may produce an enforcement crisis just a short way down the legal road.

The capacity of existing copyright law to handle these technologies is all too easily overestimated. One of the characteristics of a mature institution or bureaucracy on the verge of a real crisis is a tendency to reassure itself that everything is just fine. The Ninth Circuit’s mild hyperbole about existing legislation being “more than adequate,” therefore, is enough to prompt a wry smile. A strong case can be made that existing copyright laws are not even remotely adequate to deal with what lies ahead.

II. LAW WITHOUT THE SWORD

About 300 years ago, Thomas Hobbes identified the fundamental problem that law, without an effective way to enforce it, is of very limited value. Laws

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2 239 F.3d 1004 (9th Cir. 2001) [hereinafter sometimes referred to and cited as the "Ninth Circuit Napster decision"].

3 Id. at 1028. The specific sanctions against infringers cited by the Ninth Circuit are: 17 U.S.C. §§ 502 (injunctions); 504 (damages); and 506 (criminal penalties). See also 18 U.S.C. § 2319A (criminal penalties for the unauthorized fixation of and trafficking in sound recordings and music videos of live musical performances).

4 239 F.3d at 1028.

5 See Mathias Strasser, Beyond Napster: How the Law Might Respond to a Changing Internet Architecture, 28 N. Ky. L. Rev. 660 (2001) ("the popular MP3 file-swapping service that up to 50 million people use to download music from the Internet").

6 <http://webopedia.com/TERM/p/peer_to_peer_architecture.html> (Peer-to-peer architecture is defined as “a type of network in which each workstation has equivalent capabilities and responsibilities.”).

7 See THOMAS HOBBES, THE LEVIATHAN 148 (1660). Hobbes employs a linguistic and conceptual
"without the sword" are merely words, and people will only abide by them when they want to do so. The heavy and bulky sword of existing copyright laws can be wielded effectively enough against a hybrid P2P architecture such as Napster, in which there is a readily identifiable server operator with a legal target painted on its chest. But using such a bulky weapon to try to kill roaches in a kitchen may cause more problems than it solves.

The "plain vanilla" and "law-defying" P2P architectures which are currently on the horizon will make enforcement far more difficult. In the next generation of P2P architectures, there is no central server of the type presented in the Napster case. The coming architectures recognize that much of the use of the Internet is personal and individual, and those individual persons have the ability to share files legally — or illegally — without the assistance of a central dispatcher. Thus, it is much harder for the copyright holder to identify the infringers. Moreover, even if the individual infringers are detected, it is most unlikely that they will stand still long enough for the copyright holder to draw the existing cumbersome legal sword and allow the copyright holder to smite them with it.

The Ninth Circuit may therefore be more accurate than it knows when it says that existing copyright legislation is "more than adequate." A heavy sword is more than adequate to crush a roach. But it is very inefficient, and likely to be ineffective.

III. "BUT MY USE IS FAIR USE"

Usually, the law can rely upon the propensity of the public to be law-abiding. The threat of enforcement by legal action — criminally or civilly — is always present, but most people abide by the rules simply because they are the rules. Can the public be anticipated to adhere to copyright law voluntarily in the P2P age? Does the public believe in copyright law, such that it will comply, at least generally, even absent an effective deterrent?

Apparently not, based on the patterns of usage in the Napster system itself. The doctrine of "fair use" is really rather narrow, when applied objectively by
lawyers and judges. But, in the minds of many — perhaps most — people, their own personal use is always a "fair use." So long as they are not selling the copyrighted material to make a profit, they perceive that the copying of the material is not morally or legally wrong. They feel little or no sense of guilt at receiving a copy of a copyrighted work, or sharing it with another. The conduct of the tens of millions of Napster users speaks for itself.

Changes in technology are tied to changes in attitudes. To make copies of books, videos or music in quantity has generally required technology which most people simply did not possess. The production of significant quantities of bootleg copies of audiotapes or CDs from some dingy warehouse or from some developing nation have seemed alien, foreign to our everyday experience, and thus easy to condemn. The nature of the technology and the physical and financial requirements of the process have tended to discourage casual or free distribution in any significant quantities; a profit motive is inferable.

But doing or facilitating the same thing while sitting at one's home computer, wearing sweats, at 11 p.m. in an upper middle class neighborhood may feel completely different to the direct or contributing infringer. He or she makes no marginal financial investment and expects no economic return; a few clicks, and copies are "shared" with others who have similar tastes and sensibilities. Sharing is a good thing, isn't it? The process does not have a slimy or nefarious overtone, which might otherwise, at least by psychological association, suggest moral wrongdoing or illegality.

Over a period of years, our society has successfully demonized another behavior which was once thought to be socially acceptable: tobacco use. Perhaps the recording industry can prevail in a similar public relations effort to demonize copyright infringement. But, at least for the moment, there is little reason to believe that the public is going to start "believing in" copyright law, at least as applied to themselves individually, such that voluntary compliance will take care of the enforcement problems inherent in the newest P2P technologies.

IV. ENFORCEMENT: AT WHAT COST TO PRIVACY AND FREEDOM?

One of the most likely scenarios to present itself going forward could have some disturbing legal, constitutional and societal implications.

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13 Indeed, the decision of the United States Supreme Court in the VCR time-shifting case may have something to do with that public perception. See Sony Corp. v. Universal City Studios, Inc., 464 U.S. 417 (1984). The public has become accustomed to taping television shows, with apparent impunity, so long as the copies are not sold. In short, through the experience of the VCR, the public has been desensitized to reproducing copyrighted works in electronic form.

14 It will be interesting to see what public opinion polls are taken in the wake of the Ninth Circuit Napster decision. At around the time when the decision was announced, it was reported in various media that there was a significant surge of downloads, in anticipation that the service might be interrupted.

15 See Napster Inc. Response to Ninth Circuit Court of Appeals Ruling on the U.S. District Court Injunction in A & M, Inc. v. Napster <www.napster.com/pressroom/pr/010212.html> (as of February 18, 2001, the Napster website claimed that it had "more than 50,000,000 members").
A. Chasing Down the Real Infringers

Suppose, if you will, that the Supreme Court either ultimately denies certiorari, or affirms the decision of the Ninth Circuit in the Napster case on grounds substantially similar to those stated in the Ninth Circuit’s decision. Some of the reasoning in the Ninth Circuit decision arguably paves the way for those who want to distribute the so-called “plain vanilla” and “law-defying” P2P architectures discussed in the article by Mathias Strasser which is published in this Symposium.7

The Ninth Circuit emphasized that “the mere existence of the Napster system, absent actual notice and Napster’s demonstrated failure to remove the offending material, is insufficient to impose contributory liability.” 18 The Ninth Circuit decision points out that the United States Supreme Court, in the Sony decision, “declined to impute the requisite level of knowledge where the defendants made and sold equipment capable of both infringing and ‘substantial noninfringing uses.’”19 The Ninth Circuit accordingly refused to impute the requisite knowledge to Napster “merely because peer-to-peer file sharing technology may be used to infringe the plaintiffs’ copyrights.”20 This aspect of the decision of the Ninth Circuit may thus be embraced, in coming months or years, by those who promote and disseminate the next generations of P2P software — software which facilitates file-sharing of both infringing and noninfringing material, but which does so without the central server structure (and resulting actual or constructive knowledge) which has made Napster so relatively easy for the recording industry to attack.

If those who merely distribute the next generations of P2P software survive any attack which the recording industry may seek to launch against them, the software would seem likely to proliferate.21 The underlying situation is then unmasked: it is individual consumers, otherwise law-abiding citizens, who are “sharing” music in violation of existing copyright laws. There are millions of them, if not tens of millions of them. They are doing it largely from their homes. They are doing it with very little in the way of a paper or electronic “trail”; in the coming P2P architectures, their cyber footprints largely or completely disappear before the sun comes up the next morning. Even if one could track them in real time, the “sharers” will be transmitting files anonymously, because the architecture of the next generation P2P software which they will be using

16 See Napster, 239 F.3d 1004.
17 See Strasser, supra note 5, at 705-11.
18 Napster, 239 F.3d at 1027 (citing Sony, 464 U.S. at 442-43).
19 Napster, 239 F. 3d at 1020 (citing Sony, 464 U.S. at 442 (parenthetically noting the Supreme Court’s adoption of a modified “staple article of commerce” doctrine from patent law)).
20 Napster, 239 F.3d at 1020 (citing Sony, 464 U.S. at 436 (parenthetically noting the Supreme Court’s rejection of the “argument that merely supplying the ‘means to accomplish an infringing activity’ leads to imposition of liability’)).
21 One must keep in mind that Napster itself grew to tens of millions of subscribers and came to be a cultural phenomenon in a period of only two years. There is little reason to think that subsequent generations of software with similar functionalities will be embraced any less enthusiastically.
substantially conceals the sources from which the "shared" material has been transferred. How are they to be detected? How are they to be stopped?

Unless the law is changed substantially (legislatively, or by judicial reinterpretation), the recording industry and other copyright holders may conclude that they have only a limited number of legal choices. Allowing the so-called "sharing" to continue may not be economically feasible: notwithstanding the arguments of Napster that "sampling" actually promotes CD sales, it seems unlikely that a sufficient number of people will buy the cow when they can get the milk for free. If the providers of the software cannot be stopped, anonymous P2P file-sharing will proliferate, and the files that are shared will include copyrighted works. Chasing down each individual infringer is impractical. The remaining option? To identify and make an example of selected infringers, in order to deter others by fear.22

B. Detection

One of the biggest enforcement problems which the next generation P2P architectures presents is the difficulty in identifying the ultimate infringer who has made the copyrighted material available for "sharing." There are multiple links in the chain of computers by which files are transmitted, the owners of which may have no conscious awareness of what has passed through their systems.

Civil discovery directed by the copyright holders to the penultimate links in the chain may be of limited practical value. To begin with, litigation would have to proliferate in order to provide the launching pad for such discovery; a flood of copyright enforcement litigation could gum up the courts for years. Moreover, the practicality is that, by the time a civil case is filed, the pleadings are joined, the Rule 16 and Rule 26 conferences are conducted, and discovery is served, some if not all of the necessary evidence will have disappeared through ordinary cycling or through conscious deletion.23

Another alternative is to proceed against the users of music-sharing software more quickly and more vigorously via a criminal investigation. Within a week after the Ninth Circuit decision was rendered in the Napster case, a news story crossed the Associated Press wires under the headline: "Belgian Cops Raid Music-Sharers."24 According to the AP report from Brussels: "Acting on complaints from the music industry, police have raided the homes of users of music-sharing websites looking for evidence they infringed copyright rules."25 A spokesman for a music industry group was quoted in the article as saying that his

22 The basis for our taxation system is analogous. Auditing every return is not practical. But fear of being the one who is audited, with potentially catastrophic civil and/or criminal penalties, acts as a powerful deterrent.

23 Discovery of electronic documents, though well recognized in the federal rules of civil procedure and many corresponding state rules, is nevertheless difficult, slow and relatively expensive, because of the volume of material which is frequently produced and because of the need for consultants (in-house or hired for the case) to help separate the wheat from the chaff.


25 Id.
organization "had tracking equipment that could search for users ‘by the thousands.’" The spokesman was also quoted as saying that his group "was only targeting users ‘who had been clearly warned yet persevered with the practice.’"

As a practical matter, strict enforcement of the copyright laws as it relates to music sharing could potentially criminalize tens of millions of people. If the music industry pursues a similar approach in the United States to that which it is apparently employing in Europe, it is not outlandish to foresee the police "raiding" the homes of potential copyright infringers throughout our country as well, all in the name of protecting the property rights of copyright holders. The pervasiveness of the use of music-sharing software is so great that the state and federal governments could have a legal justification — or a pretext — for searching the homes of tens of millions of Americans and seizing their hard drives as evidence. Even after one shakes off the image of the friendly feds who paid an unexpected call to “save” Elian Gonzalez from his Florida relatives, the question remains: what practical teeth are left in the fourth amendment in such a context? In our zeal to get at someone who is technically a wrongdoer, are we willing to knock down many of the protections which have safeguarded our liberty and our privacy?

C. Remedies

Even if proof of infringement by individual computer users can be obtained without trampling the Bill of Rights, and that proof can be successfully presented to a finder of fact, the remedies to be invoked against the infringers also present a troublesome situation. The Ninth Circuit Napster decision identifies the remedies of injunction, damages and criminal penalties under existing copyright law. How would those play out in the context of the emerging P2P architectures?

Injunction is an obvious and perhaps effective alternative, so far as it goes. But it seems doubtful that the threat of having an injunction issued against a person would be sufficient to deter the underlying conduct.

26 Id.
27 Id. The same article also noted that the European Parliament had just endorsed “tougher rules” granting copyright holders more protection from Internet downloads. Id.
28 U.S. Const. amend. IV.

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

Id. Assume, for purposes of discussion, that the police have a legal justification for entering your home and seizing or copying your hard drive at any time. How secure do you feel?

29 See Robert Bolt, A Man For All Seasons (Random House 1962) (a work of fiction which portrays the latter part of the life of Sir Thomas More, Chancellor of England; it contains a scene in which William Roper asserts: "I'd cut down every law in England to do that [get after the devil]") The playwright has the character of Thomas More reply: "And when the last law was down, and the Devil turned round on you – where would you hide, Roper, the laws all being flat?

30 See Napster, 239 F.3d 1004.
Civil damages may be an effective deterrent, if they are sufficiently onerous and the perception of the likelihood of being singled out is sufficiently high. Yet, deterrence may be about all that can be accomplished monetarily against most individual infringers. A $300,000 judgment against a 24 year old with a net worth of $8,000 (counting both the car and the TV) might as well come with directions to the nearest bankruptcy court.

Criminal penalties can provide an even more severe sanction. But do we as a society really want to seek widespread criminal sanctions against individual violators of copyright laws? In our frustration with the drug problems in our country, we have already gone down the path of imposing ever more severe criminal sanctions on the individual users of drugs. In so doing, we have criminalized a significant proportion of the population, and, according to some estimates, we now are among the world leaders in the number of citizens incarcerated (approximately 2,000,000). Ruining the career prospects of many of our young people by saddling them with a criminal conviction, or going so far as to add some of them to the already overburdened prison system, does not seem to be a fair, reasonable or practical alternative for dealing with the problem of individual noncommercial copyright infringement.

IV. CONCLUSION

The challenges which the emerging P2P architectures present to copyright law are significant. The most fundamental problem is that the people who are "sharing" copyrighted works on the Internet do not believe that they are doing anything wrong. Unless that perception is somehow changed, our legal system will face the potentially daunting task of trying to deal with tens of millions of people who are scoffing at copyright laws, and who are potentially able to do so with a certain degree of practical anonymity.

Confronted with such a circumstance, the natural inclination is again to pick up the sword at hand, in the form of the existing copyright laws and enforcement mechanisms, which seem to work fairly well when applied to a hybrid P2P architecture such as Napster. But we must recognize that what has worked up to now may not work well when applied to the newer P2P architectures. The seemingly minor changes in architecture actually change the enforcement scenario fundamentally, because the legal opponents of the copyright holders will now largely be individuals and the focus of the battle will be home computers doubling as servers.

If, in response to the emerging P2P architectures, the copyright holders go hacking away at the crowd of P2P users with the sword of existing copyright laws, a wide variety of potential problems may arise. Some of the potential problems are issues of practicality. Others go deeper, and lead to significant

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societal and even constitutional questions. When taken together, all of them point to a need, not just legislatively to tweak or "strengthen" our copyright laws, but to rethink the very concepts of what copyright is and how it will be enforced in a society which increasingly looks upon the immediate copying and sharing of information for noncommercial purposes as a fundamental right.

The story is often told that Mark Twain, upon reading a prematurely published obituary of himself, remarked that "the reports of my death have been greatly exaggerated." The Ninth Circuit decision in the *Napster* case confidently reports that, even in the P2P context, the existing copyright laws provide "a more than adequate legislative solution to the problem created by copyright infringement." In light of the enforcement problems which the next generations of P2P architectures are likely to engender, the reports of the continuing vitality and adequacy of existing copyright laws in the Internet file-sharing context have been greatly exaggerated.

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33 See *Napster*, 239 F.3d at 1028.
CABLE OPEN ACCESS:
EXORCISING THE GHOSTS OF "LEGACY"
REGULATION

by Rosemary C. Harold

I. INTRODUCTION AND SUMMARY

Federal policymakers for years have heralded the ongoing convergence of the once-separate forms of electronic communications such as traditional telephony and cable television service. Just five years ago — and after a decade's worth of effort — Congress enacted the most comprehensive overhaul of the nation’s communications law since 1934 in an effort to sweep away legal barriers that prevented telephone companies from offering video services and cable companies from offering voice services. But the real competitive battleground for communications companies today is neither traditional voice telephony nor traditional cable multichannel video service. Rather, it is an arena that the Telecommunications Act of 1996 (the “1996 Act”) appears to have largely overlooked: the Internet, which can support multifaceted combinations of voice, video, and data service.

This raises legal and policy problems beyond mere semantics. The entire regulatory design of the Communications Act of 1934, even after the recent amendments, depends upon being able to slot a particular service into one of the main “regulatory classifications” set out in the statute: Title II “common carriage,” Title III “radio” (covering all wireless transmissions), or Title VI “cable communications.” Each classification carries with it a distinctly different set of obligations, mandates, and rights that Congress attempted to update to meet the industry convergence it foresaw; as the Federal Communications Commission (FCC) has recognized: “All of the specific mandates of the 1996 Act depend on application of the statutory categories established in the definitions section.” Yet the Internet is a medium that can operate across all the major classifications and cannot be easily penned into just one of them. The ambiguities in the law have set off several policy controversies, one of which — concerning the entry of cable operators into the provision of Internet access service — is the so-called “open access” debate.

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This legal confusion does not mean that the Internet is untouched by existing communications law. Although protecting the "unregulation of the Internet" has been a popular theme in policy circles, the phrase is something of a canard.\(^5\) The Internet that the vast majority of consumers know rests on highly regulated transmission systems operated by telephone companies under federal and state common carriage rules, a legal regime rooted in the railroad regulations of the 19th century and later codified in the Communications Act of 1934, as amended (the "Communications Act" or "Act").\(^6\) In part because telephone systems are legally obligated to provide connections on a non-discriminatory basis to anyone seeking "two-way" transmission service — most critically, on the "last mile" link from trunk lines to receivers or devices inside individual homes and businesses — the Internet has developed as a wide-ranging medium that provides consumers with literally hundreds, if not thousands, of choices among "Internet service providers" (or "ISPs").\(^7\) These service providers range from the multi-billion dollar AOL Time Warner, which provides many content and communications services as well as links to the Internet, to tiny start-ups offering the most rudimentary connections to the net. Regardless of their size or scope, all ISPs have equivalent rights under Title II of the Communications Act of 1934, as

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\(^5\) For example, a 1999 FCC staff study titled "The Unregulation of the Internet" goes on at great length to praise the agency's decades-old decision to forebear from regulating the data services that are the ancestors of today's Internet, but it seemingly ignores the reality that these services depended on regulated common-carriage transmission service to actually work. See generally Jason Oxman, The FCC and the Unregulation of the Internet, Federal Communications Commission Office of Plans and Policy Working Paper Series, No. 31 (July 1999).

The claim that "the Internet" is unregulated makes sense only if the claimant is referring strictly to the computers that sit at the ends of all the millions of network hook-ups and the non-proprietary Internet protocol ("IP") that allows these computers to communicate with one another. But the links among all those computers consist largely of regulated telephony lines; this is particularly so when it comes to the "last mile" links connecting individual residences or small businesses to local trunk lines that eventually hook up with long-distance transmission lines. For a detailed description of common configurations for Internet transmission links, see William P. Rogerson, The Regulation of Broadband Telecommunications, 2000 U. Chi. Legal F. 119, at 123-128; Esbin, supra note 4, at 13-21 (explaining packet switching, protocols, and the potential chain of service providers involved).

\(^6\) 47 U.S.C. § 151 et seq.

\(^7\) In addition to the mostly common carrier telephone systems that provide the transmission component of the Internet, the other critical element is the Internet protocol ("IP"), "a routing protocol that defines the structure of data, or 'packets,' transmitted over the Internet." See generally Esbin, supra note 4, at 6 n.17. In conjunction with certain transport protocols, IP allows for the separation of new services and applications development from the actual transmission and routing of the digital traffic — which means that new services can be introduced without affecting the Internet itself. Id. at n.17. Government had an even more direct hand in the emergence of the IP than it did in the rise of the telephone systems supporting the new medium. The protocol developed through a Department of Defense research project involving the military, research universities, and government contractors, later was made widely available to all universities thanks to the National Science Foundation, and eventually became freely available to all interested in using it. Id. at 6-7, 8-10.
amended (the "Communications Act"), in terms of carriage prices, terms, and conditions when they use telephone lines to reach consumers.\(^8\)

The same is not true, however, if the underlying transmission facility is a cable system. Until relatively recently, cable was conceived of — and operated as — a series of discrete, stand-alone networks providing "one way" transmission of multichannel video programming from the cable operator to its subscribers. The largely federal rules establishing the obligations of cable operators reflect the service's beginnings in the 1950s and its roots in broadcasting regulations dating to the 1930s. With few exceptions, cable operators are not generally required under Title VI of the Communications Act to offer competing service providers access to their systems at all, much less on the same terms and conditions that the operator may (or may not) extend to another entity.\(^9\)

These legal distinctions between telephony and cable service are the so-called "legacy" regulations that have been the most difficult to apply to modern advancements in communications technology.\(^10\) The old regulatory constructs are at the center of a hot policy debate today because of their potential impact on next-generation Internet services — which requires high-speed "broadband" transmission links to accommodate more dense and complex data streams.\(^11\)

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\(^{8}\) See 47 U.S.C. § 202 (making it “unlawful for any common carrier to make any unjust or unreasonable discrimination in charges, practices, classifications, regulations, facilities, or services for or in connection with like communication service, directly or indirectly, by any means or device, or to make or give any undue or unreasonable preference or advantage to any particular person, class of persons, or locality, or to subject any particular person, class of persons, or locality to any undue or unreasonable prejudice or disadvantage”).

\(^{9}\) See 47 U.S.C. § 541 (providing that “[a]ny cable system shall not be subject” by state or local authorities “to regulation as a common carrier or utility by reason of providing any cable service”).


\(^{11}\) The FCC defines “broadband” as “the capability of supporting, in both the provider-to-consumer (downstream) and the consumer-to-provider (upstream) directions, a speed (in technical terms, ‘bandwidth’) in excess of 200 kilobits per second (kbps) in the last mile.” In re Inquiry Concerning the Deployment of Advanced Telecommunications Capability 15 F.C.C.R. 20913 (2000) (“Second Section 706 Report”). Broadband therefore is a subset of the larger universe of “high-speed” electronic communications services, which the Commission defines as those offerings that provide more than 200 kbps capability in at least one direction. Id. ¶ 11. The agency noted that certain high-speed services, such as satellite-based Internet access, usually incorporates a fast downstream link to the consumer with a slower upstream link; the latter often consists of a traditional telephone line. Id. ¶ 18. As of this writing, however, only telephony and cable are broadly suited to provide two-way broadband service, and so this article focuses exclusively on these two wire-based transmission systems. Accord, Antonia M. Apps and Thomas M. Dailey, Non-Regulation of Advanced Internet Services, 8 GEO. MASON L. REV. 681, at 712-13 (noting that there are “currently only two broadband providers with any significant market share” and that entry of other competitors is not likely to occur soon); Steven A. Augustino, The Cable Open Access Debate: The Case for a Wholesale Market, 8 GEO. MASON L. REV. 653, 655 (Summer 2000) (noting that broadband access already is generally available to medium- and large-sized businesses but not to small businesses or residences).
Cable operators who have upgraded their facilities with fiber-optic lines and sophisticated routers have found their new systems well-suited for providing not simply more video programming channels but also Internet access connections. As a result, cable has leaped ahead of telephone companies (which are more slowly upgrading their own facilities with broadband technology) in the race to attract the small but fast-growing number of broadband Internet subscribers.

But the cable companies jumping into this new competitive arena have not been required to allow all ISPs access to customers through the "last mile" links of their cable systems; instead, until quite recently most cable companies have required broadband Internet subscribers to use the cable operator's affiliated ISP to connect with the Internet.

The regulatory disparity between cable-based Internet access and telephony-based Internet access has generated considerable controversy — under the battle cry of "open access" — in the last two years. Although definitions of that term...
vary, all participants agree on the focus of the debate: the last few thousand feet of wire connecting individual homes or small businesses to the nearest local telephone "central office" or cable "headend." Telephony providers have decried the lack of a level playing field in the rules that govern this aspect of the broadband arena, while ISPs and many consumer groups have raised alarms


These two terms are the labels that the telephony and cable industry generally use to refer to the hub facilities that pull together the subscriber links in a small area (such as a neighborhood or town) and then connect them all to a larger network of transmission facilities. See Second Section 706 Report, ¶¶ 35, 29; see also Rogerson, supra note 5 at 122; Esbin, supra note 4, at 66-82; Bob Rowe, Strategies to Promote Advanced Telecommunications Capabilities, 52 FED. COMM. L.J. 382, 388-91 (March 2000). See also Reno v. ACLU, 521 U.S. 844, 844 (1997) (the Internet is "an international network of interconnected computers that enables millions of people to communicate with one another in 'cyberspace' and to access vast amounts of information from around the world"). As alluded supra note 5, the Internet is often referred to as a "network of networks" because it links many small networks — such as local cable systems, local telephone exchanges (known as "local exchange networks"), and local area networks ("LANs") often deployed in large business settings — together through a web of high-capacity facilities across city, state, and national boundaries. See e.g., Kevin Werbach, Digital Tornado: The Internet and Telecommunications Policy, OPP Working Paper No. 29, at 45 (Mar. 1997) ("Digital Tornado"). The latter may include common carrier lines operated by traditional long-distance carriers (known as "interexchange carriers" or "IXCs") and trunk lines operated under so-called "private carriage" rules (known as Internet "backbone" facilities), as well as fixed wireless or satellite transmission facilities (which may be regulated as either common carriage or private carriage rules). These transmission links rely on sophisticated routing and switch equipment and software at various connection points to move the upstream and downstream electronic signals in the desired direction. As this network architecture suggests, the very decentralized nature of the Internet has been one of its main hallmarks, and it has ramifications for technical issues, political considerations, and free speech concerns.

Although the facilities that make up the main trunks of the Internet have nearly all been upgraded to handle broadband traffic, the smallest network links — the cable and telephone lines running to homes and small businesses — often have not. See Second Section 706 Report, ¶¶ 20-61 (comparing extensive deployment of high-speed technology in "backbone" and "middle mile" facilities to the "missing link" — i.e., lack of advanced technology — in the "last mile" connections). Because the high expense of replacing the old copper-wire "twisted pair" telephone lines that link most homes and small businesses to the larger local exchange network, local telephone carriers have added "digital subscriber line" ("DSL") electronic technology, which "can transform the copper loop that already provide voice service into a conduit for high-speed traffic." Id. ¶ 35. On the cable side, "the typical upgrade incorporates what is commonly known as a hybrid fiber-coaxial (HFC) distribution plant" consisting of new broadband optical fiber running from the cable operator's headend to "neighborhood nodes" dispersed closer to subscribers, with the traditional coaxial cable running from the node to each residence. Id. ¶ 29. Although there are numerous technical differences between these telephony and cable technologies, from a high-speed access subscriber's perspective, the main distinction is that with DSL, each user has his or her own dedicated line, but with HFC, the user is sharing the link with others in the same neighborhood. Thus, while the limits of DSL technology mean that it offers slower transmission speeds than does HFC under optimal conditions, the reality of sharing the cable broadband plant means that a high-speed cable subscriber usually receives transmission speeds closer to DSL speeds. See id. ¶¶ 33-34, 36-38.

See, e.g., Comments of SBC Communications and BellSouth Corporation, GN Docket No. 00-185, at 25-33 (arguing policy and logic require that if the FCC applies Title II regulation for underlying broadband transport, it must apply the same regulations to cable and DSL).
about favoritism that the cable operators may extend to affiliated ISPs — and yet they all concur that the disparate regulatory treatment could or will skew the competitive development of high-speed Internet services. Cable companies, on the other hand, contend that imposing new regulations on their provision of broadband services could curtail needed investment in upgraded facilities; cable operators also generally argue that the Federal Communications Commission has no power under the Communications Act to level the playing field, even if it wanted to do so.

The FCC, for its part, has until very recently taken a hands-off approach to the issue of which regulatory classification applies to cable-based Internet access services, despite intensive lobbying urging the agency to step in. FCC leaders have justified their intentional inaction in part by pointing to data suggesting that the current competitive landscape — including the differing regulatory treatment of broadband facilities — is driving both telephone and cable companies to deploy the expensive upgraded technology more quickly than they would otherwise.

18 See, e.g., Comments of OpenNet Coalition, GN Docket No. 00-185, at 9 (arguing that, if left unregulated, cable operators will act on their incentive to require customers to subscribe to cable-affiliated ISP and to steer customers to websites controlled or supported by the cable operator); Comments of Center for Democracy and Technology, GN Docket No. 00-185, at attachment (arguing that failure to implement open access likely to result in content censorship and has already resulted in content discrimination regarding the speed of delivery).

19 See, e.g., Comments of United States Telecom Ass'n, GN Docket No. 00-185, at 11 (arguing that FCC regulations that discriminate against a particular technological platform stifle investment and competition among facility providers); Comments of Brand X Internet, et al., GN Docket No. 00-185 (form letter submitted independently by more than 30 small ISPs) (arguing that open access policy is key rapid investment in broadband technology); Comments of Alliance for Public Technology, GN Docket No. 00-185, at 3, 6-7 (arguing that open access will spur investment in advanced services).

20 See, e.g., Comments of AT&T, GN Docket No. 00-185, at 29-31 (arguing that "forced access" would "inevitably" distort investment in the cable market and benefit only cable's competitors, not consumers); Comments of Comcast, GN Docket No. 00-185, at 16-18, 29 (arguing that Congress expanded the definition of "cable services" to include Internet services and would have expressly required nondiscriminatory access to the cable Internet platform if it was desired, as lawmakers had done with statutory directives for leased access and broadcast mandatory carriage).

21 One demonstration of the intensity of the regulatory battles over open access is the sheer number of submissions in the three FCC merger proceedings in which the issue has arisen: in the AT&T/TCI merger (CS Docket No. 98-178), more than 230 submissions were filed, many reflecting multiple written or oral communications by an individual commenter to the agency, with responses from the applicants; in the AT&T/MediaOne merger (CC Docket No. 99-251), more than 450 submissions were filed; and in the AOL/Time Warner merger (CS Docket No. 00-30), more than 750 submissions were filed. (This data was obtained through the FCC's Electronic Comment Filing System, available at <http://gullfoss2.fcc.gov/cgi-bin/ws.exe/prod/ecfs/comrsrch_v2.htm> (visited March 3, 2001)). Although not all of these submissions dealt with the open access debate, a large percentage of them did.

22 For example, during his tenure as FCC chairman, William Kennard said in a speech to local regulators that "best way that we are going to bring all Americans broadband quickly is to create competitive conditions for high-speed networks to be built out." Remarks by William E. Kennard, Chairman, Federal Communications Commission, "Consumer Choice Through Competition," to the National Association of Telecommunications Officers and Advisors (Sept. 17, 1999) ("Kennard Competition Speech"), available at <http://wwwfccgov/SpeechesKennard/spwek931html>.
But now the agency must deal with the effects of appellate decisions that have started filling the regulatory vacuum. The Ninth Circuit in *Portland* and the Eleventh Circuit in *Gulf Power* both have addressed the regulatory classification issues raised by Internet access.\footnote{23} Perhaps it should not be surprising that, in the absence of guidance from the expert agency, the two appellate courts arrived at different conclusions as to whether cable Internet access services fit into the existing statutory classifications for “telecommunications service” or “cable service.” In addition, two district court decisions now in the appellate pipeline have looked at the issue and come out with yet other conclusions.\footnote{24} And now that the Supreme Court has accepted the *Gulf Power* case for review, the justices themselves may weigh in on the classification puzzle.

Given this legal backdrop (and the business and policy uncertainties they have engendered), it is time for the FCC to fulfill its administrative role by clarifying how cable-based Internet access should be regulated under current law. The Commission has begun tentative efforts to do so by opening up a new inquiry proceeding which asks many of the right questions, even if it offers no hints as to the right answers.\footnote{25} I conclude that although the Commission’s options are limited by the Communications Act and its own precedents, the regulatory ghosts that linger from a rapidly passing communications era need not bar the agency from establishing some degree of competitive access to cable systems for unaffiliated ISPs. The FCC would serve its public interest mandate by acting expeditiously — on an industry-wide basis — to use its general authority under Title I of the Communications Act to establish open access benchmarks for cable operators who offer Internet access services. At the same

And that appeared to be occurring, he said, as cable operators rolled out their broadband product, known as “cable modem” service, and telephone companies responding with DSL:

> [O]n the DSL side, we are seeing some real interesting growth in DSL service. The telephone companies are starting to deploy it much more aggressively. Between the end of March and the end of June of this year the number of DSL lines doubled to nearly 200,000 and it is expected to double again by the end of the year. And this pickup in growth is a function of one thing: competition. The regional Bell companies know that for the first time in the history of this country they are facing a serious, facilities-based competitor in their backyard: the residential marketplace. And that is the cable television industry. And it is the prospect of that competition that is going to really jumpstart broadband deployment in this country.

Id.\footnote{23} See *AT&T Corp. v. City of Portland*, 216 F.3d 871 (9th Cir. 2000); *Gulf Power Co. v. FCC*, 208 F.3d 1263 (11th Cir. 2000), *rev. pending sub nom. NCTA v. Gulf Power Co.*, *appeal docketed No. 00-843 (cert. granted, 121 S. Ct. 879).*

\footnote{24} See *Media One Group v. County of Henrico*, 97 F. Supp. 2d 712 (E.D. Va. 2000), *rev. pending*; *Comcast Cablevision of Broward County, Inc. v. Broward County*, 124 F. Supp. 2d 685 (S.D. Fla. 2000). And, as of this writing, yet another suit has been filed in federal court on the issue — this one a potential class-action lawsuit challenging the local cable franchise fee that Cox Communications passes along to subscribers to its cable-modem service. The plaintiffs contend that asserts data delivery is a “telecommunications service” for which Cox failed to file tariffs as required by law. Linda Haugsted, *Virginia Subs Sue Cox Over Modem Fee*, *MULTICHANNEL NEWS*, Feb. 12, 2001, at 1 (reporting on filing of Bova v. Cox Communications, Inc., Docket No. 01-CV-90, (W.D.Va. filed 2001)).

\footnote{25} *Open Access Inquiry*, supra note 12.
time, the FCC should urge Congress to harmonize the overall statutory approach to the transmission services that make the new medium possible and thereby exorcise the specter of old regulatory divisions that no longer work.

The discussion below explains the significance of the cable open access debate and proposes a way for the FCC to resolve many, if not all, of the key issues under its current powers and precedents. Section II provides a brief historical background on the two main regulatory schemes at issue — those governing traditional telephony and traditional cable — in order to illuminate the currently tangled state of the law in the open access context. Section III offers a snapshot of today’s controversy, including the definitions and obligations attached to the regulatory classifications, the recent FCC proceedings that have touched on the open access issue, and court decisions spawned by the agency’s deliberate inaction. Section IV is an analysis of the current options for regulatory classification of cable Internet access, including the legal viability of each option. Section V sets out my recommendation for FCC action, which can temporarily bring some business certainty to the issue while Congress ponders further amendments to the statute.

Finally, it is appropriate to note here certain basic assumptions upon which this article rests. As in the flurry of filings before the FCC and the courts, the recent academic literature on the open access issue have been sharply at odds over the fundamental question of whether “open access” — however that term may be defined — is a good or necessary public policy.26 This article is grounded on two propositions: (1) some form of uniform open access policy applicable to all transmission media would be a societal benefit, and (2) the concept has political momentum in Washington, regardless of its merits. These two points are, of course, interrelated. Calls for fundamental equity and fairness of treatment are American maxims; in regulatory circles, arguments for “leveling the playing field” exercise a great pull over time, particularly when the services being regulated differently come to look more and more the same to consumers.27 For similar reasons, those whose orientation tends toward economic analyses and faith in marketplace forces agree that optimal outcomes depend on uniform, albeit light-handed, regulatory treatment of all competitors in a market.28 Those

26 Compare, e.g., James B. Speta, The Vertical Dimension of Cable Open Access, 71 U. COLO. L. REV. 975 (2000) (arguing that open access policy is unnecessary because cable operators have incentives to provide subscribers with broadest possible web content and services) with Mark A. Lemley & Lawrence Lessig, Open Access to Cable Modems, 22 WHITTIER L. REV. 3 (2000) (arguing that open access policy is necessary to ensure the survival of the Internet’s “end-to-end” open architecture, which has been central to the medium’s hallmark innovations). See also James B. Speta, Handcapping the Race for the Last Mile?: A Critique of Open Access Rules for Broadband Platforms, 17 YALE J. ON REG. 39 (Winter 2000) (arguing that open access rules are both unnecessary and potentially counterproductive).

27 In a more sophisticated nod to this concept, then-FCC Commissioner Michael Powell has called for a broadband agenda that “rationaliz[es] the regulatory structure” to reflect the technological fact that “a bit is a bit” regardless of the transmission system. Powell, Digital Broadband Migration, supra note 10. Powell was appointed chairman of the agency in January 2000.

28 See, e.g., Apps & Dailey, supra note 11, at 710-714 (noting that disparate regulatory treatment can skew the manner in which market forces operate); Heather T. Hendrickson, Cable Open Access: The FCC Should Establish a National Policy of Staying Out of the Way of Broadband Competition, 8 GEO MASON L. REV. 749, 773-75 (urging regulators, for the sake of providing
who focus more on government's role in addressing potential abuses of market power — and who, in the Internet setting, raise First Amendment values among their concerns — also call for uniformity; their questions about incentives and opportunities for anticompetitive behavior inherent in control of key transmission facilities depend not on the facility providers' historic identities but rather on the disparate rules that still bind those providers.

Resolving who may be "right" on the open access debate makes for interesting intellectual conversation but not necessarily for accurate forecasts on how the policy will come out. The point is that some resolution to the perceived inequities of the current regulatory scheme is coming, whether it originates in the courts, Congress, or the agency. Because business certainty is also an important objective for those who actually compete in the marketplace, my proposal for how the FCC can regulate cable-based Internet access service is intended to be an approach that can be implemented relatively quickly. It also reflects the kind of compromise and accommodation that are part of the policymaking process. Whatever it sacrifices in ideological elegance is offset, I hope, by its viability from a legal and practical standpoint.

II. BACKGROUND: WHY THE LEGACY REGULATIONS HAUNT THE OPEN ACCESS DEBATE

Unless and until Congress amends the Communications Act, the open access controversy is, at its heart, a debate over statutory construction. In order to show why the deceptively simple-looking regulatory definitions in the Communications Act are causing such consternation with respect to cable Internet access service, this section briefly reviews the origins of telephone and cable regulation. The discussion below outlines the very different conceptions from which the two regulatory regimes have sprung and how they have evolved, with an emphasis on how lawmakers and the FCC made changes at the margins over the years that are now having (probably unintended) consequences for the open access debate. The current muddle in the law concerning cable provision of Internet access service also reveals how deeply imbedded the distinctions between cable and telephony services are — and how many reverberations could be set off by any particular resolution to the open access controversy.

A. The Origins of Telephone Regulation, Concepts, and Terminology

Moving Voices and Ideas Instead of People and Things: The Common Carrier Version of "Open Access" — The basic regulatory approach to incentives for technological growth to "allow those firms that forge new technology to recoup their investment, even if it means a monopoly position in the short run," since the investment itself defeats the complacency argument normally leveled at monopolies).

29 This concern may be even more pressing now, with a softening business climate that may escalate the risks of rolling out new broadband facilities and services. See, e.g., Peter S. Goodman, Telecommunications: A Hot Sector Burns Out — As Investors Stop Calling, Companies Search for Answers, Wash Post, Feb. 28, 2001, at G1 (special section devoted to downturn in the telephony economy details, inter alia, how "investors are withholding their money, spooked by the enormous cost and complexity of rolling out telephone and Internet services").
telephone service was lifted directly from the rules governing the first important communications network of the 19th century: railroads. As the web of rail lines became an integral and powerful component of the economy, political forces eventually led to passage of the Interstate Commerce Act of 1887. That statute put into federal law the basic components of common carriage obligations: regulated entities must provide their service on same rates, terms and conditions to all who request it, without discrimination of any sort. 30

The common carriage concept was grafted essentially wholesale onto the new network of telephone lines (as well as telegraphy, its predecessor and rival communications technology). 31 In part because both had deployed their lines heavily along rail rights-of-way, the Interstate Commerce Commission ("ICC") regulated them for years as a sort of adjunct. 32 Congress eventually determined that proper regulation of the long-distance services offered by the communications networks required establishing a new agency. 33 The concerns grew in part because of the rising power of AT&T, which began as one among many rival telephone service networks, but moved swiftly to take control over the industry through a series of buy-outs or joint ventures. 34 One of the company's levers in that effort was to refuse "interconnection" with rival telephone networks serving the same or different geographic areas. 35 This "had the effect of confining independents to their particular territories" and facing the prospect of withering away as subscribers deserted them for more extensive networks; in the early days of telephony, subscribers in some cities maintained separate receivers connected to competing telephone networks in order to reach all possible telephone users. 36 (The interconnection concept, as discussed in Section IV infra, has direct ramifications for today's cable open access debate.)

As common carriers, telephone systems shared another attribute of railroads: both networks were perceived as passive carriers of traffic whose "content" — people and goods in the case of railroads, voices and messages in the case of telephony — was determined by the users of the system. 37 In fact, because

31 Cox & Byrnes, supra note 30, at 26; Robinson, supra note 30, at 4; Byrnes, supra note 30, at 31.
32 See, e.g., Robinson, supra note 30, at 4, 67.
33 See, e.g., Cox & Byrnes, supra note 30, at 27-30.
34 Robinson, supra note 30, at 7-8; Byrnes, supra note 30, at 32-37.
35 Byrnes, supra note 30, at 34.
36 Id.
37 See National Association of Regulatory Commissioners v. FCC, 525 F.2d 630, 641 (D.C. Cir.
common carriers must provide a neutral conduit to all users, they traditionally have been prohibited from exercising control over the content of the communications that they carry.\(^{38}\) (This concept of telephone common carriers as a passive conduit for the speech of others stands in marked contrast to the concept of broadcasters and, later, cable operators as entities who control the content carried on their communication systems.)\(^{39}\)

By some accounts, it may have been mostly a historic coincidence that lawmakers moved to amend this approach to telephone regulation at about the same time that the federal government’s first attempt at regulating the new broadcast medium was failing.\(^{40}\) In any event, Congress addressed both communications technologies with passage of the Communications Act. Title I of the statute authorizes the establishment of the FCC and sets forth the agency’s broad powers and purposes.\(^{41}\) Title II of the Act is devoted to “Common Carriers,” i.e., traditional telephone service providers.\(^{42}\) Title III consists of “Provisions Relating to Radio,” i.e., radio and television broadcasting.\(^{43}\)

Title II from its beginnings imposed common carriage obligations on telephony, mainly in the form of rate regulation.\(^{44}\) Oddly, perhaps, the statute did not originally also mandate broad rights of interconnection (even though that issue had been at the center of the government’s first of three major antitrust actions against AT&T during the 20th century).\(^{45}\) The common carriage provisions of the Act were left essentially unchanged for the next 60 years.

The Appearance of “Enhanced” and “Basic” Services: The First Crack in the Common Carrier Monolith (and Roots of Today’s Internet) — Although the statute remained static for decades, the FCC regulations implementing them did not. For the purposes of this article, the first big change worth noting occurred in conjunction with the emergence of early computer-data services. Beginning in

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38 See, e.g., In re Federal-State Joint Board on Universal Service, 14 F.C.C.R. 3040 (1999) (noting that the traditional two-part test for determining common carrier status includes “whether the carrier allows customers to transmit intelligence of their own design and choosing.”) (internal citations omitted); In re Rulemaking To Amend Parts 1, 2, 21, 25 Of the Commission’s Rules to Redesignate The 27.5-29.5 GHz Frequency Band, 12 F.C.C.R. 12545, at 12639-40 (1997) (noting that “if licensees transmit information that is not of the user’s choosing . . . the licensees are exempt from Title II”). That concept is embedded in the Communications Act’s definition of “telecommunications” as transmission “of information of the user’s choosing, without change in the form or content of the information as sent and received.” 47 U.S.C. § 153(43).

39 See infra Section II. B.

40 Robinson, supra note 30, at 3.


42 47 U.S.C. §§ 201-75.

43 47 U.S.C. §§ 301-99B.

44 See 47 U.S.C. §§ 201-09 (requiring “just and reasonable” rates, “nondiscriminatory” rates, the filing of public “tariffs” disclosing the terms of service, and complaint provisions).

45 See Byrnes, supra note 30, at 34; Robinson, supra note 30, at 8. The 1913 antitrust settlement with AT&T, known as the “Kingsbury Commitment,” required the company to interconnect with independent telephone carriers, was eliminated in 1921 when some of the remaining independents sought to sell out to AT&T on favorable terms.
the 1960s, it became clear that computer manipulation of data, combined with a telephone transmission component, was an emerging arena with intriguing potential for new — and competitively provided — services. The business and government visionaries have been proven correct; it is fair to say that the Internet is a direct descendant of those early data-processing-and-transport services.

The developments of almost 40 years ago gave rise to one of the FCC’s longest-running and most complex series of interrelated rulemaking actions, the still-ongoing “Computer Inquiry.” Through a series of major decisions known as Computer I, Computer II, and Computer III (and their many off-shoots), the Commission has struggled to come to grips with the convergence of unregulated data processing services with regulated communications transport services.

Although the distinction between the two in an integrated offering has never been completely free of doubt, the FCC from the outset tried to separate the regulatory treatment of computers involved in the transmission component from the treatment of computers involved in the data processing component. The goal behind this effort was two-fold: First, the Commission concluded that the data-processing market was competitive and so should not be subject to (and potentially stifled by) unnecessary regulation, particularly in the form of Title II common carriage obligations. Second, the agency strove to permit regulated common carriers to participate in the new competitive market, subject to various safeguards designed to protect both telephone ratepayers and rival providers of data-processing services who had no transmission systems of their own.

See generally Esbin, supra note 4, at 25-40 (explaining the emergence and development of the FCC’s pre-1996 Act regulatory approach to the convergence of computer and telecommunications transmission services).


As Esbin explains, computers used for such services could affect “both the means of communication — how a message is transmitted and switched — and the content of the communication — providing data processing services to users.” Esbin, supra note 4, at 25.

See, e.g., In re Computer I Tentative Decision, 28 F.C.C.2d at 297-98.

See, Esbin, supra note 4, at 26 (discussing history of evolving safeguards).
The precise shape of these "competitive safeguards" changed over time, but they were premised on a separation between two categories of service that came to be known as "basic" (i.e., traditional telephone communications) and "enhanced" (data processing). As explained infra, these classifications have since been largely codified, under new labels, by the 1996 Act. They have implications for the open access debate today because they reflect the historic U.S. regulatory concern about how an owner of a communications facility might use its control over that network to improperly disadvantage competitive rivals who need or want to use the same facility:

"Basic service" consists of "the common carrier offering of transmission capacity" and is subject to the full panoply of Title II regulation, including nondiscrimination and tariffing rules and agency-imposed interconnection obligations. Compare infra Section IV, which discusses the 1996 Act definitions of "telecommunications" and "telecommunications service."

"Enhanced services" were defined as a list of computer-processing functions coupled with a telecommunications transport component. The FCC treated

51 The Commission noted that "plausible arguments can be tendered for drawing" the line between basic and enhanced services elsewhere, but the agency explained it tried to separate them "in a manner which distinguishes wholly traditional common carrier activities, regulable under Title II of the Act, from historically and functionally competitive activities not congruent with the Act's traditional forms." Computer II Final Decision, 77 F.C.C.2d at 434-35.

52 To be specific, the FCC defined basic service as "the common carrier offering of transmission capacity" or "a pure transmission capability over a communications path that is virtually transparent in terms of its interaction with customer supplied information." Computer II Final Decision, 77 F.C.C.2d at 419-20 (noting that data processing or other computerized activity can be components of a basic service if used solely to facilitate the movement of information).


54 The FCC defined "enhanced services" as "any offering over the telecommunications network
them as non-regulated "wire communications," subject only to the FCC's ancillary jurisdiction under its general Title I authority. The agency went on to decide that it would not, in light of the competitive state of the data-processing market, actually impose any new rules upon enhanced services per se. Compare infra Section IV, which discusses the 1996 Act definition of "information service."

When offered by most local telephone carriers, enhanced services were subject initially to "structural separation" requirements (i.e., offered only by a separate subsidiary under arm's length negotiation obligations), which were later replaced by new accounting and interconnection rules and other non-structural safeguards. Regardless of their form, however, the regulatory conditions imposed on the carriers who offered both basic and enhanced services were designed to address the same fundamental concern: the potential for such entities to use their control of the underlying facilities to engage in unfair competition against rival service providers. Accordingly, the Computer II regime has required all carriers owning common carrier transmission facilities and providing enhanced services to (1) "unbundle" the basic from the enhanced components of their services, and (2) offer the unbundled transmission capacity to other enhanced service providers on the same tariffed terms and conditions through which they provided that capacity to their own enhanced service operations.

It is worth noting that, despite the repeated references to "unbundling" in the Computer orders, the FCC did not explicitly premise the regulatory approach upon the conception of separating computer-manipulated "content" from the telephone facility "conduit." Rather, the agency has treated basic services and enhanced services as completely distinct categories.

which is more than a basic transmission service," or — more specifically — as "combin[ing] basic service with computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information, or provide the subscriber with additional, different, or restructured information, or involve subscriber interaction with stored information." Computer II Final Decision, 77 F.C.C.2d at 387.

55 For the FCC's reliance on its Title I authority, see, e.g., Computer I Final Decision, 28 F.C.C.2d at 268-70; Computer II Final Decision, 77 F.C.C.2d at 430-35 (FCC again noting jurisdiction over enhanced services under the ancillary jurisdiction of Title I on the grounds that the enhanced services under consideration "constitute the electronic transmission of writing, signs, signals, pictures, etc., over the interstate telecommunications network"); see also California v. FCC, 905 F.2d 1217, 1240 (9th Cir. 1990) (Title I jurisdiction not an independent source of regulatory authority; it confers only power ancillary to the Commission's specific statutory responsibilities, which in case of enhanced services means ancillary to FCC's Title II authority over common carrier services).

56 Computer II Final Decision, 77 F.C.C.2d at 387.

57 Id. at 407.

58 See, e.g., Computer I Tentative Decision, 28 F.C.C.2d at 301-302 ("The dangers ... relate primarily to the alleged ability of common carriers to favor their own data processing activities by discriminatory services, cross-subsidization, improper pricing of common carrier services, and related anticompetitive practices and activities.").

59 Computer II Final Decision, 77 F.C.C.2d at 475.

services are deemed to be subject only to Title I regulation “despite their incorporation of a communications component, and regardless of whether that hybrid service was offered by a common carrier or non-common carrier.” This construct (known under the unfortunately phrased label of the “contamination theory”) has implications for today’s open access debate.

Another aspect of the enhanced services legal regime also is relevant to the current questions surrounding cable-provided Internet access: the transmission component of an enhanced service need not always be provided by a Title II common carrier. The FCC in interpreting the Communications Act has long allowed for some transmission providers to operate as “private carriers.” In the telecommunications context, the distinction between common carriage and private carriage turns on whether the carrier does — or should — offer its service to the public on a nondiscriminatory basis or whether it instead offers service to a small number of users on an individually negotiated basis. Under the private carriage concept, a service provider offering an enhanced service that relies on the provider’s own transmission facilities usually is deemed to be a private carrier for that component of the service — unless the facilities provider already is operating as a common carrier. The practical consequences for the carrier are

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8095-96 (1998) (summarizing precedent as showing that the predecessors of the 1996 Act’s “telecommunications services” and “information services” are “separate, non-overlapping categories”).

61 Esbin, supra note 4, at 27 (discussing “hybrid” services as the precursor concept for enhanced services and citing, e.g., Computer I Order, 28 F.C.C.2d at 276-78).

62 Not long ago, the FCC explained that “under the contamination theory,” providers offering “enhanced protocol processing services in conjunction with basic transmission services have historically been treated as unregulated enhanced service providers. Under this theory, the enhanced component of their offerings is viewed as ‘contaminating’ the basic component, and as a result, the entire offering is considered enhanced.” In re Independent Data Communications Manufacturers Association, Inc., 10 F.C.C.R. 13717 (Oct. 18, 1995) (“Frame Relay Order”) (citing Computer III Inquiry). For the relevance of this concept to the open access debate today, see infra Section IV.

63 The Commission traditionally has applied the two-part test of the so-called “NARUC” cases to distinguish between common carriage and private carriage. NARUC I, 525 F.2d at 642; see also NARUC II, 533 F.2d at 609.

64 See, e.g., In re NORLIGHT Request for Declaratory Ruling, 2 F.C.C.R. 5167 (1987) (ruling that offering is private carriage because it involved a relatively stable clientele, is tailored to the special requirements of each customer; and provided under negotiated contract terms). The legal test — which can be a rather circular exercise in application — asks first whether the carrier is under any legal compulsion to serve the public indifferently, and second whether there are reasons implicit in the nature of the carrier’s operations to expect that it will hold itself out to the eligible user public indifferently. With respect to the second prong, the eligible public is not limited to end users but may include services offered to other carriers or service providers. See, e.g., In re Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, First Report and Order and Further Notice of Proposed Rulemaking, 11 F.C.C.R. 21905, 22032-33 (1996).

65 Compare Southwestern Bell Tel. Co. v. FCC, 19 F.3d 1475, 1480-82 (D.C. Cir. 1994) (“limited, customer-specified service” negotiated under individual contract is private carriage) with Independent Data Communications Manufacturers Ass’n, Inc. Petition for Declaratory Ruling, 10 F.C.C.R. 13717, 13722 (“To date, the Commission has not applied the contamination theory to the services of AT&T or any other facilities-based carrier. Indeed, the Commission rejected that alternative in Computer III and other proceedings.”).
considerable; private carriers face far fewer regulatory obligations and costs than do common carriers. For this reason, the private carriage concept also has resonance in the open access debate.

The Death of Ma Bell and the Restrictions Imposed on the Survivors — On a separate track, government antitrust regulators also played a pivotal role in telephone regulation. In August 1982, following years of litigation, the U.S. District Court for the District of Columbia entered a consent decree that launched the break-up of the old “Ma Bell” system that supplied both local exchange service and long-distance service for most Americans. The consent decree, known as the “Modification of Final Judgment” (“MFJ”), divided the company into eight new ones along geographic and service lines: seven new “Baby Bells” (also known collectively as Bell Operating Companies or “BOCs”) came into being to provide local exchange service, while the successor AT&T entity was left to provide long-distance service. In addition to creating the BOCs, however, the MFJ imposed several important restrictions on them — based, once again, on concerns about how the new companies might unfairly use their control over the local exchange facilities to hinder rival providers of computer-enhanced services. In addressing these concerns, the MFJ also distinguished between traditional telephone service and the computer-enhanced services, although it employed slightly different terminology and definitions than the FCC used in its Computer proceedings: traditional telephony was called “telecommunications service” and the computerized offerings were called “information services.” The MFJ went on to bar the BOCs from providing any information services, as well as barring them from providing long-distance telephony and manufacturing receivers and other telephone equipment.

66 See, e.g., NORLIGHT, 2 F.C.C.R. at 5167.
68 See AT&T, 552 F. Supp. at, 186-90 (D.D.C. 1982) (discussing, inter alia, that the BOCs' ownership and control of local exchange facilities justify restrictions on the offering of "interexchange" [i.e., long distance] and information services), aff'd sub nom. Maryland v. United States, 460 U.S. 1001 (1983).
69 The MFJ defines “telecommunications” as “the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received, by means of electromagnetic transmission, with or without benefit of any closed transmission medium, including all instrumentalities, facilities, apparatus, and services (including the collection, storage, forwarding, switching, and delivery of such information) essential to such transmission.” AT & T, 552 F. Supp. at 229, aff'd sub nom. Maryland v. United States, 460 U.S. 1001 (1983). The consent decree order defines “telecommunications service” as “the offering for hire of telecommunications facilities, or of telecommunications by means of such facilities.” Id. The MFJ defines “information service” as the “offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information which may be conveyed via telecommunications . . .”; “information” is defined as “knowledge or intelligence represented by any form of writing, signs, pictures, sounds, or other symbols.” Id.
70 See AT & T, 552 F. Supp. at 186-95.
Shortly after BOCs came into existence, they began working — in the courts, at the FCC, and on Capitol Hill — to get the information services ban and other MFJ restrictions lifted. As discussed infra Section II.C., their efforts were the major impetus behind passage of the 1996 Act. Not surprisingly, Congress made use of MFJ terms such as “telecommunications services” and “information services” in addressing the restrictions, with the result of codifying the antitrust court’s language, rather than the FCC’s labels, for essentially the same concepts. 71

B. Origins of Cable Regulation, Concepts, and Terminology

An Extension of Broadcasting: The Cable Operator as Speaker to the Masses — In contrast to the highly complex (albeit changing) rules that have governed common carrier telephony for generations, the government regulations imposed on traditional cable service were relatively light until 1992. The regulators’ approach stems from cable’s origins in the 1950s. Cable began as a simple retransmission service for broadcast programming in areas where the terrain blocked good reception of TV broadcasters’ signals, though it also quickly spread into sparsely populated areas as a means for importing distant TV transmissions for rural viewers who had few local broadcasters. 72 As a regulator, the FCC initially doubted its power to oversee cable at all because it fit into neither of the two main substantive sections of the Act at that time, Title II common carriage or Title III broadcasting. 73 By the mid-1960s, the Commission reconsidered its position and began imposing some rules on cable under its general Title I authority, holding that regulating cable was ancillary to the agency’s power to regulate broadcasting. 74

It is hard to overstate the importance of the broadcast model — the notion of a provider who chooses what content it transmits over its own facility to a passive audience — for policymakers’ treatment of cable. The FCC early on rebuffed arguments that cable should be subject to common carriage rules; it distinguished between cable operators, who determined the signals they offered to the public, from common carriers who had no control over the intelligence they transmitted. 75 Conversely, cable operators’ rights to control the use of their

73 Rosenbloom, supra note 72, at 217; see Frontier Broadcasting v. Collier, 16 Rad. Reg. (P&F) 1005 (1958), recon. denied, In re Report and Order, 26 FCC 403, 428 (1959); United States v. Southwestern Cable Co., 392 U.S. 157, 164 (according to the FCC, cable systems are “neither common carriers nor broadcasters, and therefore are within neither of the principal regulatory categories created by the Communications Act”).
74 The Supreme Court approved, but restricted authority to the extent that the FCC’s regulations were “reasonably ancillary to the effective performance of the Commission’s responsibilities for the regulation of television broadcasting.” United States v. Southwestern Cable Co., 392 U.S. 157, 178 (1968).
75 See Rosenbloom, supra note 72, at 216-17; Frontier Broadcasting, 16 Rad. Reg. (P&F) at 1009
transmission system also curtailed the agency's power to impose rules on the service; courts in the 1980s invalidated FCC-generated mandates requiring cable operators to carry all local TV signals in each system's market.\textsuperscript{76}

**Letting Cable Become Cable: The Cable Communications Policy Act of 1984** — From the mid-1960s through the early 1980s, federal regulators' approach to cable rules waxed and waned. In 1972, the Commission established a dual regulatory regime under which the state or local government issued franchises, while the Commission exercised "exclusive authority over all operational aspects of cable communication, including technical standards and signal carriage."\textsuperscript{77} After an initial flurry of regulations (and ongoing struggles to balance the economic interests of broadcasters and cable operators), the FCC by the late 1970s had a limited role in overseeing cable operations.\textsuperscript{78} The same could not be said, however, of the many local municipal or state authorities whose power to regulate public rights-of-way gave them considerable scope to attach conditions on the cable franchises they conferred.\textsuperscript{79} As the often inconsistent and sometimes onerous local regulations piled up, the cable industry turned to Congress for relief.

The Cable Communications Policy Act of 1984 (the "1984 Cable Act") made many significant changes with respect to regulation of the medium. Cable law was now enshrined in a new section of the Communications Act — Title VI — which included statutory definitions that reflected old broadcast-based concepts\textsuperscript{80}:

"Cable service" was defined as "the one-way transmission to subscribers of video programming or other programming service together with subscriber interaction, if any, which is required for the selection of such programming."\textsuperscript{81} According to the legislative history, the definition excluded two-way communications services such as e-mail and data processing.\textsuperscript{82}

(The difference between cable and common carrier is "that the specific signals received and distributed by the [cable] system are, of necessity, determined by the [cable] system and not the subscriber . . . . It is axiomatic that a [cable] system which serves a group of subscribers cannot possibly accommodate the preferences or desires of each individual in the group."); id. at n.5 (noting that even the cable operator's content choice is limited by the broadcaster, who selects the programming being retransmitted via cable).


\textsuperscript{77} See New York State Comm'n on Cable Television v. FCC, 749 F.2d 804, 809 (D.C.Cir. 1984).

\textsuperscript{78} See Esbin, supra note 4, at 66; Rosenbloom, supra note 72, at 232-38.

\textsuperscript{79} Rosenbloom, supra note 72, at 240-43 (reviewing the "frenetic" process of attempting to obtain a cable franchise agreement with local authorities before 1984, with the "result[ing] set of burdens well in excess of the franchise fees that were explicitly imposed").

\textsuperscript{80} Esbin, supra note 4, at 66 ("The definition of 'cable service' was developed to prevent cable systems delivering video programming from being treated as common carriers . . . .").

\textsuperscript{81} 47 U.S.C. § 522(5) (1984). The term "video programming" was defined as "programming provided by, or generally considered comparable to programming provided by, a television broadcast station." 47 U.S.C. § 522(20). The term "other programming service" was defined as "information that a cable operator makes available to all subscribers generally." 47 U.S.C. § 522(14).

\textsuperscript{82} H.R. REP. NO. 934, 98th Cong. at 41-43.
“Cable system” was defined as “a facility, consisting of a set of closed transmission paths and associated signal generation, reception, and control equipment that is designed to provide cable service which includes video programming and which is provided to multiple subscribers within a community.”

The new law explicitly exempted cable operators from common carrier regulation insofar as they provided the defined “cable service,” but lawmakers left the way open to apply Title II rules to other, two-way services that the operator might someday provide via the same facility. In addition, the 1984 Cable Act preempted or restricted local franchise authorities (“LFAs”) from exercising many of their old powers over the medium, leaving cable relatively unregulated by any level of government.

Changing Course on Cable Operator Control of Its Facilities: The Cable Consumer Protection and Competition Act of 1992 — After several years under the 1984 Cable Act’s deregulatory approach, lawmakers began receiving constituents’ complaints about various aspects of the service. A growing perception about cable operators’ abuse of their market power in providing multichannel video services culminated in the passage of significant re-regulatory legislation. The new law’s most prominent feature may have been cable rate regulation, but from a long-term perspective — one which has consequence for the open access debate — the key changes were the imposition of a host of explicit limitations on the cable operator’s control over the content carried over its facilities. The new mandates included “leased access” rules, which require cable operators to provide capacity to unaffiliated video program providers under regulated terms, public educational and governmental (“PEG”) access rules, which require operators to provide free carriage of certain government-oriented video programming; channel capacity restraints, which cap the amount of system capacity that an operator may fill with programming in which it has an ownership stake; “program access” rules, which require cable operators who also own cable programming to lease rights to the material to

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84 See 47 U.S.C. §§ 541(c), 541(a)(2). The legislative history suggests that Congress made this distinction specifically because lawmakers recognized that cable systems were becoming capable of developing two-way transmission service and wanted to ensure that such offerings did not undermine the Title II common carrier regulatory scheme. See Esbin, supra note 4, at 66 (“Of particular concern with respect to cable’s increasing capacity for two-way transmission services was the effect of telephone subscriber by-pass of the regulated local exchange networks . . . . Such by-pass might leave the phone companies subject to universal service obligations, but lacking the revenues to support them, ultimately resulting in local telephone service rate increases.”).
85 See Rosenbloom, supra note 72, at 260-61 (noting that while broadcasters, program providers, and would-be multichannel video service providers had various complaints, the “most important” political factor was that “subscribers were often unhappy about increasing rates or poor service”).
86 Id. (noting that various complainants “united around the theme that cable systems enjoyed monopoly powers which should be restrained by legislative ‘reregulation’ and/or the promotion of new competitive entry”).
multichannel competitors on regulated terms;\textsuperscript{90} “carriage agreement” restrictions, which bar operators from extracting a financial interest in programming as a condition of carrying the material;\textsuperscript{91} and broadcast “must-carry” rules, which mandate carriage of local broadcast station signals.\textsuperscript{92} The 1992 Cable Act had a dramatic impact on the cable industry, and it was not long before cable operators and cable programmers began seeking various legislative changes.\textsuperscript{93} Their voices, added to the BOCs’ ongoing push to reform the nation’s telephony laws, helped usher in a mammoth overhaul of the Communications Act — including particular statutory amendments at the core of the controversy surrounding cable Internet access.

\textbf{C. The Big Fix: The Telecommunications Act of 1996}

To fully understand the open access debate, it is important to understand three critical aspects of the 1996 Act. First, Congress plainly intended the legislation to remove the legal barriers that had kept telephone companies from entering cable’s multichannel video market and had kept cable from entering the telephony market.\textsuperscript{94} Lawmakers had concluded that the best way to contain the market power of each type of service provider was to encourage new competitors to challenge them; in particular, Congress hoped for the emergence of a “two-wire” world in which the historically separate telephone and cable facilities competed to provide all manner of communications services to residential customers.\textsuperscript{95} Second, although the two-wire world was the goal, Congress chose

\textsuperscript{90} 47 U.S.C. § 548.

\textsuperscript{91} 47 U.S.C. § 536(a)(1), (2).

\textsuperscript{92} 47 U.S.C. §§ 534, 535.

\textsuperscript{93} See Rosenbloom, supra note 72, at 316, 322, 327-42 (describing cable legislative efforts in 1993-94).

\textsuperscript{94} See, e.g., The Economic Benefits of Full Competition in all Telecommunications Markets 141 CONG. REC. E669 (March 23, 1995) (Remarks of Rep. David Bonior) (arguing that “The biggest obstacle to fulfilling the promise of telecommunications to the American people is the maintenance of policies at the Federal and State levels of government that restrict competition in communications markets. Regulation has failed to keep pace with the changes that have occurred in the telecommunications industry and the laws governing the industry are seriously outdated and need to be reformed.”).

\textsuperscript{95} Prepared Testimony of Anne K. Bingaman, Assistant Attorney General, Antitrust Division, Before the Committee on the Judiciary, United States Senate Subcommittee on Antitrust, Business Rights And Competition Concerning S.652: The Telecommunications Competition and Deregulation Act of 1995, FEDERAL NEWS SERVICE, May 4, 1995 (opining that local telephone companies “should not be able to merge with cable companies in their local service areas and deprive consumers of the benefits of competition between these two wires”); Larry Irving, Telecommunications Policy Reform: Competition and Consumer Protection, 29 Telecommunications No. 8, at 26 (Horizon House Publ.), (Aug. 1995) (“We want to encourage two wires to the home, not one, as well as additional wireless options.”) (Irving was the Clinton Administration’s Administrator of the National Telecommunications and Information Agency); “Cable Optimistic About Telecom Reform Bill Despite Shortcomings,” COMMUNICATIONS DAILY, June 22, 1995, at 2 (cable spokesman expressing doubt whether “2-wire model ... made sense in small towns”); Tom Valovic, “The telecommunications reform bill: blueprint for competition or field day for the RBOCs?” 29 Telecommunications No. 8, at 8 (Horizon House Publ.), (Aug. 1995) (opining that even “two-wire competition between huge telco and cable providers with cross-
to maintain the statute’s separate service distinctions between common carriage and cable — the amended law simply lifted the legal barriers to new entrants into those service markets.96 Third, the addition of two small words to the statutory definition of “cable service” has resulted in deep confusion as to whether the term now encompasses some or all of the Internet-based services that broadband cable operators offer.

Congress Allows Everyone to Enter Into the Other Guy’s Business, Without Significantly Changing the Rules for Each Type of Service — As noted supra, the first and greatest impetus for the 1996 Act was the desire to resolve the legal status of the BOCs (or, more precisely, the MFJ restrictions that kept them from providing long-distance service and fully engaging in information services).97 To address the central concerns about the BOCs’ incentives and ability to unfairly leverage their control over their local exchange facilities into competitive services, the new statute established a trade-off: BOCs would be permitted to enter new and potentially lucrative service markets once they satisfied detailed “interconnection” mandates that opened up their local networks to rival providers of local telephony services.

This new interconnection regime came with a thicket of unbundling and resale requirements that (1) conceptually divide existing local telephone facilities into a series of distinct “network elements” that must be leased at cost-based rates to new entrants, (2) allow the new entrants to hook into the existing local telephone facilities at many different points in the network, and (3) permit the new entrants to offer services to consumers using their own new facilities, the network elements leased from incumbents, or some combination of the two.98

 ownership [restriction] in place may not amount to effective competition”).

96 See 47 U.S.C. § 253 (preemption of state or local laws that establish de jure or de facto monopolies for telecommunication services); 47 U.S.C. §§ 651, 653 (providing options for telephone company entry into video programming services). See also Earl W. Comstock and John W. Butler, Access Denied: The FCC’s Failure to Implement Open Access to Cable as Required by the Communications Act, 8 COMM. LAW CONSENSUS 5, at 8-9 (Winter 2000) (discussing Congressional intention “for the two types of providers to enter each other’s lines of business and compete directly”).

97 The MFJ condition that had strictly barred the BOCs from providing information services was lifted before passage of the 1996 Act. See In re Bell Operating Companies’ Provision of Information Services, 8 F.C.C.R. 55 (1992) (reviewing history of gradual elimination of restriction). The 1996 Act set certain conditions on the provision by “incumbent local exchange carriers” (including the BOCs) of information services. See, e.g., 47 U.S.C. § 259 (line-sharing requirement); 47 U.S.C. § 272 (separate affiliate safeguard). For a brief explanation of relevant telephony terminology, see infra note 98.

98 Understanding telephony jargon is helpful in understanding how and why the interconnection rules operate as they do. Local telephone companies have long been known as “local exchange carriers” (“LECs”). 47 U.S.C. § 153(26). Under the 1996 Act, LECs are further subdivided into two different groups: the former monopoly local telephone companies are called incumbent local exchange carriers (“ILECs”), 47 U.S.C. § 251(h), while new entrants to the local market are known as competitive local exchange carriers (“CLECs”). ILECs consist primarily of the remaining BOCs, as well as hundreds of smaller firms. The CLECs include existing long distance providers, also known as “interexchange carriers” (“IXCs”), the most prominent of whom are AT&T, Worldcom, and Sprint. The CLEC designation also applies to other new entrants into the local service market — including start-up carriers, cable system operators, and utility companies — as well as to ILECs providing local service outside their home region (i.e., U S West providing local
Moreover, in radically revamping the shape of the U.S. telephony industry, Congress also acted to replace implicit subsidies that had kept local telephone service rates low with a new series of explicit support mechanisms. Among them was a new approach to guaranteeing "universal service"; the law requires all interstate telecommunications carriers to contribute to programs designed to guarantee that basic telephone service is available at affordable prices to all residential customers, including those in rural and other high-cost areas.99

The 1996 Act also codified the definitions of significant terms within the Title II regulatory scheme. The definitions largely replicated those incorporated in the MFJ — which itself had drawn fairly heavily on the FCC’s basic service/enhanced service dichotomy which, in turn, reflected the old common carriage concepts rooted in 19th century railroad law. But lawmakers also made some effort to clarify and harmonize the terms and concepts to avoid confusion as to whether, or how, the statutory definitions applied to existing services:

"Telecommunications" is defined as "the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information sent and received."100

"Telecommunications service" is defined as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used."101

"Telecommunications carrier" is defined as "any provider of telecommunications services . . . . A telecommunications carrier shall be treated as a common carrier . . . only to the extent that it is engaged in providing telecommunications services . . . ."102

"Information service" is defined as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the

99 The 1996 Act’s major reform of laws governing telephone service providers is best understood as a trilogy of interrelated concepts. The first component of the trilogy is “interconnection,” the detailed regime designed to permit new entrants to provide competing local exchange services by linking up with the networks of incumbent local exchange carriers. 47 U.S.C. § 251. The second component is “universal service,” a complex approach for developing a program of explicit subsidies funded by all interstate telecommunications carriers to achieve ubiquitous, affordable telephone service. 47 U.S.C. § 254. The third component is “access charge” reform, another set of steps intended to eliminate implicit subsidies in the costs of long distance telecommunications. See, e.g., In re Access Charge Reform, 12 F.C.C.R. 16606 (1997) (providing background discussion of some elements of access charge reform effort).

100 47 U.S.C. § 153(43).
management of a telecommunications service.\textsuperscript{103}

As discussed infra Section IV, just how these terms work together in the context of Internet access service is a fiercely contentious debate.

The 1996 Act also lifted the legal barriers that had kept traditional local telephone carriers and cable companies out of each other’s line of business. The statute accomplished this objective by lifting a federal statutory bar against local telephone provision of video programming services and by preemempting any state or local laws that granted monopolies to local telephone service providers.\textsuperscript{104} Both types of service providers had lobbied lawmakers with statements predicting that they would soon enter into the once-forbidden businesses and thereby create strong, facilities-based competition in multichannel video and local telephony services.\textsuperscript{105} But that competition in the two traditionally regulated services has been slower to develop than some had hoped; members of Congress and others have expressed varying degrees of impatience or disappointment with what they perceive to be reluctance to take on the challenge of competing against an established provider.\textsuperscript{106}

For cable operators, the 1996 Act’s most immediate boon was the roll-back of rate regulation, but from a longer-term perspective — and for the open access

\textsuperscript{103} 47 U.S.C. § 153(20).

\textsuperscript{104} See supra note 96.

\textsuperscript{105} See, e.g., Prepared Testimony of Richard H. Brown, Vice Chairman, Ameritech Corporation, Before the House Subcommittee on Telecommunications and Finance, Federal News Service, May 10, 1995 (announcing “plans to invest $4.4 billion to construct a digital video network that will connect 6 million customers in our region to interactive information, entertainment and traditional cable television services” and decrying legislative proposal for “restrictions on our video operations that would not apply to our competitors. While we question the necessity of these restrictions, at a minimum, they should apply equally to monopoly cable systems seeking to provide telephony services.”); Prepared Testimony of Decker Anstrom, President and Ceo, National Cable Television Association, Before the Committee on the Judiciary, United States Senate, Regarding Legislation to Reform National Telecommunications Policy, Federal News Service, May 3, 1995 (stating that “the cable industry supports telecommunications reform legislation because we are ready to compete. Our systems pass over 95 percent of homes in the United States and carry up to 900 times more information than telephone facilities. Already, several leading cable companies are building state-of-the-art communications facilities that deliver voice, video, and data over the same wire. Put simply, we are ‘the other wire’ that will provide competition to the $100 billion local phone monopolies.”).

\textsuperscript{106} Hearing of the House Judiciary Committee, Legislation Dealing With the Internet, Federal News Service, July 18, 2000 (opening statement of Chairman Henry Hyde) (stating that “constituents have recently seen 10 percent increases in their cable bill . . . I’m now wondering whether we made a mistake in deregulating this industry. I know we now have satellite television as a more or less viable competitor and, in a few cases, new entrant cable companies. However, they don’t seem to be enough to restrain these increases.”); id. (statement of FCC Chairman William Kennard) (discussing concerns about the 1996 Act voiced in policy-making circles “that if we don’t stay the course now and be strong and keep the pressure on the incumbents to open their markets for both voice and data, then years from now, people are going to say, well the ’96 Act was a failure and unfortunately this whole industry [would be] in antitrust court all over again”); Brian Krebs, Bliley Outlines Legislative Technology Issues, Newsbytes, Feb. 3, 2000 (quoting House Commerce Committee Chairman Thomas Bliley, “one of the architects of the telecom act,” as saying that the FCC has done a fair job in handling many of the complicated technological hurdles of the law, but that he was disappointed that many of the competitive benefits touted by the act have yet to be realized”).

debate — the significant change was a two-word addition to the definition of "cable service." With the insertion of the phrase "or use," the cable service definition now reads as "one-way transmission to subscribers of video programming or other programming service, and subscriber interaction, if any, which is required for the selection or use of such video programming or other programming service." As discussed infra Section IV, many in the cable industry believe that the amendment broadly expanded Title VI cable services to encompass most or all of the communications services transmitted via the Internet. Opponents of that view counter that such an extensive reading is not warranted — in part because it has the potential to eviscerate the Communications Act's elaborate classification-based regulatory scheme.

D. The Internet: An Oversight by the Congressional Overseers?

Whether Congress in 1995 and early 1996 fully appreciated the Internet's effect on the existing regulatory scheme is an open question. Commentators disagree as to whether lawmakers failed to understand the implications of the new medium, perceived some of the Internet's potential but felt reluctant to impose rules on rapidly evolving services, or affirmatively chose to forswear from regulating the net.

Whatever the explanation, for all of the 1996 Act's bulk and breadth, the statute makes remarkably few direct references to the new medium. This perhaps is not too surprising given that the legislation was approximately ten years in the making, and the focus for the vast majority of that time was on the future of the BOCs and the introduction of facilities-based competition in both traditional telephone and cable services. As support for the reform effort grew, other communications issues were added to the mix, including broadcast ownership

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107 See infra Section IV. The cable industry was disappointed, however, in efforts to lift the 1992 Act's various restrictions on cable operator control over uses of their facilities.


109 Duffy, supra note 13, at 1263 (citing Esbin, supra note 4, at 55); Comstock and Butler, supra note 96, at n.119 (contending that deletion from 1996 Act legislation of proposal explicitly barring FCC regulation of Internet means that Congress intended the Internet to fit within "the fundamental regulatory structure of the Communications Act"); John C. Roberts, The Sources of Statutory Meaning: An Archeological Case Study of the 1996 Telecommunications Act, 53 SMU L. REV. 143, 157 (Winter 2000) (noting that "there is nothing in the extensive legislative history to indicate that [lawmakers] were aware of the new phenomenon of Internet telephony"); Speta, Handicapping, supra note 26, at 41 (opining that "tepid legislation" reflected congressional lack of understanding of implications of broadband for communications marketplace and regulatory scheme); Phil Weiser, Paradigm Changes In Telecommunications Regulation, 71 U. COLO. L. REV. 819, 842 (Fall 2000) (opining that "Congress did not fully grasp the importance of the Internet in this landmark legislation").

deregulation, cable rate deregulation, and — at the end of the process — some Internet issues.\footnote{See H.R. 1555, Telecommunications Act of 1995, 104th Cong. (eventually enacted in February 1996 as the "Telecommunications Act of 1996").}

This "add-on" quality is reflected in the rather random placement (and sometimes inconsistent nature) of the 1996 Act provisions that explicitly address the Internet. The sections that attracted the most attention during congressional deliberations were a series of content restrictions known collectively as the Communications Decency Act, some of which were later struck down as unconstitutional.\footnote{The Communications Decency Act provisions are codified at 47 U.S.C. § 223(a) to (h). See Reno v. ACLU, 521 U.S. 844, 852 (1997) (striking indecency definition for the Internet).} Other sections of the 1996 Act provide some legal protections for speech-related liability for those who provide connections to the Internet or networks they do not control or who, under the so-called "Good Samaritan" provision, provide screening designed to shield minors from offensive material.\footnote{See 47 U.S.C. §§ 223(e), § 230.}\footnote{See 47 U.S.C. §§ 223(e), § 230.} Some commentators have suggested that this provision signals Congress' recognition that different regulatory standards should apply to those Internet service providers who merely provide a passive conduit — perhaps akin to traditional common carriers? — as opposed to those who more actively combine Internet access with some content service.\footnote{Esbin, supra note 4, at 22.} If so, this understanding seems congruent with what at least one court has characterized as the two basic uses of the Internet: as a conduit for communications between particular individuals and as an electronic library for obtaining information generally available to all.\footnote{Shea v. Reno, 930 F. Supp. 916, 926 (S.D. N.Y. 1996) ("First, an individual who has secured access to the Internet can correspond or exchange views with one or many other Internet users. Second, a user can locate and retrieve information available on other computers.").}

The Communications Act does define the term "Internet." In fact, the statute provides two separate definitions, one in the 1996 Act's Good Samaritan provision and the other in a provision added by the 1998 Child Online Protection Act.\footnote{Compare 47 U.S.C. § 230(f)(1) ("The term 'Internet' means the international computer network of both Federal and non-Federal interoperable packet switched data networks.") with 47 U.S.C. § 231(e)(3) ("The term 'Internet' means the combination of computer facilities and electromagnetic transmission media, and related equipment and software, comprising the interconnected worldwide network of computer networks that employ the Transmission Control Protocol/Internet Protocol or any successor protocol to transmit information."). The first of these provisions includes a definition of the term "interactive computer service," which means "any information service, system, or access software provider that provides or enables computer access by multiple users to a computer server, including specifically a service or system that provides access to the Internet and such systems operated or services offered by libraries or educational institutions." 47 U.S.C. § 230(f)(2). The second of the two statutory provisions provides a definition of "Internet access service" as "a service that enables users to access content, information, electronic mail, or other services offered over the Internet, and may also include access to proprietary content, information, and other services as part of a package of services offered to consumers. Such term does not include telecommunications services." 47 U.S.C. § 231(e)(4).} Both definitions are expressly limited to the specific sections of the Act in which they appear — meaning that, as a formal matter, the statute still has no
overarching definition of what the “Internet” is. The Good Samaritan provision also sets out general policy goals for the new medium, which include “preserv[ing] the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation.” While the latter is often cited for hortatory purposes, it is not clear that it requires a particular outcome in any specific dispute or debate.

Finally, the 1996 Act includes another section that involves the Internet in a broad fashion. In Section 706 of that legislation, Congress directed the FCC to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.” Lawmakers did not go on, however, to tell the Commission how to do that. The agency’s conclusion that this mandate includes fostering the deployment of high-speed Internet access services for homes and small businesses is uncontroversial, but it obviously begs the real questions surrounding concrete steps that the agency can and should take to achieve the goal.

III. OVERVIEW: THE CURRENT CONTROVERSY OVER CABLE INTERNET ACCESS SERVICE

This section outlines the evolution of the ongoing debate over how cable operators should be regulated when providing Internet access services. Included are a short comparison of the regulatory burdens that come with each of the three existing classification options, a recap of the open access debate as it emerged in FCC merger review proceedings, various courts’ recent (and conflicting) pronouncements on the issue, and an overview of the FCC’s initial exploration of a possible industry-wide resolution to the controversy.

As the discussion below reflects, although the main participants in the open access debate engage in statutory construction arguments, particular policy concerns are driving the debate. These can be broadly characterized as follows: First, many ISPs who own no transmission facilities of their own, together with a number of consumer activists, have raised fears about cable acting as a “bottleneck” to throttle competition in broadband Internet services generally, with consequences for business innovation and First Amendment values.

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119 Second Section 706 Report, ¶ 2 (noting that “[w]ith advanced telecommunications capability consumers can take advantage of advanced services that allow residential and business consumers to create and access content, sophisticated applications, and high-bandwidth services”).
120 See, e.g., OpenNet Comments, GN Docket No. 00-185, at 2-3 (filed Dec. 1, 2000); Comments of Consumers Union, et al., GN Docket No. 00-185, at 3 (filed Dec. 1, 2000); Mark Cooper, Open Access to the Broadband Internet: Technical and Economic Discrimination in Closed, Proprietary Networks, 71 U. COLO. L. REV. 1011 (Fall 2000) (author, who is Director of Research for the Consumer Federation of America, discusses the overlapping concerns for speech and competition policy); Harold Feld, Whose Line Is It, Anyway? The First Amendment and Cable Open Access, 8 COMMLAW CONSPECTUS 23 (Winter 2000) (author, the Associate Director of the Media Access Project, offers constitutional analysis of AT&T arguments in AT&T/TCI merger). Although a full analysis of the constitutional and antitrust policy analysis is outside the scope of this statutory interpretation article, I note that Professor James Speta suggests that the concerns for speech
Second, cable operators entering the Internet access market raise concerns about the effect that new regulation might have on their ability to pay for, and earn a return on investment from, their upgraded facilities. These same fundamental arguments have surfaced in a variety of venues — in both adjudicatory and rulemaking proceedings at the FCC, before local regulatory bodies and the courts, and on Capitol Hill. At a somewhat subterranean level, there is a common current running through all these fora: the value of the "open access" label as the public shorthand for the concept.

Winning the battle of the labels was an early victory for those who wish to change the exclusive nature of the carriage relationships between cable operators and the cable-affiliated ISPs; it is difficult, obviously, for policy-makers to oppose "openness" as a general matter. It may be that the real struggle now shifts to reaching a conclusion on what the term "open access" should mean.

A. The Real-Life Consequences of the Current Regulatory Classifications

In order to make the thrust of the regulatory disparity arguments clear, set forth below is a brief accounting of the obligations that apply to a provider of broadband Internet access service depending upon whether the offering is expressed in the open access debate mask what "probably is the motivation for the push for open access": non-affiliated ISPs' interest in maintaining "the primary relationship" with Internet access customers, rather than ceding that role to the cable operator or its affiliated ISP. Speta, Vertical Dimension, supra note 26, at 1008-09. While it undoubtedly is true that non-affiliated ISPs are concerned about keeping their "first screen" relationship with customers, including any marketing advantages that may provide, it is not self-evident that this point negates the speech diversity argument. The Communications Act and its implementing rules have long reflected speech diversity policy choices that may or may not also reflect pro-competition goals — but all of which limit, to some degree, the electronic communications facility owner's control over the content carried on its system, even when that facility is not subject to the basic "hands off the content" restriction inherent in common carriage regulation. Compare, e.g., 47 U.S.C. § 303a nt (children's television commercial restrictions; no pro-competition goal); 47 U.S.C. §§ 312(a)(7), 315 (candidate access to broadcast facilities, no pro-competition goal); 47 C.F.R. § 76.205 (candidate access to cable facilities, no pro-competition goal; former 47 U.S.C. § 533(f) (repealed 1996) (prescribing limits on national cable system ownership and capping cable channel capacity devoted to operator's affiliated programming "[i]n order to enhance effective competition").


122 See, e.g., Comments of the Association of Communications Enterprises, GN Docket No. 00-185, at 3 (filed Dec. 1, 2000); Comments of CenturyTel, GN Docket No. 00-185, at 4 (filed Dec. 1, 2000).

123 See, e.g., Broadband Today, supra n.121, at 10 (noting “the debate over broadband access has been characterized by strong lobbying efforts and media strategies designed to define the debate in terms of ‘open access,’ or, for those opposed to regulation, ‘forced access’”).
classified as a "telecommunications service," a "cable service," or an "information service."

1. **Obligations Imposed on Internet Access Service Classified as "Telecommunications Service"**

Those whose Internet access offerings are treated as Title II telecommunications service — i.e., local exchange carriers — must shoulder a considerable array of regulatory obligations that begin with the 19th century common carriage concepts, continue with obligations added under the FCC's decades-old Computer regime, and now include additional mandates imposed via the 1996 Act. These obligations include:

A general duty imposed on all carriers to furnish service to all comers upon reasonable request.124

A general duty imposed on all carriers to interconnect directly or indirectly with other carriers.125 In addition, incumbent local exchange carriers face considerably more detailed interconnection requirements under the 1996 Act that are designed to facilitate the entry of new competitors into the local exchange market; these rules require ILECs to "unbundle" pieces of their network and provide these elements to CLECs at a cost-based price.126 The CLECs then may incorporate these elements, together with some of their own hardware and software, to offer network services in competition with the ILECs. In addition, the FCC has determined that ILECs are subject to "line sharing" obligations, akin to the unbundling concept, on their DSL facilities.127

A general duty imposed on all carriers to "coordinate" with other carriers to ensure that their networks are interoperable.128

A general mandate imposed on all carriers to provide service under prices, terms, and conditions that are not "unjust or unreasonable."129 Compliance with this mandate may carry an obligation to file public tariffs specifying the rates, terms, and conditions and so are subject to administrative challenges.130

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126 See 47 U.S.C. § 251(c). Telecommunications service can be conceived of as the provision of a collection of numerous "network elements" — such as local loops, switches, and transport facilities — linked or combined together. Since passage of the 1996 Act, considerable controversy has surrounded the FCC rules governing which UNEs the ILECs must unbundle and how the ILECs must sell these UNEs to competing service providers. See, e.g., AT&T v. Iowa Utilities Bd., 525 U.S. 366 (1999).
129 47 U.S.C. §§ 201(b), 202 (a).
130 See, e.g., 47 U.S.C. § 203(a). At the federal level, only carriers whom the FCC has recognized as "dominant" in their markets must file tariffs, see, e.g., In re Tariff Filing Requirements for Nondominant Common Carriers, 8 F.C.C.R. 6752 (1993), but state tariffing requirements vary dramatically.
A duty imposed on facilities-based carriers under the Computer decisions to "unbundle" their provision of "basic" transmission services from any "enhanced" services they provide and to sell the basic transport to rival providers of enhanced services. The FCC currently is considering elimination of this rule but, as noted above, ILECs also face statutory unbundling obligations under the interconnection provisions of the 1996 Act.

A duty imposed on local exchange carriers to generally permit rivals to purchase service under bulk-discount terms and then resell services to retail users.

A duty to comply with detailed Title II customer privacy protections.

A duty to comply with the Communications Assistance for Law Enforcement Act ("CALEA"), which requires carriers to ensure that they can comply with court-ordered electronic surveillance and to file certain compliance information with FCC.

A general duty imposed on carriers to comply with federally mandated disabilities access requirements, designed to ensure that service is accessible and usable by persons with disabilities if "readily achievable."

A multiplicity of federal and state fees, the most significant of which may be mandatory contributions to universal service funding programs.

A multiplicity of federal and state reporting obligations that vary depending upon the specific service being offered.

Thanks to another provision of the 1996 Act, however, a Title II classification need not result in the imposition of all these regulatory burdens. The statute empowers the FCC to "forbear" from applying most of the regulations applicable to "telecommunications service" if the FCC determines that enforcement is not necessary to ensure that "charges, practices and classifications" are just and reasonable, that consumers are sufficiently protected, and that forbearance is consistent with the "public interest." As discussed in Section IV.B infra, this so-called "Section 10" forbearance authority could be a significant tool for the FCC to wield in fashioning a cross-platform approach to broadband regulation.

2. Obligations Imposed on Providers of Internet Access Service Classified as

131 As noted infra Section IV.B, the FCC has determined that the 1996 Act terminology matches up with its old Computer terminology, so "basic service" refer to the same pure transmission offering as the term "telecommunications service," and "enhanced service" is deemed to be synonymous with "information service."


The contrast between the long list of obligations imposed on Internet access providers under a full-blown Title II regime and those that would appear to attach under a Title VI classification is quite plain. If ISP offerings were officially classified as a cable service, cable operators would face no open access obligations, however defined, or other nondiscrimination obligations in their provision of Internet access services. What limited non-discrimination obligation apply to cable have been construed as applying only to traditional video programming. With respect to unaffiliated ISPs, cable operators other than AT&T and AOL Time Warner—who operate under specific conditions imposed on their recent corporate mergers—can them away at will or agree to access on terms that may vary wildly from one ISP to another.

There are a few other Title VI-specific mandates that would apply to, or at least affect, a cable operator’s ISP offerings. Local franchise fees imposed by municipal governments (and passed on to subscribers) may take cable Internet usage into account, though the appellate court rulings on the regulatory classification issue are sparking some controversy as to whether such fees are appropriate. The 1992 Cable Act’s customer privacy provisions may be applicable to broadband cable ISPs; the most onerous provision of these rules, from a business perspective, is the ban on sharing of customer information with third-party affiliated services (such as other media outlets, for example). Cable systems also are subject to compliance with locally imposed customer service standards, governing such things as office hours and telephone availability, which would not seem to be affected particularly by the addition of Internet access service among the offerings on the cable facility.

In short, there is relatively little under the explicit provisions of the Communications Act or the FCC’s current cable rules that would significantly

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139 In 1999, Internet Ventures, Inc. and Internet On-Ramp, Inc. (collectively “IVI”), filed a petition requesting that the Commission rule that Internet service providers, such as IVI, were entitled to access to broadband cable facilities under the so-called “leased access” provision of the 1992 Cable Act, 47 U.S.C. § 532. The FCC in February 2000 rejected that request, concluding that Internet access service does not constitute “video programming” entitled to carriage consideration under the leased access provision. In re Internet Ventures, Inc., Internet On-Ramp, Inc., Petition for Declaratory Ruling that Internet Service Providers are Entitled to Leased Access to Cable Facilities Under Section 612 of the Communications Act, 15 F.C.C.R. 3247 (2000) (“IVI Petition”). The Commission noted that Congress did not expressly require cable operators to make channel capacity available for anything other than traditional video programming; the agency declined to consider how—or whether—it should look at the various types of data, voice and video services available via the Internet and treat them differently under the statute. (“Admittedly we might face a different set of issues if IVI, or another ISP, proposed to utilize leased access capacity for the provision of a service comprised wholly of video programming available via the Internet.”). Id. at 3254.

140 See supra note 24 (discussing suit filed by Roanoke, Va., subscribers against local cable operator).


burden a cable operator’s offering of Internet access service if the classification debate were resolved in favor of the Title VI proponents. As one FCC staff analyst put it,

[the result of such classification would be the creation of “parallel universes” for regulation of cable and telephony-provided Internet services. Cable operators would be permitted to provide such advanced cable services under a Title VI regime, free of interconnection and unbundling requirements, while certain telecommunications carriers would be obligated under the 1996 Act and the Commission’s rules to offer network interconnection, unbundled network elements, and tariffed rates to competing enhanced and information service providers.]

3. Obligations Imposed on Providers of Internet Access Offering Classified as “Information Service”

Most ISPs today currently are treated as unregulated information service provider under Communications Act. This is in keeping with the FCC’s decades’ old deregulatory approach to enhanced services under its Computer rulemakings, in which the integrated data-processing-and-transport offering was deemed to be a Title I service — and which the FCC so far has chosen to leave unregulated. As a practical matter, the transport component upon which most ISPs today rely is provided by another entity, either a Title II telecommunications carrier or a Title I “private carrier.” Facilities providers who operate as private carriers escape nearly all of the onerous obligations imposed on Title II carriers, although they must contribute to federal universal service funding, may be required to secure local authorizations (e.g., rights-of-way), and — depending on their location — may be subject to various state certification, universal service funding, and other operational obligations. Even with some disparity among state rules, however, classification of Internet access offerings under the information services rubric carries few burdens in comparison to those attached to the telecommunications service label.

B. The Emergence and Evolving Definitions of “Open Access”

The open access concept came into being as ISPs who had grown up depending on nondiscriminatory access to “last-mile” local exchange carrier facilities consisting of narrowband copper lines to individual homes and businesses began to wonder if this business model would survive in the transition

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143 Esbin, supra note 4, at Executive Summary Section VI; accord, Roberts, supra note 109, at 160.
144 The exceptions, of course, are those telephone company-owned ISPs that depend on the company’s underlying transport facilities — but even in those case, it is the underlying transport service that is regulated, not the computer-enhanced data processing service that most users think of as an ISP offering. Whether cable-owned ISPs should be treated the same is, of course, at the heart of the open access debate.
145 See supra notes 58-59 and accompanying text.
146 See supra notes 63-66 and accompanying text.
147 See supra notes 65-66 and accompanying text.
to upgraded broadband facilities. Because cable operators — who largely could
discriminate by law in the provision of “cable service” — were ahead of other
facility providers in deploying new broadband plant, the focus turned to them.\textsuperscript{148} Recent multibillion dollar mergers in the cable industry provided a regulatory
forum for the debate to emerge, but it plainly is continuing even after the mergers
themselves have taken place.

As outlined below, proponents of open access had varying degrees of success
over time in achieving their goals. What also should be noted, however, is that
proponents of the concept also have had varying definitions over time of what the
term “open access” should mean — and proposed remedies that have ranged
from imposition of common carriage rules to less onerous forms of “regulation
light” that could “avoid the full-blown burdens of Title II-type regulation.”\textsuperscript{149}

\textbf{1. The AT&T Mergers}

The merger that ushered the open access debate onto the policy stage was
AT&T’s proposed purchase of the nation’s then-largest cable operator,
Telecommunications, Inc., better known as TCI. Although both federal antitrust
authorities and communications authorities reviewed the merger, only the latter
addressed the open access issue.\textsuperscript{150} Commenters who weighed in to urge the FCC
to condition its approval of the AT&T/TCI merger included local exchange
carriers, long-distance carriers, and ISPs, whose concerns the FCC characterized
as “focus[ed] on the bundling of [the company’s broadband ISP] content with the
cable modem transmission services offered to residential customers.”\textsuperscript{151} Some of
these entities pointed to the potential for cable to “develop an insurmountable
position as a monopoly provider” of broadband access service (or, at best, a
duopoly provider together with incumbent LECs).\textsuperscript{152} Some argued that, absent an
open access condition, the AT&T/TCI combination — with its size and the
exclusive linkage between the “bottleneck” cable facilities and the company-
affiliated ISP — would work to extend, through partnerships and agreements
with other cable operators, a model for cable monopolization of broadband
access.\textsuperscript{153} Still others raised regulatory parity arguments, contending that the new
company “should be subject to the same interconnection, unbundling, and resale
requirements as those imposed on incumbent LECs.”\textsuperscript{154}

How all these parties defined open access varied considerably, at least if their
proposed conditions can be considered surrogates for a definition. As the FCC

\begin{footnotes}
\item[148] See \textit{supra} notes 12-13 and accompanying text.
\item[149] \textit{Broadband Today} at 36.
\item[150] See \textit{AT&T/TCI Order}, 14 F.C.C.R. at 3191-3207. The order provides a good overview of the
various types of providers involved in the offering of Internet services. \textit{Id.} at 3192-95.
\item[151] \textit{Id.} at 3197-98. Consumer advocacy groups did not participate heavily in the open access debate
at this stage, see, e.g., Petition to Deny of Consumers Union, et al., CS Docket No. 98-178 at 11-14
(filed Oct. 29, 1998) though they stepped up their presence dramatically in later proceedings.
\item[152] \textit{Id.}
\item[153] See \textit{AT&T/TCI Order}, 14 F.C.C.R. at 3197-98.
\end{footnotes}
noted, commenters asked the agency to impose one or more of the following obligations on the new company:

(1) offer broadband Internet access services unbundled from content so that subscribers may purchase one without the other (and buy a substitute for the service not purchased from AT&T-TCI); (2) offer "equal" or "open" access to competing ISPs (so that the transmission service can be included with their content even if it is not available to subscribers as a separate service); (3) interconnect with other ISPs pursuant to the requirements imposed on telecommunications carriers and local exchange carriers by section 251(a)-(b) of the Communications Act; (4) provide competing ISPs with interconnection, unbundled elements, and resale pursuant to the section 251(c) obligations for incumbent LECs; or (5) provide capacity to competing ISPs pursuant to the leased access provisions of Title VI.155

The Commission rejected all calls for various kinds of open access conditions. To begin with, the FCC stated, it was not prepared to recognize that high-speed Internet services should be considered a separate market from narrowband services, which constituted 90% of the overall Internet marketplace.156 This was a key decision under any type of competition analysis, given that all commenters agreed that narrowband services were highly competitive.157 (Of course, narrowband Internet services were competitive partly because they could rely on common carriage access right to the last-mile link to reach customer homes — which suggests a certain circularity in the agency’s reasoning.)

As further support for its decision, the agency noted that broadband was a new arena with potential for many competing facility providers (DSL, satellite, wireless) whose presence could prevent anticompetitive problems from arising in broadband services in the future.158 Addressing specific content-discrimination concerns expressed by some commenters, the FCC noted that AT&T/TCI pledged that consumers could access other ISP services through the new firm’s Internet access connections without having to even look at the affiliated ISP’s home screen159 — though not without having to pay for two ISP offerings.160 Finally, the Commission said, it could find nothing particular to the AT&T/TCI

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154 Id.
155 Id. at 3202 (internal footnotes omitted). The FCC noted that one telco took “the opposite approach” by arguing that the Commission should reverse its decision to impose interconnection, unbundling, and resale requirements on incumbent local exchange carriers’ offering of high-speed Internet access services. Id.
156 Id. at 3205.
157 Id. at 3205-06. The FCC’s competition analysis includes elements of traditional antitrust law, which begins with defining a relevant market and then goes on to evaluate the effect the merged firm would have on competition in that market. Id. ¶¶ 13-16. The Commission goes further under its public interest authority, however, to consider whether the proposed merger abides with specific provisions of the Communications Act and also whether the new firm would result in additional benefits for consumers, such as new services. Id.
159 Id. at 3206-07.
160 See Mark A. Lemley & Lawrence Lessig, Open Access to Cable Modems, 22 Whittier L. Rev. at 25 (noting that “click-through may be economically irrational even if it is technically feasible”).
merger to warrant conditions imposed only on that firm: "the open access issues would remain equally meritorious (or non-meritorious) if the merger were not to occur." The agency pledged to continue "monitor[ing] broadband deployment closely."

The FCC got a quick opportunity to keep that promise, for less than five months after securing government approval of its TCI acquisition, AT&T filed applications for approval of its take-over of MediaOne, another of the nation's biggest cable operators. This time, however, the Department of Justice's Antitrust Division also entered the debate — largely because AT&T, through its TCI acquisition, controlled one of the top two broadband ISPs, Excite@Home, and acquiring MediaOne would give it a significant interest in the other leading broadband ISP, Road Runner. DOJ imposed no open access conditions, but it did determine that broadband access and services constituted a separate market from narrowband access and services. In analyzing that market, DOJ concluded that an ISP must have access to transmission facilities that are capable of carrying data at a high rate in order to provide residential broadband service. The antitrust authorities found that 70% of the subscribers to residential broadband service used cable modem service and that the telephone companies' DSL offerings, the second most frequently used service, still lagged substantially behind cable modem service in market penetration and acceptance. DOJ concluded that AT&T's control of, or influence over, the top two broadband ISPs — who together held a broadband ISP market share of 75% — would enable the new company to exploit its "gatekeeper" position in the residential broadband content market to substantially increase its leverage in dealing with broadband content providers. Based on that determination, DOJ ordered AT&T to divest the Road Runner interest.

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161 See AT&T/TCI Order, 14 F.C.C.R at 3207.
162 Id.
163 AT&T/MediaOne, 15 F.C.C.R. at 9815, ¶ 1, n.1.
164 See Press Release, U.S. Dep't of Justice, "Justice Department Requires AT&T to Divest MediaOne's Interest in Road Runner Broadband Internet Access Services" (May 25, 2000) ("DOJ Press Release"). This press release, together with the DOJ's complaint in the antitrust suit against AT&T and MediaOne and the court documents reflecting the settlement among the parties, was submitted into the FCC's record. See Letter of Betsy J. Brady, Vice President, Federal Governmental Affairs, AT&T, to Magalie Roman Salas, Secretary, Federal Communications Commission, CS Docket No. 99-251 (filed May 26, 2000) (submitting Complaint, filed May 25, 2000, in U.S. District Court for the District of Columbia Case No. 1:00CV01176 ("Complaint"); draft Stipulated Order filed in same ("Stipulated Order"); draft Final Judgment filed in same ("Final Judgment"); and draft Competitive Impact Statement ("Competitive Impact Statement")).
165 Complaint, at 1; Competitive Impact Statement, at 2, 5-11. Specifically, DOJ concluded that the relevant market was for "the aggregation, promotion, and distribution of broadband content." Competitive Impact Statement, at 9.
166 Competitive Impact Statement, at 6.
167 Competitive Impact Statement, at 8.
168 See, Press Release, U.S. Dep't of Justice, "Justice Dep't Requires AT&T to Divest MediaOne's Interest in Roadrunner Broadband Internet Access Services" (May 25, 2000); Competitive Impact Statement, at 12. DOJ further found that Excite@Home, Road Runner, and other residential broadband service providers and portals can substantially enhance or detract from a content
For its part, the FCC maintained the precedent it had set just months before, declining to impose "open/forced access" on the merging parties but promising again to "aggressively monitor broadband developments" in the future. Many of the same commenters who had sought conditions in the AT&T/TCI merger returned to ask the Commission to impose such conditions on the new AT&T/TCI/MediaOne. Established consumer groups stepped up their participation, and — in a not uncommon phenomenon in FCC proceedings — coalitions of various interested parties made their first appearances in the debate. This time, the FCC's account of the commenters' contentions reflected some further sophistication in their arguments that the Applicants' offering of cable broadband transport bundled with their affiliated ISPs' Internet access service and content threatens to alter fundamentally the open nature of the Internet, replacing its open architecture with a closed model derived from the cable television industry. These parties believe that the merged entity will integrate vertically into related markets such as broadband Internet content, software, and equipment. They contend that the merged firm is likely to impose a proprietary architectural standard so as to favor affiliated product and service providers, foreclose effective competition among broadband Internet service providers, and undermine the incentive toward innovation in broadband content and applications.

provider's ability to reach a large number of customers. Competitive Impact Statement at 8-9. The DOJ concluded that, for providers of broadband content, links that attract more broadband customers — and only broadband customers — are more valuable than links that will be seen predominantly by narrowband users. Competitive Impact Statement at 8-9.

169 For its legal authority to impose conditions on the merger, DOJ relied on Section 7 of the Clayton Act (15 U.S.C. § 12), which prohibits mergers where "the effect may be substantially to lessen competition" in a market (and, for jurisdictional reasons, used Section 15 of the Clayton Act, 15 U.S.C. § 25, to enforce Section 7). See Complaint, at 1.

170 AT&T/MediaOne Order, 15 F.C.C.R 9815, ¶ 128.

171 Id. ¶¶ 114-115.

172 One measure to determine consumer group's growing interest in the open access debate is to simply count the number of times they officially contacted the FCC to express concerns in the two AT&T mergers. For example, the Media Access Project, a public interest law firm that has often represented the Consumers Union and/or Consumer Federation of America in the three merger proceedings discussed here, filed one petition in the AT&T/TCI merger; 28 petitions, comments, motions or notices of oral or written "ex parte" communications in the AT&T/MediaOne merger; and 17 such filings in the AOL/Time Warner merger (including a petition to deny the merger that came in at 165 pages, including attachments).

173 See, e.g., Reply Comments of OpenNet Coalition, CS Docket No. 99-251 (filed Sept. 17, 1999) (coalition consisting of 700 ISPs and other Internet entities). A coalition of cable-aligned interests, operating under the name "Hands Off the Internet," has weighed in with opposing views on the open access debate. See, e.g., "FCC Urges 4th Circuit To Avoid Larger Open Access Issue," Warren's Cable Regulation Monitor (Aug. 21, 2000) (noting that "allied groups" NCTA and Hands Off the Internet filed separate amicus briefs in Henrico County appeal that made similar arguments); "Personals," Warren's Cable Regulation Monitor, Sept. 25, 2000 (noting that open access was top city lobbying issue in Los Angeles in second quarter of 2000, with Hands Off the Internet accounting for $1.16 million out of $2.81 million in reported lobbying funds). See also Broadband Today at n.122 (describing both coalitions).

174 AT&T/MediaOne Order, 15 F.C.C.R 9815, ¶ 115 (internal footnotes omitted). In addition, several commenters again argued that AT&T should be subject to an open access requirement as a
In again rejecting the calls for some form of open access, the FCC again declined to decide whether broadband Internet access services should be considered a market distinct from the wider, mostly narrowband Internet marketplace. That decision was unnecessary, the agency said, given its determination that competition would be protected nonetheless because (1) the pace of deployment of alternative high-speed Internet platforms, especially DSL, was increasing, and (2) AT&T/Comcast, late in the merger review proceeding, had "voluntarily" agreed to negotiate non-exclusive contracts with unaffiliated ISPs once their exclusive commitments to the cable broadband ISPs expired. On the first point, the Commission declared that "alternative technologies are attracting new subscribers at an exponential rate, and prices for these new services appear to be falling. In fact, DSL sales are currently growing at a more rapid rate than cable modem sales." More to the point, perhaps, the agency appeared to find it telling that "[l]argely in response to cable modem rollout, the Bell Operating Companies ('BOCs') and GTE have launched major initiatives to accelerate their deployment of DSL" — and it hinted that local telephone companies appeared to have been dawdling in rolling out that technology until competition from cable forced them to do so. The unspoken corollary to this observation (unspoken at least within the AT&T/Comcast Order) was the concern that imposing open access obligations on cable systems would retard operators' investments in broadband cable, and thus eliminate a useful competitive spur for the telephone companies' DSL upgrades.

matter of regulatory parity because ILECs offering DSL services are required by law to provide access to competing providers. Id.

175 Id. ¶ 116.
176 Id. (noting that the agency also relied on DOJ order that the merged firm to divest its Road Runner stake). The FCC has made a practice in recent years of negotiating "voluntary" commitments from parties seeking agency approval of proposed mergers — an approach to regulation that has attracted considerable criticism, some of the most outspoken of which has come from members of the Commission itself. See, e.g., Harold Furchtgott-Roth, "The FCC Racket," WALL ST. J., Nov. 5, 1999, at A18 (decrying perceived FCC pattern of "sing[ing] out" a few prominent mergers for "special treatment" in merger review proceedings that "brings companies to their knees begging for 'voluntary' conditions that drive up their costs of doing business.... Because the conditions are 'voluntary' and the merger is time-sensitive, firms are virtually barred from seeking judicial review.")., available at <http://www.fcc.gov/Speeches/Furchtgott_Roth/fccRack.html>. As of this writing, AT&T is still testing the technical and operational aspects of allowing several unaffiliated ISPs onto its facilities and has not rolled out ISP choice to its Internet access subscribers.
177 AT&T/Comcast Order, 15 F.C.C.R 9815, ¶ 117. The agency indirectly conceded, however, that cable was still the leading broadband provider and it was not clear when rival facilities would catch up. Id. at n.330.
178 Id. (citing the Cable Services Bureau's Broadband Today for the observation that "The ILECs' aggressive deployment of DSL can be attributed in large part to the deployment of cable modem service. Although the ILECs have possessed DSL technology since the late 1980s, they did not offer the service, for concern that it would negatively impact their other lines of business. The deployment of cable modem service, however, spurred the ILECs to offer DSL or risk losing potential subscribers to cable."). Id.
179 FCC officials were not so shy about expressing this concern in other settings. See, e.g., Kennard Competition Speech, supra note 22; Address of William E. Kennard, Chairman, Federal Communications Commission before the California Cable Television Association, Broadband
The FCC also extended greater acknowledgment to the concerns raised about a cable operator's incentives and ability to use its control over its broadband facility to steer, through a potential array of technical means, Internet users to affiliated content. The agency stated that it

agreed with commenters that the imposition of proprietary architecture and protocols for broadband Internet applications would pose a serious threat to the openness, diversity, and innovation of the Internet and the development of competition in the provision of broadband services. There is little doubt that over the next few years, as more and more customers purchase broadband Internet connections, the development of Internet applications and content specific to broadband will accelerate rapidly. It is important that, to the extent possible, those broadband applications and content have the ability to interface with the full range of competing broadband technologies.180

But having found no record of the merger applicants engaging in such anticompetitive behavior — and having determined that emerging competition appeared likely to check any such efforts that might occur — the FCC again declined to impose any measure of open access on the new firm.181

In taking that stand, the agency also rebuffed calls for open access based on regulatory parity considerations. It explicitly declined to take on the regulatory classification issues, saying that it was continuing to demur on the "telecommunications service" vs. "cable service" vs. "information service" tangle because "those legal determinations would have industry-wide application, as well as legal and practical implications that extend far beyond the contours of this particular merger."182 The FCC did concede, however, that "[t]here may well come a time when it will be necessary and useful from a policy perspective for the Commission to make these legal determinations."183

The FCC also seemed to be acknowledging some change in the political wind in expressing concern that "the recent trend toward both horizontal and vertical consolidation in the broadband services industry has the potential to threaten the openness, competition, and innovation of the Internet and the diversity of media voices that are available to Americans."184 The agency went on to recognize the new company's "incentives and ability to use its control of [its affiliated ISP] home page and 'caching' technology to negotiate exclusive content agreements in order to disadvantage alternative broadband providers."185 The Commission pledged more forcefully to


180 AT&T/MediaOne Order, 15 F.C.C.R., ¶ 124.
181 Id. ¶¶ 125, 127.
182 Id. ¶ 126.
183 Id.
184 Id. at 127 (citing AT&T investment in an Internet telephony provider whose other owners included AOL). Id.
185 AT&T/MediaOne Order, 15 F.C.C.R. 9815, ¶ 128.
review our "hands-off" policy if competition fails to grow as expected, especially if we find signs of the following possible market failures: (a) if competition from alternative broadband providers (such as DSL, satellite, and wireless) does not develop as anticipated; (b) if the merged firm fails to fulfill expeditiously its commitment to open its systems to unaffiliated ISPs, either by limiting access to a few large ISPs, through pricing or other contractual terms, or by utilizing technology that would make an open access regime difficult or costly to implement; or (c) if the merged firm successfully enters into exclusive agreements with broadband Internet content or applications providers so as to disadvantage competing broadband providers.

By the time the FCC made this pledge, the applications seeking consent to the AOL/Time Warner merger had been in its hands for nearly four months.

2. The AOL/Time Warner Merger

There are a number of differences that distinguish the AOL/Time Warner merger review from the AT&T proceedings that preceded it — and none of them may have been more important than the fact that a different agency undertook the formal antitrust review. The Federal Trade Commission considered the open access issues extensively and imposed conditions on the merger on that basis. It concluded that the "residential broadband Internet access market" was a different market than dial-up narrowband Internet access, and that, absent conditions, the merger had potential to harm that market in two ways: (1) by lessening competition in the residential broadband Internet access market, and (2) by undermining AOL's incentive to promote DSL broadband Internet service as an emerging alternative to cable broadband. The FTC imposed a series of open access conditions on the new AOL Time Warner, beginning with requirement to sign contracts with at least three unaffiliated ISPs for carriage on company's

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186 Id.

187 For its legal authority to impose conditions on the merger, the FTC relied on Section 7 of the Clayton Act (15 U.S.C. § 12), which prohibits mergers where "the effect . . . may be substantially to lessen competition" in a market, and Section 5 of the Federal Trade Commission Act (15 U.S.C. § 45), which prohibits "unfair methods of competition."


According to FTC Chairman Robert Pitofsky, "In the broad sense, our concern was that the merger of these two powerful companies would deny to competitors access to this amazing new broadband technology.... This order is intended to ensure that this new medium, characterized by openness, diversity and freedom, will not be closed down as a result of this merger." FTC Press Release. The FTC also concluded that the merger could restrain competition in the market for interactive television ("ITV"). Id. Many providers of this emerging service plan to use, or are using, the Internet as one means of augmenting traditional television programming, but ITV is outside the scope of this article.
facilities within a short period of time and negotiate in “good faith” for carriage of still other ISPs.\textsuperscript{189} The FTC consent decree went on to (1) require that the carriage terms be subject to FTC approval, (2) prohibit the new firm from interfering with content delivered via its facilities by non-affiliated ISPs, and (3) require the new firm to market and offer AOL’s DSL services in Time Warner cable areas in the same way that the new firm markets and offers AOL service to Time Warner cable subscribers.\textsuperscript{190} The conditions are to remain in effect for five years.\textsuperscript{191}

Yet another distinction between the two AT&T deals and the AOL/Time Warner transaction was that, in the case of the latter, the applicants seeking merger approval announced early on that they had reached their own agreement — memorialized in a “Memorandum of Understanding” or “MOU” — that committed them to opening the new firm’s broadband cable facilities to several unaffiliated ISPs on terms that would not discriminate based on their affiliation status.\textsuperscript{192} The MOU provided that there would be no fixed limit on the number of ISPs using Time Warner cable systems but stated the number may be limited based on quality of service considerations and technical limitations.\textsuperscript{193} The MOU also committed the new firm to allowing ISPs the opportunity to maintain a “direct relationship” with the consumer for billing and collection.\textsuperscript{194}

Against this background, the FCC changed its own stance toward open access conditions. The agency asserted that “the circumstances presented by these applications are dramatically different from those presented in our former [AT&T] cases, and compel a different result . . . . [N]one of the prior mergers involved a comparable combination of assets or a comparable potential impact on competition among broadband ISPs.”\textsuperscript{195} The FCC also noted that AOL, as the nation’s biggest narrowband ISP, had been both a “leading advocate” for open access and, pre-merger, had been a significant force in spurring telephone companies to deploy DSL quickly — the latter of which, of course, remained a prominent goal for the agency.\textsuperscript{196}

The Commission also apparently decided it was time to consider a big transaction — especially one touted as the first to marry old and new media — from the broader perspective of U.S. telecommunications policy generally:

This proposed merger at this particular point raises a number of issues with

\textsuperscript{189} FTC Press Release at 2; FTC Decision at 6-8.
\textsuperscript{190} FTC Press Release at 2; FTC Decision at 6-8.
\textsuperscript{191} FTC Press Release at 2; FTC Decision at 6-8.
\textsuperscript{193} MOU at 1, ¶ 4.
\textsuperscript{194} Id. at 2, ¶ 9.
\textsuperscript{195} AOL/Time Warner Order, ¶ 54.
\textsuperscript{196} Id.
respect to the policies of the Communications Act that have generated intense public comment. The Internet is widely recognized as a major source of innovation and economic growth in recent years. The conditions which allowed that explosive growth and innovation to occur included substantial initial public investment and an architecture that encouraged innovation by reducing barriers to entry and ensuring competition on the merits. Competition among narrowband ISPs has been open because of the common carrier telephone network over which they offer their services. As already noted, the proposed merger has been motivated in large part by the anticipated migration of ISPs' customers from the regulated common carrier telephone network to broadband conduits, primarily cable systems, which are not common carriers. The policies of the Communications Act that are potentially implicated by this shift, and by this proposed merger, include the preference for competitive telecommunications markets, the existence of diverse platforms and providers, the promotion of innovation, and rapid deployment of advanced telecommunications services.\(^{197}\)

After having avoided the market definition issue for the two AT&T proceedings, the FCC now concluded that "high speed Internet access services" was a separate market for competition analysis.\(^{198}\) (After both of the expert antitrust agencies had concluded that broadband and narrowband were separate markets, it would have been difficult for the FCC could have delayed this determination much longer.)\(^{199}\) The Commission found it "particularly significant" that "high-speed Internet access services include features unavailable over narrowband, such as access to high-bandwidth content that is impractical over dial-up connections."\(^{200}\) It noted that the higher bandwidth made practical the Internet's promise for "becoming a multimedia experience," with full-motion video, clear audio, and detailed text and pictorial resolutions to support such activities as telemedicine and distance learning.\(^{201}\) The agency then determined that "[t]he existence of high-speed transmission is necessary to spur development of such applications, and consumers with narrowband connectivity are unable to experience (or in some instances even access) such content in the manner intended, i.e., rapidly and in real-time."\(^{202}\) The FCC reserved the right, however, not to extend its market definition determination broadly into other proceedings — including the pending Open Access Inquiry.\(^{203}\)

Having adopted a new market definition, the Commission then concluded that "the proposed merger would give AOL Time Warner the ability and

\(^{197}\) Id. \(\S\) 12.

\(^{198}\) Id. \(\S\) 69.

\(^{199}\) The FCC indirectly acknowledged in a footnote that it was essentially conceding a market definition debate that no longer was in issue. See id. at n.202 ("Although the record in this proceeding does not reflect much debate over this question, it has engendered considerable disagreement in other recent proceedings before the Commission.").

\(^{200}\) Id. \(\S\) 69.

\(^{201}\) AOL/Time Warner Order, \(\S\) 69.

\(^{202}\) Id.

\(^{203}\) Id. n.203. As of this writing, it remains to be seen whether the FCC can, or will want to, prevent its recognition of a separate high-speed market in the AOL/Time Warner Order from spilling over
incentive to harm consumers in the residential high-speed Internet access services market by blocking unaffiliated ISPs' access to Time Warner cable facilities and by otherwise discriminating against unaffiliated ISPs in the rates, terms and conditions of access."\textsuperscript{204} It also found that "the merger would make it more likely that AOL Time Warner would be able to solidify its dominance in the high-speed access market by obtaining preferential carriage rights for AOL on the facilities of other cable operators."\textsuperscript{205} The agency did not, however, determine that the new firm or the predecessor companies currently were "dominant" in the provision of high-speed access services. Rather, the FCC concluded that AOL Time Warner could use the combination of Time Warner's broadband cable facilities and AOL's "established brand name and proven marketing acumen" in ISP services generally to harm competition in broadband facility deployment and services.\textsuperscript{206}

\textsuperscript{204} Id. \textsuperscript{18}. With respect to the need for conditions concerning multiple ISP carriage terms, the merging parties' arguments likely were not helped by an ongoing dispute in the spring of 2000 between Time Warner Cable and Disney/ABC about "retransmission consent" terms governing Time Warner's carriage of ABC-owned television stations. Although the dispute had no direct connection to the Internet or ISP issues, Time Warner's decision to temporarily drop ABC's New York TV signal from cable systems there sparked a furor that cast a shadow over the pending merger proceeding. See \textit{Emergency Petition of ABC, Inc. for Declaratory Ruling and Enforcement Order For Violation of Section 76.58 of the Commission's Rules}, 15 F.C.C.R. 7882 (CSB 2000); see also Remarks by Chairman William E. Kennard, Federal Communications Commission, Before the National Cable Television Association, New Orleans, Louisiana, "Lessons from the Front: When is Pulling the Plug the Right Answer?" (May 9, 2000) (characterizing dispute as "a game of brinkmanship [played] at the expense of consumers" and noting that "it is instructive to look at the Internet model and think about how consumers get to choose what and when and where their content is delivered. The openness of the Internet architecture has lent legitimacy to voices that insist that they can and should control what and when and how their content is delivered.").\textsuperscript{205} \textit{AOL/Time Warner Order}, \textsuperscript{111}. The ABC dispute was not explicitly mentioned in the \textit{AOL/Time Warner Order}, but other, more directly relevant issues concerning ISPs' ability to negotiate carriage terms with Time Warner did merit some discussion. See \textit{AOL/Time Warner Order}, \textsuperscript{111}.

\textsuperscript{205} \textit{AOL/Time Warner Order}, \textsuperscript{111}. The agency's "particular" concern was that the merger could "allow[ ] for greater coordinated action between AOL Time Warner and AT&T in the provision of residential high-speed Internet access services." Id. This concern presumably stemmed in part from AOL Time Warner's and AT&T's joint interests in several cable entities, beginning with AT&T's 25% stake — thanks to its acquisition of MediaOne — in Time Warner Entertainment, a cable system and programming subsidiary of Time Warner.

\textsuperscript{206} Id. \textsuperscript{78}. In detailing its reasoning further, the FCC seemingly accepted a speech-diversity rationale, as well as more generalized marketplace protection concerns, for its findings that the AOL/Time Warner merger could harm competition absent the conditions the agency imposed:

The merger would imperil the continued existence of a vibrant and competitive free market for development of the Internet because AOL Time Warner would have the ability and the incentive to discriminate against unaffiliated ISPs on its own cable platform, and to obtain exclusive carriage for its Internet access services on the networks of other cable providers. These outcomes would also thwart the deployment of advanced telecommunications capability to all Americans by limiting choice in the realm of residential high-speed Internet access services and, potentially, by threatening the survival of ISPs unaffiliated with AOL Time Warner as consumers migrate from narrowband to high-speed services. These outcomes would likewise diminish the public's ability to obtain information from diverse sources, as customers of the nation's
While commending AOL and Time Warner for their MOU, the Commission found its terms insufficient to prevent discrimination because it did not address several concerns and was not legally enforceable. Moreover, the FCC noted that “reports” that it received from unaffiliated ISPs about the carriage terms that Time Warner had been proposing “raise doubt regarding the company’s commitment to implement the principles underlying the MOU.”

The FCC then imposed a series of conditions on its approval of the merger which the agency declared were needed to address the harms or potential harms it had identified. The Commission’s list began by incorporating the FTC’s conditions into the FCC grant. The agency also required that (1) the new firm’s obligation to engage in good faith negotiations for unaffiliated ISP carriage include Internet service providers who had only a local and regional presence; (2) the new firm allow non-affiliated ISPs the right to be the “first screen” for Internet access subscribers using the AOL Time Warner cable facilities, the right to have direct billing relationship with customers, and the right to nondiscriminatory technical performance; (3) the new firm provide a neutral means for customers to choose among affiliated and unaffiliated ISP options; and (5) carriage agreements permit the FCC see to the explicit contract terms.

To sum up the evolution of the open access debate through the three key mergers, the direction appears to have moved from one of outright government dismissal of the concept to acceptance of key determinations that would be necessary for an industry-wide resolution of the controversy. These central points include the findings that broadband Internet access is a special market worthy of special consideration; that cable broadband facilities have so far won the deployment race; that the cable broadband infrastructure has the potential to be configured in a way that would not mirror the “open” nature of today’s dial-up narrowband Internet; that a vertically integrated cable broadband facility/ISP second largest cable operator (AOL Time Warner) would have little choice but to access the Internet through service providers affiliated with that entity. Furthermore, as we discuss below, discrimination by AOL Time Warner against unaffiliated ISPs in the market for residential high-speed Internet access services would facilitate discrimination by that company in favor of its own broadband content, a result that could constrain consumers’ access to the “widest possible” array of information over high-speed technology. If, in contrast, AOL Time Warner were obligated to carry multiple, unaffiliated ISPs over its network on non-discriminatory terms, those ISPs could serve as an alternative outlet for non-AOL Time Warner content, making it more likely that AOL Time Warner’s affiliated ISPs would feature such content themselves to remain competitive.

Id. at 61. Compare Cooper, supra note 120, at nn.16-28 and accompanying text.

207 AOL/Time Warner Order, ¶ 111-112.

208 See, e.g., AOL/Time Warner Order, ¶¶ 18, 126. For its legal authority to impose conditions on the merger, the FCC relied on general “public interest standard” found in various provisions of Communications Act, including 47 U.S.C. §§ 151, 214, 303(r), and 310. See, e.g., id. ¶¶ 19-26.

209 See, e.g., AOL/Time Warner Order, ¶ 126.

210 Id.
provider has at least some motive and opportunity for using its control over the
facility to discriminate against or otherwise disadvantage rival Internet content
and applications providers — and that there is some early evidence to suggest
that they might act on those motives and opportunities even though it would not
be "rational," in the economic theory sense, to do so.\footnote{211}

3. The Court Rulings to Date

While the federal regulatory agencies avoided direct confrontation with the
classification issue lurking within the open access debates, recent court decisions
have not. To the contrary, in the absence of expert guidance from the FCC on the
issue, the court decisions have produced inconsistent legal theories. Those
decisions, in turn, are placing pressure on the Commission to step in and resolve
the regulatory classification issue, not simply in the context of the pending Open
Access Inquiry but also because the agency must face various petitions for
interconnection and universal service funding that have arisen since Portland.\footnote{212}
The major court decisions to date are outlined below.

a. AT&T v. City of Portland

The first, and perhaps best known, of the open access cases arose from an
attempt by city officials in Portland, Oregon, to impose open access conditions
on their approval of AT&T's acquisition of the TCI cable system there.\footnote{213}
Overruling the lower court, the U.S. Court of Appeals for the Ninth Circuit ruled
that cable Internet access service provides, in essence, for too much specifically

\footnote{211} Economic-based theories of rational behavior, while elegantly logical, cannot guarantee that
actors in a marketplace will always perceive their self-interests in a rational or logical manner. \textit{Contra} Speta, supra note 26, at 997 (discussing why "economic theory" holds that monopolist
"generally" will have no incentive to harm competition in adjacent markets); see also generally
Speta, supra note 26 at section IV. It may also be the case that players in a particular marketplace
do not perceive that the competitive environment has, in fact, changed and that, as a result, their old
business models and "rational" self-interests should as well. See Lemley & Lessig, supra note 26,
at 15-16. Government regulators therefore are left to wrestle with their best judgments as how soon
rational self-interest can be relied upon to protect the functioning of any particular market. \textit{Cf.}
Broadband Today at 35-36; Feld, supra note 120, at nn.136-4 (discussing cable history, recent
Internet equipment manufacturer marketing, and MFJ findings on AT&T history of discrimination);
Cooper, supra note 120, at nn.121-122 (discussing market analyst's evaluation of cable operation
intent in limiting video streaming to 10-minutes increments).

\footnote{212} \textit{See, e.g.,} Petition of United States Telecom Association for Declaratory Ruling on Universal
Service Contribution Obligations of Cable Operators That Provide Telecommunications Service
(filed Sept. 26, 2000) (seeking ruling in light of \textit{Portland} that provision of "cable broadband
transmission service" triggers funding obligation), available at <http://www.fcc.gov/broadband/
usta_petition_092600.pdf>. The FCC has consolidated the USTA Petition into the \textit{Open Access
Inquiry} in order to seek public comment, see \textit{Open Access Inquiry}, ¶ 20 & nn.40-41, but ISP
requests for interconnection to cable facilities also are pending before both federal and state
regulators. \textit{Id.; see also} Petition of the United States Internet Industry Association for Declaratory
Ruling and Institution of Rulemaking with Respect to Tariffs for Cable Internet Interconnectivity

\footnote{213} \textit{AT&T Corp. v. City of Portland}, 43 F. Supp. 2d 1146 (D. Or. 1999), rev'd, 216 F.3d 871 (9th
Cir. 2000).
targeted and two-way communication than can fit within the limited subscriber interaction provided for in the statutory definition of a "cable service."

The court went on — in a part of the decision criticized by a number of telecommunications law specialists, regardless of their preferred outcome for the open access debate — to try to make sense of the service in the context of the statutory definitions of "telecommunications" and "telecommunications service." Running sub silencio in the Ninth Circuit's ruling on this point is the FCC's old "unbundling" concept: the court distinguished between the cable ISP service's provision to subscribers of Internet transmission over the cable facility from the cable ISP service's offering of content and Internet applications. The first, according to the Ninth Circuit, constitutes "telecommunications service" under the Communications Act, while the second constitutes "information service" under the statute. The appellate court noted that its determination did not necessarily portend the imposition of onerous Title II obligations on cable operators because the Communications Act gave the FCC broad power to forbear from imposing many common carriage rules on telecommunications carriers. The decision was not appealed to the Supreme Court and so has begun to affect federal and state regulators' approach to cable-based Internet access regulation in California, Washington, Oregon, Montana, Idaho, Nevada, and Arizona.

b. Gulf Power Company v. FCC

The first of the regulatory classification cases to go to the Supreme Court is not an open access dispute. Rather, the legal disagreement in the Gulf Power case concerns a rather arcane provision of the Communications Act that regulates the rates that utility companies can charge cable operators and local telephone companies for attaching their lines and equipment to utility companies' poles, conduits or rights of way. In determining whether the FCC had authority to regulate rates for cable operators' pole attachments for supplying Internet access service, the U.S. Court of Appeals for the Eleventh Circuit ruled that cable Internet service fit neither the statutory definition of a "cable service" nor of a "telecommunications service." As to the former, the Eleventh Circuit decided that the 1996 Act's addition of the words "or use" to the statutory definition was a minor amendment that did not justify a major shift in statutory meaning. As to the latter, the appellate panel concluded that the FCC itself had told Congress

214 This criticism of the Ninth Circuit's reasoning is based in the court's apparent misunderstanding that the offering of "telecommunications" does not necessarily constitute the offering of "telecommunications service." For details, see infra Section IV.B.

215 See AT&T Corp. v. City of Portland, 216 F. 3d 871, 877 (9th Cir. 2000).

216 See, e.g., Ted Hearn et al., Portland Case Has Impact, MULTICHANNEL NEWS, July 3, 2000 (quoting open access advocate suggesting that, in the Ninth Circuit, "an ISP can request interconnection and nondiscriminatory access" to broadband cable facilities and "[i]f talks fail, the ISP can seek arbitration from state regulators").

217 Gulf Power Co. v. FCC, 208 F.3d 1263 (11th Cir. 2000), rev. pending sub nom. NCTA v. Gulf Power Co., Dkt. No. 00-843 (cert. granted, 121 S. Ct. 879) (2001)).

218 Gulf Power Co. v. FCC, 208 F.3d 1263, 1276-77 (11th Cir. 2000).
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(in the 1998 Universal Service Report) that Internet access services were not telecommunications services but rather were properly classified as "information services."219

The ruling was recently stayed pending the high court's review, which is set for argument in the 2001-2002 term. It is not clear whether the justices will weigh in on the classification issue. Arguably they do not need to in order to construe the statute to nonetheless give the FCC some authority to scrutinize pole attachment rates, and the agency has specifically urged the Court to take that course — and leave the classification issue to the Commission to decide.220

c. MediaOne Group v. County of Henrico

Another open access case is now before the U.S. Court of Appeals for the Fourth Circuit. That dispute centers on the attempt by Henrico County, Va., officials to impose open access conditions on their approval of AT&T's acquisition of MediaOne cable systems in the Richmond area. The U.S. District Court for the Eastern District of Virginia ruled that the Internet service at issue met the statutory definition of a "cable service" — but also ruled that the county's effort to impose open access upon cable operators constituted a statutorily impermissible attempt to force cable operators to provide "telecommunications facilities."221 The apparent internal inconsistency of this reasoning seems to rest on the district judge's factually obtuse description of the cable ISP services. The decision notes that the affiliated ISP provides "news, commentary, games, and other proprietary content with which subscribers interact as well as Internet access."222 The implication seems to be that the former are akin to the "video programming" or "other programming" content specified in the cable definition, but the district judge does not explain why the e-mail, chat rooms, and other two-way communications services also encompassed within the affiliated ISP service does not take it out of the cable classification.

In the pending appeal, the FCC filed an amicus brief urging the Fourth Circuit to declare that Henrico County has no power, as a local franchise authority, to impose an open access condition.223 The Commission contends that the court need not, and should not, decide the classification issue in order to resolve the question about a local franchise authority's power to mandate open access in the context of a franchise transfer proceeding.224 The agency warned the court that addressing the larger classification controversy "could have profound and largely unforeseen regulatory consequence in a variety of regulatory contexts."225 The FCC went on to note that the agency "has not itself

219 Id. at 1277.
221 MediaOne Group, Inc., et al. v. County of Henrico, 97 F. Supp. 2d 712 (E.D.Va. 2000), appeal pending, No. 00-1680 (4th Cir.).
222 MediaOne Group, 97 F. Supp. 2d at 715.
224 Id. at 13-14.
225 Id.
resolved" that exceptionally complex dispute, although it may well do so in the near future.226

d. Comcast Cablevision v. Broward County

Yet another district court decision, also now on appeal, has added further confusion to the open access debate. But the dispute in Comcast Cablevision focuses solely on First Amendment issues.227 The Southern District Court for Florida ruled that the county's open access ordinance is an unconstitutional restraint on cable operators' free speech and free press rights.228 The ruling makes no mention of the regulatory classification issues under the Communications Act and cites none of the recent court decisions on open access or the classification issues — not even Gulf Power, which is direct precedent for this court.

Although the decision notes in passing that Internet access services involve two-way communications and access to content generated outside the cable operator's control, the judge did not factor these points into his analysis. The court also rejected, without much discussion, the county's contention that cable-based Internet access service should be perceived as having a transport component separate from the Internet-based content.229 (The court did cite FCC precedent, however, for the propositions that a high-speed cable system was not "a unique facility" and that cable was not in a position to monopolize the market for high-speed communications services because local telephone companies' DSL service was a viable alternative.)230

* * *

In addition to these decisions, other court rulings raise significant federal/state jurisdictional issues that could bear on the regulatory classification question, as well as the regulatory parity issue.231 And, whatever else one may

226 Id. at 14.
228 The decision turns on the district court's assumption that a cable operator's offering of Internet access service is a speech activity akin to its offering of video programming services such as HBO, VH1 and CNN. The judge placed special emphasis on the cable-affiliated ISP's first screen, which he analogized to publications such as traditional newspapers both as to the editorial function of selecting content and to the generation of advertising revenue to support the speech activities. Id. at Sections III.C, III.D.
229 Id. at Section III.C.
230 Id. at Section III.A, III.F.
231 See Bell Atlantic Telephone Companies v. FCC, 206 F.3d 1, (D.C. Cir. 2000) (calling into question the FCC's determination that Internet access services provided by telecommunications carriers are jurisdictionally interstate, and thus subject solely to federal regulation rather than shared federal/state regulation); Ass'n of Communications Enterprises v. FCC, 235 F.3d 662 (D.C. Cir. 2001) (holding that 1996 Act requires that incumbent local exchange carrier's DSL offering be subject to Title II resale mandate).
make of the contradictory court rulings, most observers likely would agree that they illustrate the need for the FCC to address the classification problem soon.

4. The FCC’s Opening Step Toward a Rulemaking Proceeding

The Commission in September 2000 opened a proceeding that eventually may lead to a decision on how high-speed Internet access services provided via cable facilities — and perhaps other facilities — should fit within the existing regulatory classification scheme. The Open Access Inquiry does an admirable job of laying out all the main questions surrounding the issue, along with many of the potential ramifications that might come from the answers to those questions.

The agency opened up the floor by asking whether open access a desirable policy result; whether there should be a uniform regulatory approach applicable to all high-speed Internet access, regardless of the technology used; and what technological issues would need to be addressed as part of any open access framework. But although the FCC seeks comment on the appropriate legal and policy approach for high-speed Internet service provided over various platforms (cable, DSL, satellite, wireless), the focus is largely on cable systems. The agency’s detailed questions fall into three basic categories:

How should “cable modem service” be classified under the Communications Act? Should the Commission treat it as a Title VI cable service, a Title II telecommunications service, a Title I information service, or as something else?

Which of the following open access models would be best? Should (1) ISPs purchase transmission capability and customer access from cable operator on a nondiscriminatory basis, with the cable operator managing the network on a nondiscriminatory basis; or (2) should that basic approach be modified to substitute an affiliated or preferred ISP as manager of the network; or (3) should ISPs obtain access to the cable modem platform according to agreements negotiated between those ISPs and cable operators; or (4) should the FCC adopt another model?

If the classification issue is settled, what should the FCC do next? Depending on whether the Commission even reaches a decision on the classification —

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232 In its Open Access Inquiry, the agency employs terminology that does not correspond to the more common labels used for the cable transmission facility and the Internet access service that “rides” on that facility. The FCC uses the term “cable modem platform” for the underlying transport facilities from the end user to the cable headend, CMTS, or point of interconnection with an ISP. The agency uses the term “cable modem service” to identify the service that provides an end user a connection from their computer to the Internet (through an ISP) via the cable modem platform’s “last-mile” link. Open Access Inquiry, ¶ 1, n.1.

233 Id. ¶ 4, 32-33, 43-46.

234 Id. ¶ 15-24.

235 Id.

236 Id. ¶ 30-31.

237 Id. ¶ 50-56.
which, as a procedural matter, the inquiry proceeding does not require — should the agency continue its current “hands-off” approach or initiate a rulemaking proceeding? And if the agency decides that Title II is the proper regulatory classification, should the agency exercise its forbearance authority?

The two rounds of official comments in December 2000-January 2001 attracted more than 150 submissions — and the proceeding remains open for extensive “ex parte” submissions by any interested entity for an indefinite time to come. As might be expected, the substance of the comments to date reflect divisions along industry lines, though there are instances of difference there as well. A brief summary of some of the major comments follows.

a. Cable Interests

Cable operators almost uniformly contend that cable-based Internet access service — which they mostly termed “cable modem service” — fell within the statutory definition of “cable service” in the Communications Act. There is some disagreement, however, as to the clarity of the statute, including whether the 1996 Act amendment of the definition and legislative history is key to the argument. Nevertheless, the consequence of that classification, cable operators and National Cable Television Association agree, is that the FCC is barred by statute from imposing “forced access” upon cable operators that offered cable modem service.

Cable interests are more divergent in their approach to the issue of cable modem service as a Title I “information service” which, as all commenters note, the FCC historically has refrained from regulating. The general consensus is that cable modem service is both a “cable service” and an “information service,” but they disagree as to whether the Title I approach is more of a fall-back position or more appropriate than Title VI. Most acknowledge that the information services classification raises the issue of a possible separate regulatory treatment of the transport conduit and the data and applications riding on top of it, but they argue that (1) FCC precedent was not to regulate the underlying transmission facility unless provided by a local exchange carrier (“LEC”), and (2) the competitive dynamic of the current broadband marketplace makes any such

238 See 47 C.F.R. §§ 1.430, 1.411, 1.412 (inquiry proceedings “do not result in the adoption of rules” but instead lead to formal proceedings to consider proposed rules).

239 A recent search of the FCC’s comments database for the proceeding indicated that there have been more than 200 submissions in the Open Access Inquiry to date. See <http://gullfoss2.fcc.gov/cgi-bin/websql/prod/ecfs/comsrch_v2.hts> (visited March 11, 2001).

240 Detailed summaries of the comments and reply comments filed in the formal rounds of the Open Access Inquiry are on file with the law review.

241 See, e.g., Comments of the National Cable Television Ass’n, GN Docket No. 00-185, 2, 5, 6-8 (filed Dec. 1, 2000); AT&T Comments, at 8, 9-11, 12-15.

242 See, e.g., NCTA Comments, at 8-13 (discussing alternative “information services” classification); Comments of Cox Communications, Inc., GN Docket No. 00-185, at 26-29 (filed Dec. 1, 2000) (same).

243 See, e.g., Cox Comments, at 34-45.

244 See, e.g., Cox Comments, at 26.
regulation unnecessary.245 Even if the content and conduit "inputs" of cable modem service are conceptually separate, many cable operators contend that the transport component is "private carriage" rather than "common carriage."246

Cable operators who addressed classification issues argue that cable modem service is not a Title II "telecommunications service" — generally based on the contention that the offering does not fit the statutory definition of a pure-play transport service "offered for a fee to the public."247 Rather, cable commenters stress, cable modem service is a unified offering that cannot be split into component parts, either as a conceptual matter or under existing FCC precedent.248

NCTA also took on the "regulatory parity" issue between cable and telephony, arguing that there was considerable existing precedent for treating "functionally similar" services differently (citing, for example, broadcasting and cable).249 NCTA asserts that the very different regulatory histories of cable and telephony justified the different treatment, particularly because the two industries operated under different financial risk environments.250 Moreover, NCTA contends, because Congress made the decision to treat the two differently, the FCC lacks power to do otherwise.251

b. Telephony Interests

Commenters from this industry segment include large incumbent LECs, competitive LECs, and long-distance providers. Telephony interests uniformly contend that cable-based Internet access service cannot be classified as a "cable service" because the offering does not meet the statutory definition; commenters stress that much, if not all, of Internet access involved two-way transmission service of content that the cable operator had no part in devising or selecting.252 They also argue that the degree of interaction inherent in Internet access service greatly exceeded Congress' amendment of the cable definition, which telephony interests assert was limited to interaction needed to select traditional programming content.253

As for the alternative classification options, there is a loose consensus among telephony commenters that cable-based Internet access fits within both the Title II "telecommunications service" and the Title I "information services"
However, individual commenters take quite different approaches to some of the issues. For example, some urge the FCC to recognize cable-based Internet access as an unregulated Title I service — and then to deregulate the ILECs’ provision of DSL service; they consider Title II a less preferable alternative that, if adopted, should be accompanied by a large modicum of forbearance for all broadband providers. Others argue that the FCC has no choice under the statute but to recognize cable-based Internet access as a Title II service. They differ, however, on the degree of forbearance that should accompany the classification.

Regardless of their explicit positions on the classification issues, all commenters from the telephone arena stress that the FCC’s current disparate treatment of telephony and cable providers of broadband is inequitable, if not also contrary to law.

c. Internet Service Providers

Many ISPs who submitted comments chose to avoid the regulatory classification question. Of those that did not, several agreed that cable-based Internet access meets the Title II “telecommunications service” definition, for largely the same reasons advanced by the telephony interests. These commenters also concur that the content and other data delivered via the cable plant should be classified as an “information service” severable from the underlying Title II transport service.

A good number of ISP commenters urge the agency to take some sort of formal action to regulate access to cable facilities. Many ISPs devote the bulk of their submissions to detailing the various protections that they advocate be part of any open access policy that the FCC adopts, regardless of the classification issue. Although these commenters broadly endorse some form of non-discrimination and interconnection requirements, they differ on the details.

Even those ISPs that did not spell out their particular open access wish list generally argue that the FCC must regulate cable broadband and DSL in an

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254 See, e.g., id. at 38-45.
255 See, e.g., id. at 12,14-15.
256 See, e.g., Comments of Verizon Communications, GN Docket No. 00-185, at 11-16 (filed Dec. 1, 2000).
257 See, e.g., Comptel Comments, at 47; Verizon Comments, at 21-28.
258 See, e.g., Comments of Cable and Wireless, GN Docket No. 00-185, at 17-18 (filed Dec. 1, 2000).
259 Id.
262 See, e.g., Comments of Questar Network Services, GN Docket No. 00-185, at 1-2 (filed Dec. 1, 2000).
263 See, e.g., OpenNet Comments, at 22-24.
264 See, e.g., Comments of A+ Net Internet, GN Docket No. 00-185, at 4-10 (filed Dec. 1, 2000); Comments of Big Planet, Inc., GN Docket No. 00-185, at 13, 15 (filed Dec. 1, 2000).
Several express skepticism as to how well market forces could work to foster open access in the absence of FCC action.\(^{266}\)

**d. State and Local Regulators**

Most commenters who filed on behalf of state and local governments contend that cable modem services should be classified as Title VI "cable services" — a result that, not surprisingly, might leave them with some jurisdiction to regulate in the area.\(^ {267}\) These commenters generally also contend that cable modem services do not meet the statutory definition of "telecommunications service."\(^ {268}\) Several further argue that the revenues that operators receive from cable modem services should be subject to franchise fees.\(^ {269}\)

**e. Consumer Interest Groups**

Commenters that fall into this camp are sharply divided. One side might be tagged — perhaps not completely accurately — as favoring a libertarian approach: They urge the FCC to stick to its "hands off," market-based policy, at least for the time being.\(^ {270}\) These commenters tend to avoid addressing the regulatory classification issue at all.\(^ {271}\)

In contrast, a group of more pro-regulatory consumer advocates contend that cable Internet access service (or at least the transport element of it) falls under the rubric of "telecommunications services."\(^ {272}\) Several of these commenters propose fairly detailed models for open access with a number of nondiscrimination conditions.\(^ {273}\)

* * *

Against this historically long and procedurally convoluted background, the discussion in the next section will attempt to provide the FCC with some viable suggestions for making its way out of the legal morass.

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\(^{265}\) See, e.g., *OpenNet Comments*, at 13.

\(^{266}\) See, e.g., *Earthlink Comments*, at 58. But see e.g., Comments of Excite@Home, GN Docket No. 00-185, at 14-15 (filed Dec. 1, 2000).

\(^{267}\) See, e.g., Comments of the National Ass’n of Telecommunications Officers and Advisors, *et al.*., GN Docket No. 00-185, at 7-10, 18-22 (filed Dec. 1, 2000).


\(^{269}\) See, e.g., *NCL Comments*, at 12-13.

\(^{270}\) See, e.g., Comments of the Competition Policy Institute, GN Docket No. 00-185, at 2-8 (filed Dec. 1, 2000).

\(^{271}\) See, e.g., Comments of Annenberg Public Policy Center, GN Docket No. 00-185, at 1-9 (filed Dec. 1, 2000).

\(^{272}\) See *APT Comments*, at 3, 8-9.

\(^{273}\) See, e.g., *Consumers Union Comments*, at 21-22.
IV. ANALYSIS: DOES CABLE INTERNET ACCESS FIT INTO THE EXISTING REGULATORY CLASSIFICATIONS?

This article does not provide a long trek through the development of the telephony and cable regulation simply as a historical exercise. The point I have tried to make is that the legacy regulatory constructs are still very much with us, regardless of the technological progress of the past decade and despite a mammoth legislative effort to revise the major U.S. communications statute. Existing business models and lawmakers' recent overhaul of the Communications Act continue to reflect the old concepts of basic telephone service as a point-to-point, two-way conduit whose content is determined by the users and cable service as a point-to-multipoint, multichannel, one way communications network with the facility operator as speaker.

Of course, there were changes made at the margins of these old concepts over time. Perhaps the most significant was the FCC's decades-old distinction between "enhanced" and "basic" services. This elaboration on the telephony concept was devised at the beginning of the computer era, when there was essentially one monopoly facility provider — the old Ma Bell — upon whom the upstart "enhanced" service providers depended for the transport component of their integrated data-processing-and-transport offerings. The regulatory distinction made its way, under the different labels of "information service" and "telecommunications service," into the antitrust consent decree that broke up the Bell System and then later into the 1996 Act, which originally was devised to mop up after the consent decree. But there remains a tension, in our new world of multiple facility providers and Internet-delivered services, as to how the amended statute should shape regulation of that still-all-important transport component.

In contrast, changes at the margins of the cable service concept may be profound, or not, depending on the meaning of two small words inserted into the statutory definition with little recorded discussion or debate. Lawmakers understood that some degree of convergence was coming to cable, in the form of

274 Cf. Comstock & Butler, supra note 96, at 12 (FCC's "core assumption — that ISPs generally do not own facilities — is no longer valid with respect to some national players"); Roberts, supra note 109, at 175 (noting that 1996 Act revisions "do not negate the subtle . . . theory . . . [that] the definitions" of telecommunications service and information service "do not overlap, but the dividing line between them has been moved from the position outlined by the FCC before the 1996 Act was passed").

275 In re Federal-State Joint Board on Universal Service (Report to Congress), 13 F.C.C.R. 11501, ¶ 13 (1998) ("Universal Service Report") (reiterating FCC's determination that "Congress intended the categories of 'telecommunications service' and 'information service' to be mutually exclusive, like the definitions of 'basic service' and 'enhanced service' developed in our Computer II proceeding, and the definitions of 'telecommunications' and 'information service' developed in the Modification of Final Judgment that divested the Bell Operating Companies from AT&T") id. ¶ 39 ("in defining 'telecommunications' and 'information services,' Congress built upon the MFJ and the Commission's prior deregulatory actions in Computer II."). Some have argued, however, that Congress in the 1996 Act intended a more fundamental alteration of the old regulatory constructs. See generally Comstock & Butler, supra note 96 (contending that lawmakers intended to regulate the transmission provided by facilities-based communications service providers in the same manner).
some degree of two-way interactivity, and they plainly made some effort to accommodate at least some of it. But there remains a tension as to how much may be too much, given that the amended statute still enshrines the old telephony and cable concepts.

Is there a need to resolve these regulatory tensions when it comes to cable offering of Internet access service — and, if so, can the tensions be resolved under the Communications Act in its current form? As to the first question, the discussion below assumes that the combined forces of the ongoing litigation and political pressure will force the FCC to provide an answer to the continuing classification debate. (The former chairman of the agency already has warned the cable industry as much.) As to the second question, I consider the three main classification options and conclude that two of them hold some promise for Commission resolution of the open access controversy. But the statute does not equip the agency to perform a full-scale exorcism of the lingering elements of the old telephony and cable conceptual division that seem not to work well in an Internet-driven communications marketplace. Particularly if regulatory parity is the ultimate objective, Congress must step in.

* * *

Before I delve into substantive arguments on how cable provision of Internet access fits within the classification options, it is worth reiterating — as the FCC itself has done repeatedly — that there is no current consensus on what the term "open access" means. Thus, contrary to the implications in some of the

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276 As several academic commentators have pointed out, by continuing to do nothing, policymakers are in fact making a choice. See Weiser, supra note 109 n.116 (agreeing with Lessig in urging "citizens and policymakers not [to] make the mistake of thinking that doing nothing with respect to the internet will enable a ‘natural’ course of action").

277 See Kennard Cable Speech, supra note 179 (advising industry group to not “underestimate the power of this issue to capture the attention, and the ire, of American consumers” and to "[r]emember the lessons of the Cable Act of 1992, when your industry went into denial and paid a heavy price").

278 Accord, Roberts, supra note 109, at 148-49 (noting that “[c]ritics have already begun to point out . . . that the [1996] Act was obsolete when it was passed, and that it failed to correctly predict where the combination of global business pressures and technological advances would take the newly converging telecommunications industry"). The utility of, and need for, congressional action would not mean that it would occur quickly — or that members of the House and Senate will not in the meantime try to shape the FCC’s interpretation of the current statute through public or private criticism. See Roberts, supra note 109, at 162 (discussing the time-honored tradition of jawboning).

279 Some efforts in this direction were underway in the 106th Congress, although they did not advance far. See, e.g., Internet Growth and Development Act, H.R. 1685, 106th Cong. (1999); Internet Freedom Act, H.R. 1686, 106th Cong. (1999) (both addressing the open access issue). Discussions are now underway in the 107th Congress on the same topic, although at least some key leaders appear to be more interested in addressing the regulatory parity angle. See, e.g., Tauzin Aide Says New HR-2420 Will Emerge Soon, Communications Daily, Mar. 2, 2001 (reporting that “House Commerce Committee will introduce new bill ‘in next month or so’ to replace last session’s [H.R.] 2420 that would give Bells more regulatory freedom for data transmission").

280 Open Access Inquiry, ¶ 26-28; Broadband Today at 36-38. See also, e.g., Weiser, supra note
academic literature, fitting cable operators' offering of Internet access services into any one classification does not necessarily carry with it a rigid construct for the open access regulations that might apply.\(^{281}\)

**A. Regulatory Scenario 1: Cable Provision of Internet Access Classified as Title VI "Cable Service"**

For this scenario, the threshold question looms the largest: When a cable operator, working alone or with an affiliated ISP, offers Internet access service to subscribers, can the offering be classified as a "cable service" under the Communications Act? Determining the answer requires detailed digging with traditional tools of statutory construction — followed by an evaluation of the best-reasoned judgment calls.

As amended in 1996, the statutory definition currently states that "cable service" means "(A) the one-way transmission to subscribers of (i) video programming, or (ii) other programming service, and (B) subscriber interaction, if any, which is required for the selection or use of such video programming or other programming service."\(^{282}\) The definition appears still to grounded in the old concept of cable as primarily a video programming service flowing "one way," that is, mainly from the cable operator to its subscribers.\(^{283}\) The statute goes on to define "video programming service" in a way that forecloses it from applying to the array of data communications that flow across the Internet.\(^{284}\)

Consequently, if Internet access service fits into the definition at all, it must be as "other programming" for which a degree of subscriber interaction is

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\(^{109}\) at 826 (discussing "three very different phenomena" within the open access debate: control of key facilities, open and ubiquitous access to competing services, and "a 'marketplace of ideas' concern").

\(^{281}\) For example, Professor Speta suggests that "an open access requirement both requires the cable system to interconnect with all other ISPs and content providers and to carry their services on a nondiscriminatory basis." Speta, Vertical Dimension, supra note 26, at 990 (emphasis added). If by interconnection Speta means an unaffiliated ISP’s direct linkage to subscribers via the cable system’s last-mile connection — a concept more akin to unbundling — Title II would not necessarily mandate such universal connections. See infra Section IV.B.

\(^{282}\) 47 U.S.C. § 522(5).

\(^{283}\) Cf. Comstock & Butler, supra note 96, at 15. The definition of "cable system," which has not been amended since 1984, also seems to reflect the origins of cable service as a one-way transmission medium localized to each community it served. The statutory term refers to "a set of closed transmission paths and associated signal generation, reception, and control equipment," 47 U.S.C. § 522(6) (emphasis added), which could be read to mean not interconnected as are local telephone exchange networks. The FCC has not interpreted the statute this way, but instead has said the term is meant to distinguish wire-based transmission systems from "radiating," i.e., radio wave-based transmission systems. See Definition of a Cable Television System, 5 F.C.C.R. 7638, ¶ 7 (1990) (acknowledging that neither that statute nor direct legislative history explains the term but relying on unenacted legislation for its interpretation).

\(^{284}\) The term "video programming" is defined as "programming provided by, or generally considered comparable to programming provided by, a television broadcast station." 47 U.S.C. § 522(20). See also note 139 (discussing FCC rejection of the so-called "IVI Petition" seeking unaffiliated ISP access to cable system under statutory "leased access" provision that affords some limited carriage rights to unaffiliated video programmers).
permissible. Much of the current argument over cable open access concerns the proper construction of “other programming,” defined in the statute as “information that a cable operator makes available to all subscribers generally.”

Many participants in the debate contend that such popular Internet services as e-mail cannot be fit into this definition — a point that even some cable interests do not strenuously contest.

Even more of the recent debate has focused on the 1996 Act addition of the words “or use” to subsection (B) of the cable service definition. Just how much did that amendment change the old cable concept still largely reflected in the statute?

Not much, according to the two appellate courts that have considered the matter thus far. Although the Ninth Circuit in the Portland case and the Eleventh Circuit in the Gulf Power case did not agree on what cable-based Internet access service is, from a regulatory classification standpoint, they concurred on what it is not: a Title VI offering. (In reaching their decisions, the two courts were put in a rather unusual position for a case turning on the fine points of a statute administered by an expert agency; the more common dispute of this type turns on the question of the reasonableness of the agency’s interpretation of the law. But there were no questions in either Portland or Gulf Power along the Chevron deference line because, of course, there was no agency interpretation of the provisions at issue to which to defer.)

The Ninth Circuit looked at the statutory definition and concluded that “[t]he essence of cable service . . . is one-way transmission of programming to subscribers generally.” Then, apparently looking primarily to the “plain meaning” of the statutory language, the court found that cable offering of Internet access “is not one-way and general, but interactive and individual beyond the ‘subscriber interaction’ contemplated by the statute.” It did not spend time closely parsing the legislative history to try to determine just where Congress drew the line between an acceptable level of interactivity within the definition and an unacceptable one. Rather, the court simply catalogued a list of typical Internet services involving high degrees of two-way interaction with little or no direct content generated or specifically selected by the cable operator; the accretion of examples served to build an illustrative argument against the cable

285 It appears plain that the term “subscriber interaction” in subsection (B) is subordinate, as a matter of statutory text and design, to subsection (A) and so cannot be relied upon alone to pull Internet services within the cable service definition. Accord, Comstock & Butler, supra note 96, at 13; Hendrickson, supra note 28, at 770; Duffy, supra note 13, at 1269.


287 Compare Comments of SBC Communications & BellSouth Corporation, GN Docket No. 00-185, at 43 (because Internet access entails numerous services that are not available to all subscribers generally, it does not fit within statutory definition of cable service) with AT&T Comments, at 9-11 (characterizing e-mail as “incidental” to cable Internet access service). See also, e.g., Apps & Dailey, supra note 11, at 690 (noting that Congress did not delete phrase “one-way transmission” from “cable service” and asserting “information services, such as Internet access, involve two-way communications”).

288 AT&T Corp., 216 F. 3d at 876.

289 Id.
After its plain-meaning analysis, the Ninth Circuit looked to the overall design of Title VI — a statutory tool that has often been overlooked by those debating the matter before the FCC. The court pointed out that "applying the carefully tailored scheme of cable television regulation to cable broadband Internet access would lead to absurd results, inconsistent with the statutory structure." Finally, the Ninth Circuit seemed to hearken back to the one-way versus two-way historical roots of communications law in concluding that "the communication concepts are distinct in both a practical and a technical sense. Surfing cable channels is one thing; surfing the Internet over a cable broadband connection is quite another."

The Eleventh Circuit took a different route in its construction of the statutory term "cable service." The panel in Gulf Power apparently concluded sub silencio that the plain meaning of the text was unclear, because it turned immediately to legislative history for guidance. The court consulted the committee report for the House bill which became the 1996 Act and found "only [one] sentence in the legislative history that attempts to explain Congress' change to the definition of 'cable service.'" That sentence explained that the inclusion of the words "or use" was meant to reflect "the evolution of video programming toward interactive services." The Eleventh Circuit found the phrase itself to be ambiguous; this is an apt finding, as further review of the legislative history below indicates. Yet the court drew a conclusion based on the brevity of this discussion: "[I]t is clear from Congress' lack of discussion of this change that it was minor in both language and intent." In doing so, the panel pulled out a

According to the Ninth Circuit:

Accessing Web pages, navigating the Web's hypertext links, corresponding via e-mail, and participating in live chat groups involve two-way communication and information exchange unmatched by the act of electing to receive a one-way transmission of cable or pay-per-view television programming. And unlike transmission of a cable television signal, communication with a Web site involves a series of connections involving two-way information exchange and storage, even when a user views seemingly static content.

Id. at 876-77.

A court "[w]hen interpreting a statute, . . . will not look merely to a particular clause in which general words may be used, but will take in connection with it the whole statute (or statutes on the same subject) and the objects and policy of the law, as indicated by its various provisions, and give to it such construction as will carry into execution the will of the Legislature." Kokoszka v. Bedford, 417 U.S. 642, 650 (1974) (quoting Brown v. Duchesne, 60 U.S. (19 How.) 183, 194 (1857)); accord Regions Hosp. v. Shalala, 118 S. Ct. 909, 917 n.5 (1998) ("context counts, and . . . [i]n expounding a statute, we must not be guided by a single sentence or member of a sentence, but look to the provisions of the whole law, and to its object and policy.")(quoting United States Nat'l Bank v. Independent Ins. Agents of Am., Inc., 508 U.S. 439, 455 (1993)) (internal punctuation marks omitted).
traditionally potent statutory construction argument — that if lawmakers had meant to make a dramatic change in the meaning of the term, it would have spoken unambiguously:

If Congress by the addition of these two words meant to expand the scope of the “cable service” definition from its traditional video base to include all interactive services, video and non-video, it would have said so. Without any substantive comment, we will not read this minor change to effectuate a major statutory shift. 297

The Eleventh Circuit also refused to construe the term “other programming” broadly enough to include Internet services. The court pointed out that the words has been part of the definition of “cable service” from the beginning, “when the Internet was only a tool for researchers and the military.” 298 The panel therefore concluded that the legislative drafters “could not have intended it to cover Internet services provided by cable companies” and would not so “radically expand the scope of the definition . . . without some substantive indication from Congress that this is indeed its intent.” 299 The Eleventh Circuit backed up its rationale by noting that the FCC itself told Congress recently that Internet service providers provide “information services,” which the court apparently inferred as meaning “not cable service.”

Both of the court analyses can be faulted for missing some key nuances surrounding the legislative development of the “cable service” definition. Whether these nuances should trump the plain meaning of text, however — including the provision’s place in the overall statutory scheme — is another matter. But these nuances are the focus of the arguments in the Open Access Inquiry and so deserve a more detailed examination.

With respect to lawmakers’ addition of the words “or use” to the cable services definition, the Eleventh Circuit concluded that the statute’s “plain language” and the “one sentence explanation” in the legislative history indicate that the expended definition was intended to “allow [cable subscribers] to interact with traditional video programming.” 300 While this interpretation may comport with the plain language of the provision, the full legislative history of the definition raises a problem: It indicates that Congress in 1984 already thought it had allowed for some interactivity — and not only with traditional video programming but with “other programming” as well.

297 Id. (citing Walters v. National Ass’n of Radiation Survivors, 473 U.S. 305, 318 (1985) (stating that without substantive comment “it is generally held that a change during codification is not intended to alter the statute’s scope”) (citing Muniz v. Hoffman, 422 U.S. 454, 467-74 (1975))).

298 Id. at 1277. The Eleventh Circuit apparently was under the impression that the statutory definition of cable service dated to 1978, when the Pole Attachment Act was enacted. This is incorrect; there was no statutory definition of the term until Congress passed the 1984 Cable Act. See supra notes 80-83 and accompanying text. The point, however, basically remains valid; there was no “Internet” in 1984 as we know it now.

299 Id.

300 Id. (citing the Universal Service Report statement that “Internet service providers themselves provide information services . . . .”).

301 Id.
The House committee report that accompanied what became the 1984 Cable Act indicates that lawmakers were aware then that interactive offerings — involving text, video, or both — were new and possibly attractive features being introduced into the marketplace.\textsuperscript{302} (News reports of the time show that many communications and media companies were experimenting with “videotext” and “audiotext” services but these early offerings tended to be of a limited and proprietary nature, in contrast to the wide-open character of today’s Internet.\textsuperscript{303} ) Lawmakers wanted to encourage the emergence of new services without blurring the line between traditional “two-way” telephone transmission service and “one-way” cable service. In trying to illuminate the way that new offerings would fit into the old classifications, the 1984 House Committee Report provides an unusually long and complex discussion.\textsuperscript{304} The report explained that the drafters intended to exempt video programming from common carrier regulation in accordance with the traditional conception that the one-way delivery of television programs, movies, sporting events and the like is not a common carrier activity. Other programming services that make non-video information generally available to all subscribers are included as cable services because they are sufficiently like video programming to warrant a similar regulatory exemption.\textsuperscript{305} The report explains that inclusion in the cable service definition of “other programming service” — which the statute says is “information that a cable


\textsuperscript{303} It is appropriate, under the “originalist” approach to statutory construction favored by Justice Scalia and others, to consider general understandings in the era of the framers of legislation in construing their handiwork. See, e.g., 44 Liquormart v. Rhode Island, 517 U.S. 484, 495-96 (1996) (employing historical review in First Amendment interpretation); H. Jefferson Powell, Rules for Originalists, 73 VA. L. REV. 659 (May 1987) (discussing appropriate methods for using history in statutory interpretation). In 1984, spurred in part by the seeming promise of France Telecom’s “Minitel” data service, a number of prominent U.S. firms tested and/or tried to launch similar offerings. The most touted of these so-called “viewtext” services generally consisted of dedicated terminals linking users to the service provider’s main-frame server; the specific information and data-processing services provided through the service were all chosen by the service provider. See, e.g., Efrem Sigel, Videotex: Into the Cruel World, DATAMATION, Sept. 15, 1984, at 132 (chronicling Knight-Ridder’s difficulties with its “Viewtron” service, launched in an upscale Miami suburb in 1983, “after more than three years of experiments, putting Knight-Ridder in the hole to the tune of $17 million, with an additional $17 million investment slated for 1984”).

Ironically, at least some members of the cable industry in the 1980s — commenting in a then-contentious rulemaking designed to allow telcos somewhat greater freedom to offer multichannel video services — disdained the notion that the emergence of broadband facilities would have much of an impact on their traditional business model. See Telephone Company-Cable Television Cross-Ownership Rules, 3 F.C.C.R. 5849 n.20 (1988) (stating that “[c]able interests have contended that video entertainment programming is the only viable broadband service and that the belief that construction of broadband facilities will lead to new services, broadband or otherwise, is illusory.”).

\textsuperscript{304} The discussion goes on over four single-spaced pages of the report — a veritable tome in comparison to the usual bare-bones references common to most House and Senate committee or conference reports. See H.R. Rep. No. 934 at 41-44.

\textsuperscript{305} H.R. Rep. No. 934 at 41.
operator makes available to all subscribers generally”—requires that that the information not consist of subscriber-specific data.\textsuperscript{306} Thus, if the information is made available only to an individual subscriber or to a discrete group of subscribers, the drafters of the original definition intended to exclude such transmissions from cable service.\textsuperscript{307}

As for the permissible level of interactivity within cable service, the 1984 House Cable Report appears to reflect an effort to hew rather closely to the old “one-way” nature of the service. That effort seems to turn on a distinction between simple, one-way retrieval of generally available information—such as that which would be accessible directly from a content menu devised by the cable operator—and more sophisticated manipulation of data—such as “services providing subscribers with the capacity to engage in transactions or to store, transform, forward, manipulate, or otherwise process information or data would not be cable services.”\textsuperscript{308} In particular, the drafters wished to make clear that “off premises data processing” did not fit within the cable service definition.\textsuperscript{309}

One aspect of this discussion seems particularly relevant in the context of today’s Internet, the utility of which, for most users, depends greatly on the availability of search engines provided either by the user’s ISP or by an independent provider. In 1984, the drafters of the cable service definition explained that the retrieval interaction they meant to include was limited to “simple menu selection” from a menu “already be sorted into a specific, limited number of options [by the cable operator], all of which would themselves be generally available to all subscribers.”\textsuperscript{310} In contrast, subscriber requests for information that triggered computer-generated searches based on specific directives form the individual user would not fall within the cable service definition.\textsuperscript{311}

To flesh out the distinctions that they were trying to draw, the 1984 House drafters provided some examples of what kind of offerings would, and would not, fall within cable service. Cable service could include “video programming, pay-per-view, voter preference polls in the context of a video program video rating services, teletext, one-way transmission of any computer software (including, for example, computer or video games) and one-way videotext services such as news services, stock market information, and on-line airline guides and catalog services that do not allow customer purchases.”\textsuperscript{312} Falling outside of cable service would be “shop-at-home and bank-at-home services, electronic mail, one-way and two-way transmission on [sic] non-video data and information not offered to all subscribers, data processing, video-conferencing, and all voice communications.”\textsuperscript{313} The drafters went on to clarify that cable operators could

\textsuperscript{306} See id. at 41-42 (discussing 47 U.S.C. § 522(14)).
\textsuperscript{307} See id.
\textsuperscript{308} H.R. REP. No. 934 at 42.
\textsuperscript{309} H.R. REP. No. 934 at 42-43.
\textsuperscript{310} H.R. REP. No. 934 at 43-44.
\textsuperscript{311} H.R. REP. No. 934 at 44.
\textsuperscript{312} Id.
\textsuperscript{313} Id.
certainly offer the later services — but the offerings simply wouldn’t be regulated under Title VI.314

In contrast to this long (and, some might say, tortured) explanation of how much interactivity fit within the 1984 definition of cable service, the two-word amendment of the statutory provision got relatively short shrift in 1996. It was, however, a bit more extensive than *Gulf Power* suggests, though not necessarily more illuminating. The Ninth Circuit correctly quoted the House committee report for the 1996 Act, which explained that the change reflected “the evolution of video programming toward interactive services.”315 But the change was also discussed briefly in the report from the House-Senate conference committee, where the two chambers’ similar, but not identical, telecommunications reform bills were reconciled before final passage.

The key passages in the 196 Act Conference Report are excerpted at length below because they are the main basis for the arguments advanced by those advocating a Title VI classification for cable offerings of Internet access service.316 In the discussion on the “Cable Act Reform” section of the legislation, the conferees noted that:

Section 307(a) of the House amendment amends the definition of “cable service” in section 602(6) of the Communications Act by adding “or use” to the definition, reflecting the evolution of video programming toward interactive services.317

Shortly thereafter, the conferees explained they reconciled the differing House and Senate amendments of the cable service definition by

adopt[ing] the House provisions [on Cable Act Reform] with modifications. [The reconciled legislative proposal] adopts the House provision amending the definition of cable service. The conferees intend the amendment to reflect the evolution of cable to include interactive services such as game channels and information services made available to subscribers by the cable operator, as well as enhanced services. This amendment is not intended to affect Federal or State regulation of telecommunications service offered through cable system facilities, or to cause dial-up access to information services over telephone lines to be classified as a cable service.

For close readers, this passage raises many questions: If the conferees were adopting the House amendment to the cable services definition, why did they change the House’s explanation of its meaning — *i.e.*, “evolution of video programming toward interactive services” — to “evolution of cable to include interactive services . . . as well as enhanced services”? The former suggests that the House still drew a line well short of fully interactive services, whatever those might be, but the conferee explanation seems considerably more expansive. It could be that the differences in the “evolution . . . toward” and the “evolution . . .
to include" phrases reflect grammatical clarification efforts rather than substantive changes in meaning. The inclusion of the additional clause concerning "enhanced services" seems to negate that. But yet, given that the same legislation was enshrining the term "information services" into the Communications Act itself, why did the conferees use the FCC's old "enhanced services" terminology instead? And, finally, to reiterate the Eleventh Circuit's point, if the conferees intended to make an expansive change to the statutory meaning of cable service, why didn't they just do so — in the statute itself?

The end result of this more expansive review of legislative history could well be deemed as ambiguous as the Gulf Power panel found its own results to be. For example, even if the "or use" amendment appreciably heightens the degree of permissible interactivity allowed in a Title VI cable service, the 1996 Act did not explicitly purport to amend the meaning of "other programming." The definition therefore may still require an interpretation that falls far short of what most popular ISP offerings include, particularly e-mail and instant messaging services.

Beyond the confusing legislative history, of course, is that a "plain meaning" interpretation of the language and structure of the entire Communications Act, as amended by the 1996 Act, does not necessarily lead to the interpretation that Title VI proponents seek. Without an explicit congressional directive to include "Internet access service" or even "information service" within an expanded "cable service" definition, the courts — and the FCC — must follow the traditional canons of statutory construction and try to read all provisions of the Act in pari materia. The detailed differences between the regulatory schemes governing Title II telecommunications service and Title VI cable services are still in the Communications Act. They continue to reflect some of the old distinctions between two-way transmission of information of the user's own choosing and one-way transmission of information of the network provider's choosing. The 1996 Act (and its legislative history) also reflect lawmakers' hopes and expectations that cable operators would soon enter into the provision of non-Title VI services. If all of these statutory provisions must be read to still have meaning, then the logic of the two appellate court interpretations of "cable service" as excluding Internet access service has force.

The FCC's General Counsel has suggested as much. In the agency's amicus brief to the Ninth Circuit, the Commission's chief lawyer explained that

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318 See Roberts, supra note 109, at 178-79 (noting that "joint statements need not explain each crucial choice made by the conferees, and often for political reasons do not").

319 The Supreme Court has instructed that "[s]tatutory construction is a holistic endeavor. A provision that may seem ambiguous in isolation is often clarified by the remainder of the statutory scheme . . . ." United Savings Assoc. of Texas v. Timbers of Inwood Forest Assoc. Ltd., 484 U.S. 365, 371 (1987). See also, e.g., Promotion of Competitive Networks in Local Telecommunications Markets, WT Docket No. 99-217; CC Docket Nos. 96-98, 88-57, FCC 00-366 n.369 (rel. Oct. 25, 2000) ("We note the in pari materia rule of statutory construction, which states that when a particular statute is ambiguous, statutes which relate to the same subject matter should be read together so that the legislature's intention can be gathered from the whole of the enactments.").

on a conceptual level, an argument can be made that Internet access is more appropriately characterized as an information or telecommunications service than a cable service. At the most basic level, there are two kinds of communications service networks: (1) broadcast (one-to-many) networks, in which the distributors choose the content and sends it to all customers; and (2) switched (one-to-one) networks, in which the customer chooses the content and sends it to the person(s) of his or her choice. The first type of network best describes cable service; the second type of network most accurately depicts telecommunications and information services. Some have argued that Internet access more closely resembles the switched service. However, the Commission has not yet conclusively resolved the issue.\footnote{Brief of the Federal Communications Commission as Amicus Curiae, AT&T Corp. v. City of Portland, No. 99-35609 (submitted in the Ninth Circuit on Apr. 17, 2000). The General Counsel's characterizations of the two fundamental types of networks obviously correspond to the "one-way" and "two-way" characterizations used in this article.}

If, however, Internet access service were properly classified as Internet access service, what would be the effect of that classification on the open access debate? The widely held assumption has been that such a determination would make it extremely difficult, if not impossible, for the FCC to impose any significant kind of open access requirements on cable operators' Internet offerings. That assumption has been bolstered by the FCC's February 2000 decision in the IVI case, in which the agency concluded that the "leased access" provision of Title VI does not afford ISPs a right to capacity on a cable system.\footnote{15 F.C.C.R. 3247. For details on the case, see supra note 139.} In reaching that decision, the Commission pointed out that the leased access provision, 47 U.S.C. § 532, explicitly affords access rights only to unaffiliated providers of "video programming."\footnote{Id. ¶¶ 13-14.}

The FCC limited its consideration to the four corners of the leased access provision and rejected IVI's request for recognition of ISP access under it; the agency expressly deflected calls to consider the extent of the cable service definition more broadly or to consider whether it might have ancillary power under other sections of the Communications Act to find an ISP access right.

Arguably, then, it is still an open question as to whether a cable service classification would foreclose the federal agency's ability to decree some form of open access obligation under Title VI. Doing so would be at odds with the old conception of cable service as a communications medium whose content is chosen by the facility provider. More to the point, perhaps, is that all of the current exceptions to that general concept — whether it be for carriage of local broadcast station signals, public or governmental channels, or unaffiliated programming on leased access channels — were carved out by Congress.\footnote{See supra notes 87-92 and accompanying text. Also, the U.S. Court of Appeals for the D.C. Circuit twice struck down the FCC's attempts to use its own general authority to impose broadcast "must-carry" obligations before similar mandates were enacted by Congress. See Century Communications Corp. v. FCC, 835 F.2d 292 (D.C. Cir.) clarified, 837 F.2d 517 (D.C. Cir. 1987), cert. denied, 108 S. Ct. 2014 (1988); Quincy Cable TV, Inc. v. FCC, 768 F.2d 1434 (D.C. Cir. 1985), cert. denied, 476 U.S. 1169 (1986).}

Thus, even if the FCC were inclined to attempt to insert open access obligations
into Title VI through an exercise of its Title I ancillary authority, the odds are heavy against its success.

Foreclosure of federal power, however, would not mean that local cable franchising authorities would be powerless. If cable-based Internet access services were properly classified as Title VI services, that determination would appear to eliminate the Ninth Circuit's objections to the Portland open access conditions. Assuming LFAs had such power, the result could well be a hodgepodge of different open access mandates — which might prompt cable operators to consider seeking federal preemption, or even a change in the classification of their Internet service, in order to ensure that their offerings would be subject to nationally uniform regulation.

B. Regulatory Scenario 2: Cable Provision of Internet Access Transport Classified as Title II "Telecommunications Service"

This scenario requires a combination of complex considerations. First, as the subheading suggests, most serious consideration of a Title II regulatory classification for cable offering of Internet access service is premised on the notion of unbundling the "pure" transport service from the ISP services that "ride" on top of the transport facility — i.e., the connection to the Internet and any proprietary content or services the ISP may provide. Thus, under this scenario the broadband cable operator would be deemed to be providing Title II "telecommunications service," while its affiliated ISP would be providing an unregulated "information service." As the discussion below explains, the unbundling issue likely would be a matter of some dispute.

Second, if the unbundled cable broadband transport were deemed to be a Title II service, then a panoply of common carriage obligations would apply. As a general matter, this would support open access goals, but it also would result in the imposition of a number of unnecessary (and perhaps even counterproductive) rules. Therefore, it would be appropriate for the FCC combine recognition of this regulatory classification with a strong dose of its Section 10 forbearance authority. What shape that forbearance should take also likely would be a subject of debate.

Before launching into an analysis, it may be useful to review the current statutory definitions relevant to the Title II classification:

325 As noted above, appeals are pending on two district court decisions concluding that cable-based Internet access service is a "cable service" but that, nonetheless, local franchise authorities have no power to mandate open access. See supra notes 221-230 and accompanying text.

326 Some have suggested that the entire cable ISP offering should be treated as telecommunications service, but this position appears to have attracted no serious support among commenters in the Open Access Inquiry (even if they otherwise disagree on the outcome of the classification debate). See, e.g., Comments of NCTA, at 9-12 (disputing application of Title II to cable modem "transport"); Comments of Verizon at 10-11, (supporting application of Title II to cable operator transmission of "residential broadband transmission").

327 With respect to all of these statutory definitions, Professor John Roberts, a former Senate staffer, note that "it is clear that there are terms of art, without any common meaning obvious to the layman. Indeed, the meaning of "telecommunications" is especially troublesome. For many years that term was used exclusively to refer to the telephone business, but more recently it has come into
The term "telecommunications" means the "transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." In other words, telecommunications is the "pure transmission" component of most "two-way" electronic communications services available today, regardless of sold and/or packaged to be sold to users. This definition also reflects the old common carriage notion that it is the user, rather than the facilities provider, who determines the content of the information being transmitted.

The term "telecommunications service" means the "offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." The difference between offering "telecommunications" and offering a "telecommunications service" is that, in the latter case, the pure transmission is made available (1) to the public, and (2) for a uniform fee. (As explained below, those two distinctions are key to the arguments concerning broadband cable operators' classification status.) A provider of telecommunications services is considered to be a "telecommunications carrier," also known under pre-1996 Act precedent as a "common carrier", such providers are, generally speaking, subject to full Title II regulation. But under FCC precedent, if a provider offers "telecommunications" to only a small number of users under individually tailored terms, the offering is not "telecommunications service" but rather a largely unregulated "private carriage" offering.

The type of telephony providers who are cable's main rivals in offering broadband access to the Internet are called "local change carriers." They offer "telephone exchange service," known to most Americans as the local telephone...
network offering local voice (or data) service within a community, and "exchange access," best understood as the connection service linking local network wires to long-distance trunk lines which together support long-distance voice (or data) service.

To return to the threshold classification question, determining whether broadband cable transport should be subject to Title II requires grappling with the traditional test for determining whether a service is common carriage. The so-called NARUC test long predates the 1996 Act's definition of "telecommunications service," but it reflects the same concepts and remains the FCC's method for deciding whether to apply Title II rules to a particular service offering. Under that test, a service may be subject to common carriage obligation either because the provider voluntarily has chosen to offer it "indifferently" (i.e., to the public on the same terms and conditions) or because the Commission has required it to do so for public interest reasons.

In the case of cable Internet access, the integrated data-and-transport service is offered widely on a "retail" level to cable subscribers on the same terms and conditions — but the transport component alone has not been offered widely, either to retail subscribers or on a "wholesale" basis to unaffiliated ISPs. This is the major basis for the objections raised by cable operators as to why their offering cannot be fit into the Title II classification and, accordingly, cannot be subjected to open access obligations. This distinction between the wholesale

337 47 U.S.C. § 153(47) (term means "(A) service within a telephone exchange . . . , or (B) a comparable service . . . by which a subscriber can originate and terminate a telecommunications service.").

338 47 U.S.C. § 153(16) (term means "the offering of access to telephone exchange services or facilities for the purpose of the origination or termination of telephone toll service"). The FCC has treated DSL service as an interstate "exchange access" service — a determination that reflects the long-distance aspects of much Internet traffic (and also gives the federal agency undivided authority over it) — although that decision is under court challenge. See Deployment of Wireline Services Offering Advanced Telecommunications Capability, 13 F.C.C.R. 24,011 (1998), remanded in part, AT&T Corp. v. Iowa Utilities Board, 525 U.S. 366 (1999), 14 F.C.C.R. 20, 912 (1999); Ass'n of Communications Enterprises v. FCC, No. 99-1441, 235 F.3d 662 (D.C. Cir. 2001). If broadband cable-based transport were classified as telecommunications service, it may be given the same regulatory status.

339 See NARUC I, 525 F.2d at 640-42.

340 Id. at 642 ("we must inquire, first, whether there will be any legal compulsion thus to serve indifferently, and if not, second, whether there are reasons implicit in the nature of [the] operations to expect an indifferent holding out to the eligible user public").

341 See, e.g., NCTA Comments at 11-12. See also Gulf Power, 208 F.3d 1276 (internal citations omitted) (noting that the FCC has stated that "Internet service does not meet the statutory definition of a 'telecommunications service.'"). The FCC also has stated that ISPs, as "information service" providers, are users of "telecommunications" rather than providers of "telecommunications service." See, e.g., Implementation of the Local Competition Provisions in the Telecommunications Act of 1996 Inter-Carrier Compensation for ISP-Bound Traffic, 14 F.C.C.R. 3689, at ¶¶ 15, 17, 23 (1999); see also Portland, 216 F.3d 876. It should be noted, of course, that the vast majority of ISPs do not rely on their own transmission facilities to provide their services — and that ISPs affiliated with facilities-based local exchanges are treated differently. See Deployment of Wireline Services Offering Advanced Telecommunications Capability, 13 F.C.C.R. 24,011 (1998), remanded in part, AT&T Corp. v. Iowa Utilities Board, 525 U.S. 366 (1999), on remand, 14 F.C.C.R. 20912 (1999); Ass'n of Communications Enterprises v. FCC, No. 99-1441,
and retail level of service also is raised by critics of the Ninth Circuit's *Portland* decision, who claim that the court muddied the two.\footnote{235 F.3d 662 (D.C. Cir. Jan. 9, 2001) (upholding FCC determination that telco version of broadband, DSL, must be regulated as common carriage).}

These objections do not necessarily end the classification debate, however. For one thing, some cable operators have begun to offer traditional voice telephony service over their cable facilities. Those operators, at least, already have accepted Title II status and so may be treated like other facilities-based "carriers" under the agency's *Computer II* unbundling requirements — and thereby be required to offer unaffiliated ISPs access to the cable facility's underlying broadband transport.\footnote{See *Portland*, 216 F. 3d at 876.} Moreover, those cable operators contemplating the offering of Internet-based voice telephony service could be treated in the same fashion if the FCC finally comes to grip with the regulations that should govern so-called "VoIP" service.\footnote{See supra note 59 and accompanying text; accord, Augustino, supra note 11, at 674.} Long-term reliance on this unbundling obligation, however, would require that the FCC not follow through on a pending proposal to eliminate it.\footnote{See *Computer II Remand Further Notice*, 3 F.C.C.R. 6040; accord, Augustino, supra note 11, at 664 ("Unbundled wholesale transmission capacity proved to be a critical building block for the development of the entire information services industry.").}

Another possibility with respect to Title II classification of cable Internet access transport would be for the Commission to rely on a different aspect of the NARUC test. Although it is rarely used, the agency does have power to require that a provider offer its service under common carriage obligations, even if the provider is not currently offering service to a wide section of the public under uniform terms.\footnote{The FCC has not yet decided how to fit IP telephony into its regulatory scheme, although it has suggested that it might be appropriate to take a "functional" approach that would lead to classifying it as a Title II service. *Universal Service Report*, 13 F.C.C.R. at 11,544. A decision to treat voice services that seem the same to users — whether delivered as analog signals over copper wires or digital packets over a broadband, packet-switched network — as functionally the same for regulatory purposes could, of course, have significant implications for other regulated services that migrate to the broadband Internet.} Although the FCC generally is reluctant to take this step, in this instance it would have several good policy reasons for doing so — not the least of which are its findings (and those of the FTC) in the AOL/Time Warner merger that competition in the broadband Internet access market could be harmed by offerings of integrated cable transport/ISP service absent some form of multiple ISP access.\footnote{See, e.g., *Telefónica SAM USA, Inc., et al.*, 15 F.C.C.R. 14915, ¶ 11 (2000) (FCC stating "there will be no legal compulsion to serve the public indifferently where there is no public interest reason to require the facilities to be offered on a common carrier basis"); Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band, 15 F.C.C.R. 16127, ¶ 95 (2000). Also, the courts do impose limitations on the FCC's authority to declare that an offering is common carriage. *See* Southwestern Bell v. FCC, 19 F.3d 1475 (D.C. Cir. 1994) (mere filing of service contracts insufficient to justify imposition of common carrier rules).} Assuming that the FCC did decide to effectively unbundle the cable broadband transport in an Internet access offering and classify it as a

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\footnote{See supra notes 187-210 and accompanying text.}
telecommunications service, Title II's nondiscrimination requirements would provide a strong vehicle for some type of open access obligations. In providing Internet access transport as a telecommunications service, broadband cable operators would be subject to general duties to interconnect with other carriers and to refrain from acting in an unjust and unreasonable manner regarding prices, terms, or conditions of service. But although this classification bring with it the potential for being subjected to a long list of specific mandates and responsibilities — as sketched out above in Section III.A.1, it does not necessarily impose a rigidly defined set of operating rules. For example, the service might be subject to varying degrees of regulation depending upon whether it were deemed to be "local exchange" or "exchange access" service, whether the transport service were deemed to be exclusively interstate or some mix of intra- and interstate, and whether the cable operator would be deemed a "dominant" carrier.

More significant still would be the potential for substantial "forbearance" from many of the Title II mandates. In particular, Section 10 of the Communications Act (which Congress added as part of its 1996 reform of the statute) is the "wild card" under this scenario. The provision affords the FCC power, should it choose to use it, to eliminate or soften many of the traditional rules. Suggestions for which mandates could forborne are provided below.

Beyond the specifics, however, it should be recognized that there are a number of public policy advantages to the Title II-plus-forbearance approach. It could be extended beyond broadband cable facilities to apply (in whole or in part) to other broadband platforms, thereby benefiting from the political appeal of advancing regulatory parity. And, in an era of Republican leadership in Washington, decisive FCC use of its forbearance authority would have an undeniable attraction as a major deregulatory move.

349 For example, if a broadband cable operator were deemed to be providing "local exchange" service, then it may be subject to several standard mandates imposed on CLECs. For open access purposes, the most significant of these may be the statutory duty not to restrict unreasonably the resale of its telecommunications services. 47 U.S.C. § 251(b).
350 If the service were deemed to combine both interstate and intrastate elements, state regulators may have some jurisdiction to impose rules affecting the service within their state borders.
352 47 U.S.C. § 160(a) (providing for "regulatory flexibility").
353 There are certain statutory obligations that apply only to incumbent LECs which may require congressional action to address. See, e.g., 47 U.S.C. § 251(c) (including certain interconnection, unbundling, resale, and equipment "collocation" mandates). Consequently, ILECS — such as the remaining BOCs — likely would not immediately benefit from FCC forbearance on this aspect of the regulatory regime.
354 Some suggest that regulatory parity should deliver economic benefits to consumers. See, e.g., Augustino, supra note 11, at 670 ("In a monopoly or duopoly market context, the profit-maximizing price for a service provider is significantly higher than in a competitive market environment."); Apps & Dailey, supra note 11, at 688.
Returning to the statute, Section 10 broadly authorizes the FCC to lift or modify Title II mandates as long as the remaining obligations still support a determination that the service is being offered to enough users so as not to be “unjustly or unreasonably discriminatory” on terms and conditions that are “just and reasonable.” In this context, the desired forbearance would include:

Relaxing strict duties to furnish service to all requesting entities indifferently — The Commission already permits telecommunications service providers to “reasonably” limit the number of entities granted access to a facility on a technical basis. It should be possible to fashion a considerably less regulatory requirement that calls for carriage of an unspecified number of unaffiliated ISPs, with no discrimination on the basis of affiliation; a requirement for good-faith negotiation with requesting entities; and some reference to reasonable technical and business limitations. The agency may be amenable to fashioning a “safe harbor” or other guidelines to define the scope of this relaxed requirement.

Relaxing strict, tariff-like uniformity of rates, terms, and conditions — The FCC for years has shown little interest in adding new tariff obligations on anyone in any setting; its efforts instead have focused on “de-tariffing” many services.\footnote{See, e.g., MCI WorldCom, Inc. v. FCC, 209 F.3d 760 (D.C. Cir. 2000).} Because broadband is widely viewed as an emerging arena in which the Commission has little or no expertise regarding costs, demand patterns, etc., regulators may find it appealing to allow service deals to negotiated in the marketplace without direct regulation of prices and related terms, subject to some minimal oversight mechanism.

Modifying the existing “unbundling” obligations — Although this proposal for minimalist Title II regulation of underlying broadband Internet transport service would retain some measure of unbundling, it does so in a very deregulatory way that should be welcomed by some other broadband providers, including local exchange carriers.

In sum, although the Title II scenario poses a number of legal tangles, it offers a number of countervailing benefits. Because this approach would incorporate a tradition of openness but also politically appealing opportunities to deregulate broadband transmission service in a comprehensive fashion, the FCC should explore it seriously.

C. Regulatory Scenario 3: Cable Provision of Internet Access Classified as Title I “Information Service”

Under this scenario, the threshold classification question appears easy to answer — but the resulting consequences for open access obligations are more complex. According to the statutory definition, “information services” means “the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information \textit{via telecommunications} . . . .”\footnote{47 U.S.C. § 153(20) (emphasis added). The definition goes on to exclude the “use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.” In other words, a certain amount of computerized management of a “pure transmission” system would not pull a telecom offering out of Title II. One} There is wide agreement that the statutory term
essentially replicates the FCC’s old Computer proceeding concept of “enhanced service.” And there is wide agreement that ISP services generally, with their bundled provision of data processing and transport, fall squarely within the information service classification. The FCC certainly has said so many times — with only the exception for facilities-based local exchange carriers, who must unbundle the transport component and offer it on a common carrier basis to competing ISPs. The Eleventh Circuit in Gulf Power strongly hinted that it thinks the agency’s determination should extend to cable operators who provide Internet services.

Should the Title I classification apply to cable offerings of Internet access service as it has to most other ISPs — in other words, without the unbundling mandate that applies to cable’s wireline rivals — then the telecommunications component of the service presumably would be treated as largely unregulated private carriage. Under that rubric, the cable operator would be deemed to provide Title I “telecommunications” and its affiliated ISP, like other ISPs, would be classified as providing a Title I information service.

Although the threshold classification question under this scenario may attract little dispute, the next question — its implications for open access requirements — certainly would provoke debate. Under current FCC precedent, the Title I classification alone would not result in the imposition of open access requirements on a cable operator or any other facilities provider. But the agency has untested power under Title I to establish such obligations. The FCC has expressly retained Title I jurisdiction to regulate information services, and while it has largely declined to exercise its authority in this area, there is no obvious bar to a well-reasoned policy decision to require broadband cable facilities to carry unaffiliated ISPs on fair terms. (This concept may be akin to unbundling as it pair of commentators argue that the statute’s design suggests that lawmakers intended “information services” to be a regulatory adjunct to “telecommunications service”: “All of the provisions addressing either the internet or computer services were included in Title II of the Communications Act, while no mention of computers or the internet was included in the provisions dealing with video programming and cable services” Comstock & Butler, supra note 96, at n.32.

357 See, e.g., Universal Service Report, 13 F.C.C.R. at 11516.
358 Compare, e.g., Comments of NCTA at 8 (even if cable-based Internet access service is not a “cable service,” “there can be no question that [it] is an information service”) with Comments of SBC & BellSouth at 9-12 (arguing that all broadband facility providers offering Internet access should be regulated under the Title I information services classification).
359 See, e.g., Universal Service Report, 13 F.C.C.R., ¶ 73 (finding that “Internet access services are appropriately classed as information, rather than telecommunications, services” because they “do not offer a pure transmission path” but instead “combine computer processing, information provision, and other computer-mediated offerings with data transport”); Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996 (Third Report and Order in CC Docket No. 98-147 & Fourth Report and Order in CC Docket No. 96-98), 14 F.C.C.R. 20912 (1999) (instituting “line sharing” obligations for incumbent LECs offering DSL services in order to advance the 1996 Act’s goals for competition and rapid deployment of advanced services).
360 Gulf Power Co., 208 F.3d at 1276.
361 For an explanation of the considerably lesser regulatory burdens placed on private carriage, see supra notes 64-68 and accompanying text.
362 See, e.g., Access to Telecommunications Service, Telecommunications Equipment and
is known in the Title II context, but it need not be formally considered as such; the same basic idea is present in several Title VI carriage obligations.\footnote{363} As the Commission recently noted, federal courts have long recognized the FCC's "authority to promulgate regulations to effectuate the goals and accompanying provisions of the Act in the absence of explicit regulatory authority, if the regulations are reasonably ancillary to existing Commission statutory authority."\footnote{364} This power is lodged in several provisions of the Communications Act,\footnote{365} and the FCC has called upon it over the decades to regulate in many sectors of the communications arena.\footnote{366} In particular, Section

Customer Premises Equipment by Persons with Disabilities, WT Docket No. 96-198, FCC 99-181, 1999 FCC LEXIS 4804, ¶ 98 (September 29, 1999) (asserting FCC jurisdiction to regulate information services generally, whether provided by carriers or non-carriers, and, specifically, to impose disability access rules on the offering of "voicemail and interactive menu services, and related equipment"). See also AOL/Time Warner Order, ¶ 177 (asserting Title I jurisdiction over instant messaging and "advanced IM-based high-speed services" or "AIHS"). While one may take issue with the FCC's exercise of authority in the latter case, it is worth pointing out here that the agency based its power to do so on what it perceived as the ramifications of the combination of the provider's particular Internet offering and its affiliated broadband cable facilities. \textit{Id.} ¶¶ 120-22. \textit{Accord, Augustino, supra} note 11, at 675-76.

\footnote{363} See supra notes 87-92 and accompanying text.


\footnote{365} Under Section I of the Communications Act, the Commission is charged with "execut[ing] and enforce[ing] the provisions of this Act," 47 U.S.C. § 151, the provisions of which "apply to all interstate and foreign communication by wire or radio and all interstate and foreign transmission of energy by radio, which originates and/or is received within the United States." 47 U.S.C. § 152(a). Section 2(a) makes it clear that the Act applies to the LECs: "The provisions of this act shall apply to . . . all persons engaged within the United States in such communication or such transmission of energy by radio." 47 U.S.C. § 152(a). Moreover, Section 4(i) provides the Commission with general authority to promulgate regulations that are necessary to perform its functions: "The Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this Act, as may be necessary in the execution of its functions." 47 U.S.C. § 154(i).

\footnote{366} The FCC relied on Title I in devising the \textit{Computer II} regime, with its separation of "basic" and "enhanced" services plus the accompanying mandate imposed on facility providers to unbundle the transport component of their enhanced services and sell it to competing providers of enhanced services. See \textit{77 F.C.C.2d at 475. See also, e.g., AT&T Corp. v. Iowa Util. Bd., 525 U.S. 366 (1999)} (J. Scalia, writing for the majority, upholding Commission's exercise of ancillary jurisdiction pursuant to Section 201(b)); \textit{United States v. Southwestern Cable, 392 U.S. 157 (1968)} (Southwestern Cable) (upholding the Commission's authority to regulate cable television); \textit{National Broadcasting Comm'n v. United States, 319 U.S. 190, 219 (1943)} (Congress "did not frustrate the purposes for which the Communications Act of 1934 was brought into being by attempting an itemized catalogue of the specific manifestations of the general problems for the solution of which it was establishing a regulatory agency"); \textit{United Video, Inc. v. FCC, 890 F.2d 1173, 1183 (D.C. Cir. 1989)} (upholding Commission's authority to reinstate syndicated exclusivity rules for cable television companies as ancillary to the Commission's authority to regulate television broadcasting); \textit{Rural Tel. Coalition v. FCC, 838 F.2d 1307 (D.C. Cir. 1988)} (upholding Commission's pre-statutory version of the universal service fund as ancillary to its responsibilities under Sections 1 and 4(i) of the Communications Act, stating that "[a]s the Universal Service Fund was proposed in order to further the objective of making communications service available to all
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4(i) of the statute provides that "[t]he Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this Act, as may be necessary in the execution of its functions." 467

This is not to say that the FCC's ancillary authority is without limit. The new FCC chairman, Michael Powell, recently cautioned that "[i]t is important to emphasize that section 4(i) is not a stand-alone basis of authority and cannot be read in isolation." 468 However, the agency properly may draw for support upon several explicit statutory provisions, including expressions of major congressional goals, in exercising that power. 469 In the context of devising limited open access requirements to be imposed upon broadband cable operators — and potentially other broadband facility providers as well — the FCC could point to a number of Communications Act provisions that such action would further, including but not limited to the policy goals set out in the "New Technologies and Services" section, 470 the "Advanced Services" section, 471 the general cable policy sections, 472 and the general Internet policy sections. 473 The latter includes the oft-quoted statement that it is U.S. policy "to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services . . . ." 474 When Congress adopted this policy in 1996, the last-mile connections upon which the Internet marketplace largely

Americans at reasonable charges, the proposal was within the Commission's statutory authority"; North American Telecomm. Ass'n v. FCC, 772 F.2d 1281, 1292-93 (7th Cir. 1985) ("Section 4(i) empowers the Commission to deal with the unforeseen — even if [ ] that means straying a little way beyond the apparent boundaries of the Act — to the extent necessary to regulate effectively those matters already within the boundaries") (citations omitted); Lincoln Tel. & Tel. Co. v. FCC, 659 F.2d 1092, 1109 (D.C. Cir. 1981) (FCC properly "exercise the residual authority contained in Section 154(i) to require a tariff filing" because it "properly perceived the need for close supervision" with respect to interconnection); GTE Serv. Corp. v. FCC, 474 F.2d 724, 731 (2d Cir. 1974) (holding that "even absent explicit reference in the statute, the expansive power of the Commission in the electronic communications field includes the jurisdictional authority to regulate carrier activities in an area as intimately related to the communications industry as that of computer services, where such activities may substantially affect the efficient provision of reasonably priced communications service").

467 47 U.S.C. § 154(i).

468 Video Description Order, 15 F.C.C.R. 15230 (2000) (Separate Statement of Commissioner Michael Powell) (internal citations omitted) ("It is more akin to a 'necessary and proper' clause. Section 4(i)’s authority must be 'reasonably ancillary' to other express provisions. And, by its express terms, our exercise of that authority cannot be 'inconsistent' with other provisions of the Act.").


470 47 U.S.C. § 157(a) ("It shall be the policy of the United States to encourage the provision of new technologies and services to the public.").

471 47 U.S.C. § 157 (directing the FCC to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans . . . by utilizing . . . measures that promote competition in the local telecommunications market").

472 47 U.S.C. § 521 (declaring the purposes of Title VI generally to include "establish[ing] a national policy" for cable communications and "promot[ing] competition in cable communications").


474 Id. (emphasis added).
rested were, of course, telephony lines subject to Title II rules. Imposing considerably less burdensome regulatory requirements than common carriage rules, as proposed below, therefore would appear to serve Congress' aims in an appropriately deregulatory manner. Furthermore, as discussed above, with respect to certain cable operators who already are using their facilities to provide telecommunications service and so already are subject to common carriage obligations, the FCC could draw upon its Title II mandates to justify imposition of a Title I-based deregulatory approach instead. Finally, should the FCC determine that the current regulatory confusion concerning Internet telephony is prompting cable operators to avoid entering the telecommunications services market as Congress expected them to do, the Commission also could draw upon the relevant provisions of Title II and Title VI as support for an effort to harmonize the regulatory burdens placed on facilities-based Internet service providers.

Once past the issue of the agency's authority to impose some form of open access obligations under Title I, the question becomes what kind of requirements to impose. In this regard, the FCC likely would want to craft a relatively simple framework designed to serve several objectives. The agency's Title I power should not, and probably could not, be used to devise an extensive regulatory structure that mimics Title II common carriage. Rather, one benefit of pursuing the Title I scenario is that it would afford the Commission a relatively clean slate upon which to draft a coherent scheme of minimal open access principles. Such obligations might apply to broadband cable immediately and, eventually, to all relevant last-mile wireline facilities, regardless of the provider's historical identity.

Open access obligations devised under this scenario should provide for sufficient variety among ISPs available over a broadband cable facility to ensure that the facility provider cannot use its control over the transport medium to unfairly compete in the ISP arena or in the downstream Internet content and services marketplace. At the same time, the framework should call for minimal government oversight so as not to impede investment in cable broadband facilities or the new services developed for broadband.

In considering new rules or regulations, policymakers commonly look to existing models for ideas. The obvious model in the open access setting, of

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375 See supra note 343 and accompanying text.
376 See supra note 106 and accompanying text.
377 See, e.g., Southwestern Bell v. FCC, 19 F.3d 1475 (D.C. Cir. 1994) (mere filing of private carriage service contracts insufficient to justify imposition of common carrier rules).
378 One political consideration to bear in mind with this approach is that, with the current Republican leadership in place today, it may be more difficult to convince policymakers to pursue an option that could be characterized as imposing new regulations rather than eliminating old ones. Such a characterization could be countered, however, by pointing out that it may be easier as a legal matter to establish a small number of new obligations — especially if they settle the regulatory parity dispute — than to forbear from a large number of old ones.
379 As noted above, certain statutory obligations currently imposed on incumbent LECs likely would have to be modified before a streamlined open access obligation would apply to them. See supra note 353 and accompanying text.
course, is the set of conditions imposed by the FTC and the FCC in the AOL/Time Warner. Accordingly, one approach drawing upon that model would be to establish a set of minimum open access “benchmarks” that broadband facilities providers would have to meet if they provide high-speed ISP services directly to residential end-user subscribers. Because the new mandates would set only minimum standards, any particular facility provider could, if it chose, exceed them — by offering, for example, more than the minimum number of unaffiliated ISPs.

Thus, a Title I approach to open access might include the following benchmarks:

Carriage of a specified minimum number of unaffiliated ISPs, under rates, terms, and conditions that do not discriminate on the basis of whether an ISP is affiliated with the cable operator or not. (As to the precise number, the FTC/FCC conditions require a minimum of at least three unaffiliated ISPs in addition to its affiliated ISP(s). This may not necessarily be the appropriate number for a general benchmark, but it does have the imprimatur of expert antitrust authorities with respect to its likely impact on the competitiveness of the ISP and Internet content markets.)

Negotiation in good faith with any ISP requesting access.

Access terms specified in privately negotiated contracts, subject to confidential disclosure to a designated government official empowered to conduct expedited review and settlement of complaints.

Include in all contracts with unaffiliated ISPs a clause warranting that the technical performance protections — including caching, technical support, quality-of-service mechanisms, address management and other technical functions that affect subscribers’ experiences — are afforded to all ISPs in a manner that does not discriminate on the basis of affiliation with the facility provider.

Non-interference with content passed along the bandwidth contracted for by any unaffiliated ISP. This might include permitting each unaffiliated ISP carried on the broadband facility to determine the contents of its subscribers’ first screen; a bar on requiring unaffiliated ISPs to carry certain content, such as a link to the facility provider’s home page, as a condition of carriage; and no requirement that all ISP subscribers “go through” the facility provider’s ISP in order to reach their chosen ISP.

No restrictions on the ability of current or prospective ISP customers to select an unaffiliated ISP carried on the broadband facility. This might include giving prospective customers a “neutral” method for selecting among their ISP choices, and barring any restraints on unaffiliated ISPs’ marketing as a condition of carriage.

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Note that this proposed regulatory scheme would not apply to providers of last-mile wireline connections to businesses, Internet backbone facilities, or “wholesale” transport services because those markets are competitive or otherwise do not present the same public interest concerns.
Permit each unaffiliated ISP carried on the broadband facility to have a direct billing relationship with its own subscribers.

Such a benchmark system under Title I offers the promise of equitable treatment of affiliated and unaffiliated ISPs, thereby affording consumers the promise of the price and service benefits that flow from functioning competition. It also places greatest responsibility for determining appropriate terms to negotiations between the parties, who are best placed to grapple with the particulars of technical and business constraints, while providing for an expedited enforcement mechanism if the parties themselves cannot arrive at mutually satisfactory arrangements.

In addition, because the broadband marketplace is a new and unpredictable one, the benchmarks approach could be tailored to accommodate concerns about how government open access mandates might skew investment or competition. The scheme could include a "sunset" clause that would call for the open access benchmarks to expire upon a certain date — such as five years after adoption of this approach — unless the FCC conducted a proceeding to determine that they were still necessary. This approach should go far to address concerns that the cable broadband infrastructure, in particular, might be built out in this early period in a manner that could effectively foreclose openness in the future. A period of five years or so should be sufficient time for broadband facility providers' business models to incorporate an open platform as a natural feature of their offerings.

The open access benchmarks approach also would be consistent with the Gulf Power decision and at least arguably consistent, in the main, with the Portland case. It may not answer all the lingering questions — such as the potential for state regulators to wield some authority in the area — but this type of Title I regulatory scheme is a Commission option worth exploring.

V. CONCLUSION

The regulatory fixes that I suggest may resolve the cable Internet access fracas for now, but they do not address many of the other problems that loom

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381 See, e.g., Weiser, supra note 109, at 830.
382 There is FCC precedent for such sunset clauses in proceedings that concern the competitive operation of a marketplace. See, e.g., Prime Time Access Rule, 11 F.C.C.R. 546 (1995) (establishing one-year sunset period to allow "industry participants to adjust to the changing economic conditions that might result").
383 See, e.g., Lemley & Lessig, supra note 26, at 18-24; Weiser, supra note 109, at 836-37.
385 See supra notes 288-93 and accompanying text (discussing the Ninth Circuit's concern for the underlying transmission service).
386 Whether state authorities would have a role to play depends in part upon whether the service was deemed to be interstate service for regulatory jurisdiction purposes, and therefore subject only to federal oversight, or an intrastate service, over which federal and state regulators share jurisdiction. If the broadband service were jurisdictionally intrastate, some state public utility commissions might attempt to exercise power because some states do not recognize the private carriage concept.
larger as electronic communications services increasingly converge. Beyond the
degree of legal enforcement governing the openness of communications
platforms, the most important of these issues appears to be the advent of Internet-
delivered voice services, which some fear could undermine the current regulatory
scheme for ensuring the survival of traditional "lifeline" telephony services.387

These larger issues may well require congressional action, and they certainly
deserve lawmakers' attention. If technological developments do require us to
relinquish the legacy regulatory concepts upon which our communications laws
and business models have been built for generations, our elected representatives
should perform the ritual exorcism.

387 See, e.g., Apps & Dailey, supra note 11, at 688.
THE ROLE OF FREEDOM OF SPEECH IN THE “OPEN ACCESS” DEBATE

by Dennis R. Williams¹ & W. Thomas Fisher²

Use of the Internet pervades nearly every aspect of American life. Its use as a research and communication tool makes it invaluable to businesses and individuals. Its use as a recreational consumer tool is equally obvious. Demand for Internet access has increased exponentially in recent years, and with free access at public libraries, restaurants, and bars, it has become an integral aspect in the lives of millions of Americans. How Americans obtain their access to the Internet has also grown and changed with its increased use. The Internet has quickly replaced other mediums as the primary marketplace of ideas for Americans and the world. All that is required to participate is access to the Internet. How access to the Internet is provided to the consuming public has become a major issue. Everyone agrees that consumers should have access, even unlimited access. What presents the most contention is who will be able to provide this access. Consumer advocacy groups contend that consumers should have the right to choose any Internet Service Provider (“ISP”) they wish. Internet Service Providers, particularly those that expend considerable resources to construct a network to provide Internet access, believe they should be permitted to designate the ISP their customers may access the Internet through. Somewhere in the middle is the United States Government, particularly the Federal Communication Commission (“FCC”). Obviously, the FCC is concerned with providing full and equal access to consumers, but it is less certain about who should be permitted to provide the access and more importantly, how to regulate who provides the access.

At the heart of this question is the open access, or forced access (depending upon whom you ask) debate. The open/forced access debate focuses on whether cable operators and programmers will be forced to provide access to their Broadband Network to ISPs they do not choose. The cable operators and programmers assert that this abridges their freedoms of press and speech, while Congress has very broadly and generally charged the FCC with the duty of

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making Broadband Internet access available to all Americans and to prevent a monopoly over access to this resource.

This comment will examine the recent decision of Comcast Cablevision Inc. v. Broward County, Florida, which considered the question of whether or not a county ordinance forcing cable operators and programmers to permit any Internet Service Provider access to its Broadband network violated the cable operators' and programmers' freedom of speech and press rights guaranteed under the First Amendment. The first section of this comment will discuss and define Broadband provider options and the current status of Broadband regulation. The second portion of this comment outlines the Comcast case and reasoning. Finally, this comment will analyze the First Amendment freedom of speech and press standards and which standards apply to Broadband Internet access and the cable open/forced access debate.

I. BROADBAND INTERNET ACCESS PROVIDERS AND THE CURRENT REGULATORY SCHEME

Internet access for most Americans, and most small businesses, is obtained through the use of dial up modems utilizing the telephone lines. This has been the traditional method of access and because of a phone system's copper wiring the speed of this access is capped. In fact, most Americans currently exchange information over the Internet at less than speeds of 56 kbps. Data transmission speeds several hundred times faster than this rate are currently available and are known as Broadband Internet access. The higher speed is provided through advances in the transmission system used to provide access to the Internet. Broadband is the name attached to a variety of different technologies that provide Internet access to individuals and businesses at speeds significantly faster than 56 kbps. At the onset of 2000, about two million Americans had access to Broadband technology and the number is expected to increase exponentially as access becomes available. The increased speed of informational exchange under these Broadband technologies will enable individuals and businesses to make even greater and more efficient use of the Internet for a wide range of activities such as political speech, communications, shopping, research, and business transactions, to name just a few.


See Cable Services Bureau, Broadband Today, Staff Report To William E. Kennard, FCC 9 (1999) [hereinafter Broadband Today]. The report provides a thorough discussion of what Broadband technology is, including the history and recent developments in the debate over Broadband access. Id. It discusses the Broadband industry, including cable broadband, telephone company broadband, and wireless technologies. Id. Further, it details the preliminary findings of the Cable Bureau's Industry Monitoring Sessions as well as analyses the risks and benefits of the FCC continuing its policy of regulatory restraint and monitoring. Id. The report concludes by recommending that the FCC continue monitoring developments in the Broadband industry but refrain from regulating the industry and consider future regulation only if competitive harms arise. Id. A Broadband glossary is also included at the end of the report. Id.
Broadband Internet service is currently provided by three (3) means; cable lines, telephone lines, and satellite or other wireless systems. Cable television was originally encouraged by Congress as a means to provide rural areas with consistent and reliable access to broadcast television signals. Over the years, cable has emerged from its rural American roots to provide a wide variety of non-broadcast television viewing channels to its customers. The original cable television systems were designed to provide only one way access, delivery of television programs, and it was limited in the number of channels it could provide. With advances in fiber optic cables, cable systems are now able to provide hundreds of programming channels for television viewing and massive bandwidth for data transmission (Broadband Internet). Cable operators throughout the country have or are in the process of upgrading to fiber optic cable systems capable of providing Broadband Internet access (referred to in this comment as Cable Broadband Internet access). Obviously, the implementation of this network is very expensive as it involves the physical replacement of millions of miles of current co-axial cable with more expensive fiber optic cable. Cable Broadband Internet technology provides Internet access that is several hundred times faster than the current dial up modems which utilize telephone lines and approximately one hundred times faster than Integrated Services Digital Network telephone line (ISDN). The exact speed of exchange of information on cable Broadband cannot be accurately quantified as it fluctuates with the number of users on the system at any given time.

Telephone lines currently provide most of the Internet access in the United States. Similar to the cable industry, higher speed Internet access can be provided by upgrading existing telephone lines. Unlike cable, the telephone lines do not require replacement. Digital Subscriber Line (DSL) technology allows more efficient use of copper telephone wires. This technology creates the ability to use the phone line not only for voice and fax transmissions but also for simultaneous high speed Internet Access.

Wireless Broadband Internet Access is provided through the use of satellite and fixed microwave devices which are used to transmit data between two points. Satellite systems, once constructed, can service massive geographic areas. The main drawback to these systems is the requirement of clear sight lines between the sending and receiving antennae.

Of these three Broadband Internet Access systems, it is commonly recognized that DSL service has the greatest business advantage. It is less expensive to implement than a cable fiber optic system and its rate of speed is constant. Additionally, a subscriber is required to have only one wire attachment (phone line) for his home or business. Having cable access does not alleviate the business and personal needs for a telephone and the low cost of wire based telecommunications does not make completely wireless phone systems

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7 See BROADBAND TODAY, supra note 4, at 19.
8 Id.
9 Id. at 21.
10 Id. at 20-21.
practical at this point. DSL is also viewed as advantageous over satellite or other wireless systems because the equipment for those systems can be costly, and as a result, are impractical for users other than businesses. The line of sight requirements also cause significant disadvantages at times.\(^\text{11}\)

The FCC has been charged with monitoring the development of Broadband Internet access and to accelerate such deployment if required.\(^\text{12}\) The FCC has determined that at the present time there is no need to regulate the Broadband market.\(^\text{13}\) More importantly, the FCC’s Cable Services Bureau reported in October 1999 that cable does not have a bottleneck monopoly in Broadband services and that telephone and wireless Broadband access did not require regulation of the Cable Broadband Internet Access.\(^\text{14}\) Congress intends for the FCC to monitor and even regulate the Broadband industry if necessary. Part of this regulation could entail monitoring some Broadband systems differently than others. What is not addressed in the 1996 Telecommunications Act, or any report of the FCC, is whether the FCC will be able to regulate different Broadband providers differently. Hurling itself into this mix is the Comcast decision. As is indicated above, some Broadband providers, notably cable and fixed satellite, are required to spend significant resources to construct a Broadband providing system. As cable companies throughout the country have upgraded their cable systems to include fiber optic lines; various companies seeking to provide Internet access have sought access to these Broadband networks, particularly telecommunication Broadband providers.

II. THE FACTS OF

**COMCAST CABLE VISION, INC., V. BROWARD COUNTY, FLORIDA**

Some local cable franchisors (typically counties or other local government boards) have forced cable operators to grant access to their recently constructed Broadband Internet access systems to any Internet Service Provider requesting access. The Broward County Commission, the authorized cable franchisor for Broward County, Florida, upon the urging of GTE, a telecommunications

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\(^{11}\) *Id.* at 20-22.

\(^{12}\) See 47 U.S.C. § 157 (1994) ("The Commission shall determine whether any new technology or service proposed . . . is in the public interest."). *See also BROADBAND TODAY, supra* note 4, at 41 ("The Commission’s public interest mandate requires it to forbear from regulation and allow market forces to flourish, but to intervene in the event of market failure.").

\(^{13}\) *See In re Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and PossibleSteps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, 14 F.C.C.R. 2398 (1999).* The FCC declares its commitment to ensuring that Broadband capability is being deployed to all Americans in a reasonable and timely manner, while promoting the deregulatory and procompetitive objectives of the Telecommunications Act of 1996. *Id.* The report concludes that, presently, Broadband technology is being deployed in a reasonable and timely manner, based on actual deployment and predictions regarding future deployment, and the environment seems conducive to competition. *Id.* Consequently, the Commission will take no present action on issues that may have considerable impact on the deployment of Broadband capability in the future but will continue to monitor the issues regularly and issue a report, similar to this one, annually. *Id.*

\(^{14}\) *See BROADBAND TODAY, supra* note 4, at 42.
provider (not a cable franchisee), adopted ordinance number 1999-41 requiring such open/forced access. The ordinance read as follows:

Non-discriminatory Access Required. Subject to technical feasibility, Franchisee shall provide any requesting Internet Service Provider access to its Broadband Internet Access Transport Services (unbundled from the provision of content) on rates, terms, and conditions that are at least as favorable as those on which it provides such access to itself, to an affiliate, or to any person. Such access shall be provided at any technically feasible point selected by the requesting Internet Service Provider.

GTE, in addition to providing telecommunication services also provides Broadband Internet access through telephone lines. GTE also agreed to indemnify Broward County for any costs and fees that it might incur as a result of a legal challenge to the ordinance. GTE’s interest in the passage of the ordinance was to gain more access to consumers by being a part of the Cable Broadband Internet service providers system. The cable companies in Broward County objected to the County’s attempt to force access to their franchised systems to outside parties.

Media One Group, Inc., (“Media One”) and Telecommunications, Inc. (“TCI”) are cable access providers in Broward County and the Plaintiffs in Comcast. As part of their cable programming they offer a variety of programming features common on most cable systems in addition to Broadband Internet access. The Internet access is a service separate from the television programming to which customers subscribe. Customers subscribing to the television services are not required to subscribe to the Broadband Internet Access service. In fact they are free to decline Internet service or elect services provided by DSL or wireless systems.

To market the broadband services they provided, Media One and TCI, developed wholly owned subsidiaries to provide this service. Media One’s service was provided under the name Roadrunner, while TCI’s was provided under the name Excite@Home (“Excite”). Both cable companies entered exclusive contracts with these ISPs to create and market Broadband cable

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16 Id.
17 See generally id. at 686-88.
18 See id. at 686 n.1.
19 Id. Counsel for GTE drafted the ordinance and sent it to the Broward County Commission. Id.
20 Id. at 689-90.
22 Id.
23 Id.
24 Id.
25 Id.
26 Id.
services over their cable networks. As part of the services provided, Roadrunner and Excite provided home pages to their customers.\textsuperscript{28} A home page is the initial page an individual views when connecting to the Internet.\textsuperscript{29} All ISPs have an initial home page for their subscribers.\textsuperscript{30} The home page contains a wide variety of information selected by the home page provider, and can include news, other Internet links, commentaries, or goods and services.\textsuperscript{31} However, an individual is not bound by what home page he or she wishes to view.\textsuperscript{32} A user can change his initial home page at anytime and is not bound to use it by subscription.\textsuperscript{33} Most, however, do not change their home page.\textsuperscript{34}

Upon passage of Ordinance 1999-41, neither Media One nor TCI elected to extend their fiber optic cable network or Broadband internet service to unincorporated portions of Broward County, actually made such extension their lowest priority.\textsuperscript{35} Media One and TCI expected to recoup some of the costs of upgrading their system from co-axial cable to fiber optic cable through the exclusive offering of Internet Broadband Services.\textsuperscript{36} This would be done through the service charge and through advertising sold on the home page of either Roadrunner or Excite, as applicable.\textsuperscript{37}

Both sides in the Comcast case recognized that there were freedom of speech and press issues presented by Ordinance 1999-41. The County argued that providing access to the cable Broadband system was regulation of a delivery system not regulation of content.\textsuperscript{38} The plaintiff cable companies argued that the ISPs and their content were carefully chosen because of their messages.\textsuperscript{39} They further argued that providing access to any Internet service provider would force them to grant access to parties with whose message they did not agree or condone.\textsuperscript{40} Judge Middlebrooks' decision appropriately frames the question at issue in this case when he writes "The question then becomes, can government regulate the technology of expression without also changing its meaning?"\textsuperscript{41}

It is hardly novel that the government has the right to regulate the cable industry. As indicated above, the cable industry received an initial push from the government as a means of transferring broadcast stations. The cable system is a physical infrastructure that uses public right-of-way and easements in order to

\begin{itemize}
  \item \textsuperscript{28} Id. at 690.
  \item \textsuperscript{29} Id.
  \item \textsuperscript{30} Id.
  \item \textsuperscript{31} Id. at 689-90.
  \item \textsuperscript{32} Id.
  \item \textsuperscript{33} See Comcast, 124 F. Supp. 2d at 689-90.
  \item \textsuperscript{34} Id.
  \item \textsuperscript{35} Id.
  \item \textsuperscript{36} Id. at 690-91.
  \item \textsuperscript{37} Id.
  \item \textsuperscript{38} Id. at 691.
  \item \textsuperscript{39} See Comcast, 124 F. Supp. 2d at 691.
  \item \textsuperscript{40} Id.
  \item \textsuperscript{41} Comcast, 124 F. Supp. 2d at 692.
\end{itemize}
place cables throughout the community and could not exist without authorization from local governments.\textsuperscript{42} In addition, Congress has enacted various pieces of legislation governing the cable industry, including the Cable Television Consumer Protection and Competition Act of 1992.\textsuperscript{43} This Act subjected the cable industry to rate regulation by the FCC and municipal franchising authorities, prohibited municipalities from awarding exclusive franchises to cable operators, and authorized the FCC to develop and promulgate regulations imposing technical standards for cable operators.\textsuperscript{44} Additionally, the 1992 Cable Act, required cable service providers to grant access to broadcast television services in its area free of charge.\textsuperscript{45}

Juxtaposed against this spotted history of governmental regulation is the universal recognition by the courts that cable programming is "speech," is an operation of the "press," and deserving of First Amendment protection.\textsuperscript{46} What qualifies as speech and what are regulatory activities are the opposing forces in Comcast. Broward County, acting as the hired gun for GTE, asserted the position that open access to Broadband technology may be regulated by government agencies because it is a delivery system akin to a newspaper delivery company with a public franchise to deliver newspapers each morning that bundles its delivery franchise with its own newspaper.\textsuperscript{47} Thus, in order to receive any other newspaper, the consumer must purchase the franchisee's newspaper as well.\textsuperscript{48} Broward County argued that the less strict intermediate level of freedom of speech analysis applied to cable companies.\textsuperscript{49}

In response, Media One and TCI contended that the choice of an Internet service provider is a programming decision.\textsuperscript{50} Media One and TCI, also contend that their choice of an ISP is driven in part by consumer demand and, thus, is even more a content decision as opposed to a delivery system.\textsuperscript{51} Media One and TCI argued that forced access should be viewed with the strict scrutiny lens of cases upholding free speech and free press rights.\textsuperscript{52}

\textsuperscript{44} Id.
\textsuperscript{47} See Comcast, Florida, 124 F. Supp. 2d at 691.
\textsuperscript{48} Id.
\textsuperscript{49} Id. at 691-92. See generally Turner Broadcasting System, Inc. v. F.C.C., 512 U.S. 622, 627 (1994) (concluding that the intermediate level of scrutiny was the proper standard by which to assess the constitutionality of must-carry provisions imposed on cable television systems).
\textsuperscript{50} See Comcast, 124 F. Supp. at 693.
\textsuperscript{51} Id. at 691-93.
\textsuperscript{52} Id. at 694-97. See generally Miami Herald Publishing Co. v. Tornillo, 418 U.S. 241 (1974) (holding that the choice of material to go into a newspaper, including the treatment of public issues and officials, was not limited to merely reporting the news, but rather, involved the free exercise of editorial control and discretion, and thus, a statute which compelled a newspaper to publish, free of charge, upon request of a political candidate, a reply to prior criticism of the candidate by the newspaper, violated the First Amendment.); Los Angeles v. Preferred Communication, Inc., 476
In light of First Amendment precedent, Comcast correctly decides that strict scrutiny should be applied in the open access debate and that cases such as Tornillo rather than Turner, govern the situation. The Judge in Comcast emphasized the importance of the editorial and information distribution functions of a cable operator, reaffirming “the liberty of circulating is as essential to freedom of the press as liberty of publishing; indeed, without the circulation, the publication would be of little value.” Furthermore, “the press in its historic connotation comprehends every sort of publication which affords a vehicle of information and opinion.” Cable operators provide informational dissemination analogous to publishers of more traditional media and therefore should be afforded the same protections as traditional “presses.”

Also significant in the decisions following the Tornillo case is the determination that Ordinance 1999-41 places a significant constraint on the exercise of editorial control of and an economic burden on the medium. Analogizing this forced equal access to the situation in Tornillo, the ordinance was found to place too significant a burden on the cable provider. The Turner Court recognized the Tornillo rule, that forcing access to media invaded free speech and press rights, but it found that it was necessary to do so because of the bottleneck monopoly owned by cable companies.

In recognizing that cable operators exercise editorial functions worthy of protection, Comcast distinguished telephone services, which sell transmissions, and cable companies, which offer “a collection of content.” This reasoning is based on the inherent differences in the technologies and costs of Broadband Internet access, specifically the differences between telephone Broadband and

U.S. 488 (1986) (discussing free speech and press rights for cable operators); Grosjean v. American Press Co., 297 U.S. 233 (1936) (invalidating a Lousiana tax on advertisements in publications with a circulation greater than 20,000 copies per week, and concluding that the tax was unconstitutional, not because the statute taxed newspapers on advertising revenues, but rather, because the purpose of the tax was to suppress the circulation, and thus, content, of a selected group of newspapers.); FCC v. Midwest Video Corp., 440 U.S. 689, 707 (1979) (holding that cable operators exercise a significant amount of editorial discretion regarding what their programming will include.); Arkansas Writers' Project, Inc., v. Lagland, 481 U.S. 221 (1987) (invalidating a sales tax levied on general interest magazines, while exempting newspapers and religious, sports, trade, and professional magazines, because it applied only to a small number of publishers and discriminated on the basis of subject matter.); Minneapolis Star & Tribune Co. v. Minnesota Comm'r of Revenue, 460 U.S. 573 (1983) (applying strict scrutiny to a tax on the paper and ink used in the production of newspapers not only because it applied solely to the press, but also because, from a practical sense, it fell only on a small number of newspapers.).

54 Id. at 692.
55 Comcast, 124 F. Supp. 2d at 692 (quoting Ex Parte Jackson, 96 U.S. 727, 733 (1877)).
56 Lovell v. City of Griffin, Georgia, 303 U.S. 444, 452 (1938).
57 See Comcast, 124 F. Supp. 2d at 692.
58 Id.
59 Id. at 694.
61 See Comcast, 124 F. Supp. 2d at 693.
Judge Middlebrooks compares the cable operator to a newspaper in that it must advertise on its information system as a means of lowering its service rates necessary to survive and pay for its network. It is this difference that justifies the imposition of strict scrutiny to Ordinance 1999-41. The statute does not meet the harsh strict scrutiny requirements and was therefore overturned because the Court found that the "imposition of an equal access provision both deprives the cable operator of editorial discretion over its programming and harms its ability to market and finance its service, thereby curtailing the flow of information to the public." 

Presumably, in anticipation of future attempts to force access into the cable Broadband market and arguments that such attempts should be governed by the less strict intermediate level of review, Judge Middlebrooks indicated that Ordinance 1999-41 would not survive intermediate level scrutiny. This standard is applied to content neutral statutes. Such a content neutral statute must further an important or substantial government interest that is unrelated to the suppression of speech and, that hinders no more speech than is necessary to be sustained.

Relying upon FCC statements and various industry statistics outlining use of the Internet and Broadband Internet, Comcast reaches the conclusion that cable operators do not operate a monopoly on Broadband, that there is no difficulty obtaining Broadband access and that telephone lines will continue as the primary Internet access vehicle. Moreover, Broward County failed to prove that there was an important governmental interest in forcing access or that it was necessary. The primary reason for the lack of an important government interest (wide access to Broadband Internet) and no other means available (cable being the only option, thus necessitating forced access) was that Ordinance 1999-41 was promulgated and passed at the urging of GTE, a competitor who wanted access to the system. The Court correctly reasoned that desire for a competitive advantage does not equate to an important governmental interest.

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62 Id. at 694-96.
63 Id. at 693.
64 Id. at 697.
65 Id. at 693.
66 Id. at 697.
67 See generally e.g. Turner Broad. Sys. v. FCC, 512 U.S. 622, 642-43 (1994). Generally, regulations which suppress or govern speech because of its content, are content based, and thus, receive strict scrutiny. Id. Conversely, regulations which do not target the content of the speech itself, but unintentionally restrict speech, despite focusing on another objective, are content neutral, and therefore, subject only to intermediate scrutiny. Id.
69 See Comcast, 124 F. Supp. 2d at 698.
70 Id.
III. WHICH FREE SPEECH AND PRESS STANDARD SHOULD APPLY TO OPEN ACCESS STATUTES

Cable systems have been recognized as providing media and having editorial discretion similar to that of newspapers. With this recognition, any regulation of a cable operator must include an analysis of its effect on free speech and press analysis. In light of the current lack of a definitive regulatory plan, the competitive nature of the Broadband service industry and the physical differences of the Broadband provider systems, Comcast raises the specter of whether any regulatory plan would withstand First Amendment scrutiny. The case of Turner on the other hand, indicates that cable companies' freedoms of speech and press are not free from regulation.

In Turner, several cable television system operators and programmers challenged the constitutionality of the 1992 Cable Act as an unconstitutional violation of the cable operators' freedom of speech. The 1992 Cable Act required cable operators to permit local broadcast stations to provide their channels over the cable system. Cable operators argued that this violated their editorial programming discretion in the same manner that a law requiring a newspaper editor to publish content would infringe upon the newspaper's freedom of speech and press.

In determining the validity of the 1992 Cable Act, the Turner Court dismissed the rational relationship analysis applied to economic speech and broadcast television as inapplicable to a cable operator's choice of programming. The Court did recognize however, that cable operators have freedom of speech and press rights similar to that of a newspaper editor. Despite this, they applied an intermediate level of scrutiny and upheld the statute. The infringement on speech was deemed minimal because it did not preclude or hamper the cable operator's right to choose programming significantly. The Court reasoned that the regulations are neutral on their face because they require carriage of signals based upon the manner of transmission rather than the content of transmission. The must-carry provisions of the statute were deemed to be content neutral because they applied to all cable systems.

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72 Id. at 495-96.
73 See Turner, 512 U.S. at 634.
74 Id. at 626.
75 Id. at 653.
76 Id. at 639.
77 Id. at 644, 656. While the Court recognized that the must-carry provisions interfered with the cable operators' editorial discretion, the Court nonetheless emphasized the technological difference between cable and newspapers. Id. The Court noted that a newspaper, no matter how great a monopoly it has in a community, cannot prevent other newspapers from being distributed if recipients so choose. Id. In contrast, a cable operator can prevent its subscribers from accessing programming by merely excluding them. Id.
78 See Turner, 512 U.S. at 661-62.
79 Id. at 644-45.
80 Id. at 643-44.
companies equally, regardless of their message, and even with the must-carry provisions a cable operator or programmer still had sufficient channel capacity to exercise discretion over what content would be provided. Any regulation of forced access to cable Broadband networks will naturally not apply in the same manner to other Broadband access providers because of the differences in Broadband technology and its costs. The result is that a cable operator's exercise of free speech and press will be violated. Without some critical lack of broadband access, it is unreasonable that a court would uphold the infringement of such rights.

The Turner court also recognized that the right to control what speech is presented in a medium affects the speaker's ability to continue providing the medium. In Turner, the Court reasoned that a lack of access to the cable subscribing public due to the nature of the cable "bottleneck" would lead to a diminishment in revenues to broadcast companies as they competed for advertising revenues with the cable companies and ultimately the decline of free broadcast services. In contrast, cable ISPs compete at a disadvantage to telephone Broadband ISPs, most notably in the high cost of network creation and construction which telephone ISPs do not have. Despite this, both cable Broadband service providers and telephone ISPs are competing for the same clientele and revenues in a manner similar to the way cable and broadcast television competed for advertising revenue dollars.

Additionally, the Court determined that the manner in which cable systems were connected to individual televisions was critical. The direct connection of the television to the cable line precludes a television antenna from being connected thereby creating a "bottleneck" that naturally precluded broadcast television. In applying the intermediate level of scrutiny, the Court determined that the government's interest in a free broadcast system was an important motivation justifying the limitation of the cable operators' or programmers' discretion.85 This analysis does not fit the cable open access debate because there is no bottleneck monopoly and no crises regarding Broadband access.

Under the Turner analysis, a statute forcing cable companies to provide access while not affecting other Broadband service providers creates the "risk of covert censorship" identified by Justice Marshall's dissent in Leathers v. Medlock. In that case, the Supreme Court determined that an Arkansas Sales Tax levied upon cable operators for providing cable services was constitutional under intermediate scrutiny. As in Turner, it applied the intermediate level of scrutiny because the sales tax applied to all sales of services including those of

81 Id. at 656.
82 Id. at 664.
83 See Comcast, 124 F. Supp. 2d at 693.
84 See Turner, 512 U.S. at 656.
85 Id. at 647.
86 See Comcast, 124 F. Supp. 2d at 698.
88 Id. at 441-42, 447.
cable services. The Court analogized the exemption of these media sources from the Arkansas Sales Tax as similar to those of Congress in enacting various tax deductions or the preclusion of various tax deductions for the exercise of political speech. The Court found that a differential burden on speakers, by itself, is insufficient to raise First Amendment concerns. As with the Turner decision, the Court's reasoning in Leathers is not applicable to the open access debate for cable internet service providers. In Leathers, the Supreme Court deferred to the will of the legislature and agreed that a sales tax did not hinder a speaker's rights of free speech and press. However, as Justice Marshall's dissent notes, and as is more evident in Comcast, this standard could not be applied to the cable internet open/forced access debate as Internet Service Providers other than cable operators would have a significant advantage over cable operators due to their lack of financing the systems construction that would result in the government's ability to determine which speaker would have the ability to operate the "press," or even worse, the ability to eliminate a "press."

Broadband providers should be viewed as an industry that provides services in a number of different physical means rather than separate industries subject to separate regulatory schemes. Even if this approach is taken, it is doubtful that statutes governing the regulation of the Broadband industry would avoid First Amendment scrutiny because the "unique physical characteristics of cable transmission should [not] be ignored when determining the constitutionality of regulations affecting cable speech." The reason is that a cable company's choice of programming and its control of access to its network gives it editorial free speech protections recognized in Supreme Court decisions. Telephone Broadband access providers have not constructed a network and do not exercise editorial control over an information network and accordingly are not engaging in speech activities. For these reasons the strict scrutiny rational applied in Tornillo should continue to be applied to the access issues on cable networks.

As detailed in Tornillo, Florida had a statute on its books that required a newspaper to publish the response of a candidate for political office to an attack upon him in the newspaper in the same manner and space in which the attack was printed. The intent of that statute was to provide access to the media in an atmosphere where newspaper ownership had been concentrated into the hands of

89 Id. at 447.
90 Id. at 447-49.
91 Id. at 447.
93 See id. at 458 (Marshall, J., dissenting).
94 Turner, 512 U.S. at 639.
a limited number of groups.\textsuperscript{97} The \textit{Tornillo} Court determined that a newspaper is not merely a vehicle for content.\textsuperscript{98} It found that newspapers also exercise discretion as to what content is included in the newspaper, and that this is an exercise of free speech and press worthy of the highest protection.\textsuperscript{99} Also, the Court determined that a forced access statute created a cautionary atmosphere that discouraged printing of information because of the right of forced response.\textsuperscript{100} This same concern is present in any forced access statute. A forced access statute could force a cable operator to choose not to offer Broadband Internet access because it is reluctant to permit access to other providers whose message it deems offensive for not offering its system to all providers.\textsuperscript{101}

Laws forcing access to cable Broadband systems affect cable operators and programmers in the same manner that the Florida law in \textit{Tornillo} affected newspapers, it forces them to provide access to speakers, and destroys their discretion over content.\textsuperscript{102} In \textit{Tornillo}, the Supreme Court struck down the statute by applying strict scrutiny.\textsuperscript{103} Any statute requiring access on Broadband cable networks should be analyzed under strict scrutiny analysis because of the stringent and unnecessary regulations it places on the editorial function and discretion of the cable operator exercising its freedoms of speech and press.

One might argue that allowing one Broadband ISP complete control over the content of its network would diminish the amount of information available and shutter the marketplace of ideas. This is no different than concerns stated regarding newspapers and the lack of open access to publish on its pages by those other than the editors. The \textit{Comcast} decision recognized that like newspapers, cable operators have the right to recoup their costs by determining access and selling content on their system.\textsuperscript{104} It specifically addressed the concern of a reduction in speakers, but, nevertheless rejected the argument "that concentration of ownership and expense of entry into publishing had resulted in a loss of any ability by the public to respond or to contribute in any meaningful way to debate on issues."\textsuperscript{105} Rather, the Court found "an enforceable right of access brings about a direct confrontation with the express provisions of the First Amendment."\textsuperscript{106} Additionally, forced access by the government "dampens the vigor and limits the variety of public debate" by favoring speakers.\textsuperscript{107}

While the \textit{Comcast} facts may not present an even handed approach to forced access, due to GTE's motivation, a broader county ordinance or other law

\begin{footnotesize}
\begin{itemize}
\item[97] \textit{Id.} at 245.
\item[98] \textit{Id.} at 258.
\item[99] \textit{Id.} at 258.
\item[100] \textit{Id.} at 256.
\item[101] \textit{See Comcast,} 124 F. Supp. 2d at 691.
\item[102] \textit{Id.} at 694.
\item[103] \textit{See Tornillo,} 418 U.S. at 258.
\item[104] \textit{See Comcast,} 124 F. Supp. 2d at 693-94.
\item[105] \textit{Comcast,} 124 F. Supp. 2d at 694 (referring to Miami Herald Publ'g Co. v. Tornillo, 418 U.S. 241 (1974)).
\item[106] \textit{Id.}
\end{itemize}
\end{footnotesize}
requiring all ISPs to provide open access would presumably still be unconstitutional, as it would affect various ISPs differently. On its face such a statute may be content neutral. Despite applying to all Broadband ISPs a content neutral statute would clearly favor Telephone Internet Service Providers over Cable Broadband Service Providers in that Cable Broadband Service Providers would be forced out of the market because they could not recoup their construction costs.

The traditional recognition and protection granted to the editorial functions of cable operators and programmers should not be diminished simply because the operator chooses a particular content that is also available through other media. The approach of Congress to this matter has been appropriate and supports the notion that Broadband Internet Service should be approached as a separate service or industry, regulated on its own rather than according to who is providing the service.\footnote{8 See Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56.}

Obviously, Comcast is not the last word in the debate over open access and cable systems. The increased consumer demand for Broadband access likely will bring this issue to the forefront. How such issues are resolved will be pivotal not only in determining what options are available to consumers, but also in protecting the free speech rights of cable operators and programmers. It is still unclear whether Congress or the FCC will promulgate additional statutes and rules affecting this debate. Regardless of whether Congress or the FCC weighs in on the issue, the Comcast decision provides a functional framework in which to address the issue of consumer choice and free speech rights of cable operators or programmers. This, coupled with the Supreme Court’s long recognition that cable operators’ and programmers’ editorial functions deserve First Amendment protection also should not be ignored in addressing this issue, particularly when there is a lack of monopoly or threat of monopoly. Future attempts at regulation should follow the Comcast decisions reasoning and grant cable operators the freedom of speech and press rights long recognized by the Supreme Court.
ONLINE DISPUTE RESOLUTION: SOME LESSONS FROM THE E-COMMERCE REVOLUTION

by Ethan Katsh

"The change from atoms to bits is irrevocable and unstoppable." 3

"Is this like 1947 in the television business (meaning another six years before a mass market emerges)? Or are we in a year like 1953, on the verge of changing the nation? Or is it like 1971 in the cable business or — a horrible thought — 1985 in a business known as videotext, a precursor to the digital information business that sucked up hundreds of millions of dollars from a galaxy of major media companies before evaporating." 4

Consider the online auction site eBay. In March 1999, 1.7 million items were offered for sale there. 5 A year later, in March 2000, the number of items for sale at eBay had increased to 4.1 million. 6 By the end of 2000, there were more than 5 million items for sale, and it is likely that when you read this, the number will be even higher. 7 With so many items offered for sale, the number of transactions each week is in the millions, 8 and almost all of these transactions occur between strangers. eBay provides the place and the means for a huge amount of commercial activity to take place, but eBay itself assumes no responsibility for any problems that might arise between buyer and seller. Is it any surprise that disputes occur in such an environment?

Or consider domain names, the word or phrase that comes between the "www" and the " .com" in a World Wide Web address. During 2000, more than 2,000 complaints were filed against the owners of domain names by companies claiming that their trademarks were being infringed. 9 Before the Internet, there were no domain names and, of course, no disputes over domain names. As recently as 1997, there were fewer than 2 million domain names. 10 There are...

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1 Copyright 2001 Ethan Katsh <katsh@legal.umass.edu/dispute>. Adapted from a speech given at Salmon P. Chase College of Law Symposium on Cyberlaw, Feb. 3, 2001. A more complete discussion of the issues raised in this article can be found in E. KATSH & J. RIFKIN, ONLINE DISPUTE RESOLUTION (2001).

2 Professor of Legal Studies and Director of the Center for Information Technology and Dispute Resolution at the University of Massachusetts at Amherst <http://www.umass.edu/dispute>.


4 Michael Wolff, Burn Rate 17 (1998).


10 See Cheryl Regan, History in the Making – Milestones (visited Mar. 23, 2001) <http://www.rs-
now more than 30 million domain names. Is it any wonder that there are disputes over them?

Or consider Napster, a piece of software developed by an ambitious and entrepreneurial college student. With Napster on your computer, you can find and obtain a copy of any song you would like to have, as long as it is on someone's machine, anywhere in the world, who also has Napster running. Is it any surprise that record companies (what an outdated phrase) are unhappy with Napster?

Cyberspace is not a harmonious place. How could we expect anything different in an environment with an extraordinarily high level of activity, energy, competition, and innovation? Indeed, many of the same qualities that make cyberspace interesting and, for some, lucrative, also contribute to an environment where misunderstandings occur and interests clash. Cyberspace may be a big space, in the sense that there are almost no limits to how many people can participate in it and how many activities can be taking place online. It is also, however, a continuously growing and changing environment, and these are conditions that are not likely to be conflict-free.

We cannot hope, in any environment, to suppress conflict completely. Indeed, and perhaps surprising to some, that would not even be a particularly desirable goal. The existence of conflict can be a sign of trouble, or it may be a sign of, and an inevitable consequence of, a vibrant and competitive environment. Conflict can be an obstacle to creativity and entrepreneurship, or it can motivate and energize. We do need to be aware of how high a level a conflict exists in cyberspace, and how and why conflicts are occurring, but what should concern us most about our emerging online environment is not that disputes exist or even that lots of disputes may exist. More troublesome than encountering conflict online is that, as we have been putting in place wondrous and easily accessible resources for working, selling, learning, and playing online, we have neglected to design systems for dealing with disputes that would arise.

In 1995, someone who worked in the computer field told me that he thought the World Wide Web was a passing fad. I suggested to him that the Web seemed to be a system that could only expand and become more popular, and that it would find greater and greater acceptance. Even then, one could, sitting at one's computer, obtain textual materials that previously required a trip to the library. One could also obtain materials that previously were expensive, Supreme Court opinions for example, at no cost. He was not persuaded. There were, he said, a lot of impressive things about the Web, but who could know what would be permanent and what not.

Five years later, the future existence of the Web seems completely secure. What the Web will look like in another five years, however, and what it will be used for, are not clearly predictable. We have witnessed large numbers of

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businesses being started and know that some will thrive while others, which are prominent today, may not even exist in five years. The Web as a commercial space will certainly continue. What, however, will the Web have in addition to commerce? What will be its function in education or in politics? It is clear how to buy and sell things online, how to bank and invest, but how much more of the activities we are familiar with in our physical environment will find a home on the Web? Cyberspace is a source of much conflict and that may be a problem. Cyberspace is also, however, an environment of resources, skills, and expertise that can be employed to respond creatively to this problem.

The Web needs civic as well as commercial institutions. Settling disputes is often assumed to be the responsibility of the legal system, and the need for law to respond to the emergence and development of cyberspace has been given a great deal of attention in the last few years. It has also become clear that the new technologies are having an impact on the legal profession and on legal education, both of which are feeling pressure to change. What has lagged behind the concern over rules of law and lawyers has been examination of the impact of cyberspace on the operation of legal institutions and processes.

Law is often called upon to settle disputes, but dispute resolution is not synonymous with law. Disputes are dealt with in many different contexts by many different people using many different institutions. Law is not irrelevant to our inquiry, but it is not central either. Robert Ellickson, in his impressive work *Order Without Law,* notes:

> [L]arge segments of social life are located and shaped beyond the reach of law. Despite this mounting evidence, the limits of law remain too little appreciated. In everyday speech, for example, one commonly hears the phrase “law and order,” which implies that governments monopolize the control of misconduct. This notion is false . . . .

Cyberspace provides us with an environment to observe new sources and patterns of conflict. Technology also provides us with the opportunity to consider new approaches to conflict resolution. Our experience with cyberspace thus far has taught us that we should not simply import our traditional ideas, practices, and institutions to the online world. What we are familiar with offline developed in response to problems and conditions that existed offline. The systems that were put in place represent what were workable offline. Law was an important part of this, but not the whole part. In the complicated and emerging environment of cyberspace, law and lawyers will not play the same role online as they do offline. Indeed, it is quite possible that the authority and role of the law in dispute resolution processes will be less than it is offline.

Disputes can be resolved out of court, without lawyers, and even without concern for legal rules. Most disputes are. As we consider dispute resolution in cyberspace, we need to do so with an eye to putting in place processes that make the most sense in the online environment, and that can bring satisfaction, trust, and legitimacy in a way that is effective in the online environment. These could resemble legal processes, but they could also involve using technology in

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creative ways so as to reduce reliance on resources that have been commonly used in the past.

One of the notable trends of the last several decades has been the increasing use of alternative dispute resolution. Alternative dispute resolution, or ADR, refers to several different techniques for resolving disputes, all of which are alternatives to litigation in court. The most familiar ADR processes are negotiation, mediation, and arbitration, but there are various hybrid processes as well. What these processes share is an approach that is generally less formal than law, that may not require the involvement of lawyers, and that is more focused on bringing an end to the dispute between the parties than on clarifying points of law or establishing a legal standard. In addition, these processes are typically faster and cheaper than litigation. All of these factors have encouraged the growth of ADR offline and will be factors affecting the growth of online dispute resolution (ODR) systems.

The use of the word "alternative" suggests that there is a primary model for settling disputes, namely litigation in court. What are considered the alternatives offline, however, might become the primary models of dispute resolution online. As noted above, litigation still occupies a central place in our thinking about dispute resolution, and this is so even though the reality is that relatively few disputes end up being settled via a trial. With cyberspace disputes, there is even less reason to think that courts will be the choice of first resort.

The nature of cyberspace, how we can use it and how it may change us, are important and challenging issues for anyone interested in understanding online conflict and in building dispute resolution systems online. One lesson we have learned about ADR is that the context in which disputes arise is important. Disputes and dispute resolution do not occur in a vacuum. Every dispute arises in a setting or context, and the setting from which it arises provides us with information about the nature of the dispute and about the options that might be considered in trying to resolve it.

In the year 2000, it became clear that cyberspace was both a context of conflict and a context with opportunities for conflict resolution. Some of the notable events and developments that occurred during 2000 are as follows:

- More concern by governmental agencies and international bodies over problems with online transactions, and advocacy of ODR as a solution.

  During 2000, conferences and workshops devoted to ODR were held by the Federal Trade Commission,\textsuperscript{15} Department of Commerce,\textsuperscript{16} European Union,\textsuperscript{17} Hague Conference on Private International Law,\textsuperscript{18} Organization for Economic Cooperation and

\textsuperscript{15} See University of Massachusetts Center for Information Technology and Dispute Resolution Online ODR Bibliography (visited Mar. 26, 2001) <http://www.disputes.net/cyberweek2001/onlinebibliography.htm#reports>. The site contains a list of resources generated by these conferences.

\textsuperscript{16} Id.

\textsuperscript{17} Id.

\textsuperscript{18} Id.

- Heightened interest by traditional alternative dispute resolution organizations.

  Sessions on ODR were held at the annual meetings of the American Bar Association Section on Dispute Resolution, the CPR Institute of Dispute Resolution, and SPIDR.

- Significant venture and private financing of online dispute resolution companies such as SquareTrade.com, eResolution.ca, Cybersettle.com, and ClicknSettle.com.

- Evidence of being able to conduct ODR at a large scale.

  An online arbitration process for domain name disputes has handled approximately 2,000 complaints, and SquareTrade mediated more than 35,000 disputes between March and December 2000.

- Greater acceptance by online and offline marketplaces of ODR both to settle disputes and as a mechanism for building trust.

  In addition to eBay, there is a growing list of new ventures, such as eLance, Onvia, HelloBrain, and others with distinctive dot com names that offer dispute resolution to their users.

ODR is becoming an industry as well as a process. For e-commerce entrepreneurs, ODR is attractive as something that can be incorporated into their new ventures as part of an overall strategy to build trust among users. For online disputes, there may be no alternative to ODR, and the process may grow fastest in that context. For ODR providers, however, the ability to deliver expertise over a network becomes an asset that can be employed for disputes occurring both in or out of cyberspace. Over time, what is learned online will be applied wherever it can be of value, something we have already begun to see occur in a variety of offline disputing contexts.

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19 Id.
20 Id.
21 See University of Massachusetts Center for Information Technology and Dispute Resolution Online ODR Bibliography (visited Mar. 26, 2001) <http://www.disputes.net/cyberweek2001/onlinebibliography.htm#reports>. The site contains a list of resources generated by these conferences.
22 The author was present at this session.
23 Id.
24 Id.
26 See generally ICANN, Uniform Domain-Name Dispute-Resolution Policy (last modified June 17, 2000) <http://www.icann.org/udrp/udrp.htm>.
27 Conversation with Karen Hagewood, General Counsel to SquareTrade (Jan. 14, 2001).
ODR AND THE OFFLINE ENVIRONMENT

I recently returned home from a trip and found that the airline had lost my luggage. This seemed to be as clear a physical world event as one can imagine. Or was it? Certainly, the luggage was physical, and it was sitting in some physical place somewhere. But the solutions were also, on several levels, electronic. Hope for finding the luggage lay not in the airline personnel but in the bar code on the luggage tag and in scanning devices that might have kept track of where it had been sent. In addition, my anger and frustration were allayed somewhat when I was told that I could track the progress of the search on the Web. Instead of waiting twenty-four hours and then calling and being told whether it was found or not, I could go to a Web site and check every so often whether it had been found, where it might be, and when it might arrive.

This was not a problem that originated on the Web and, if it turned out that the luggage could not be found, there was no provision for filing a complaint or settling the dispute online. Yet it also seemed quite clear that technology was moving into the world of a fairly common offline problem. It was moving a step at a time, but all that was needed for ODR was one or two more steps. Why couldn’t lost luggage disputes be resolved online, with a quick filing, review, and settlement of a claim? Wouldn’t this be more efficient than whatever process is normally used?

We have enough experience with cyberspace to know that what happens online inevitably touches what occurs offline. The growth in electronic commerce, for example, has caused changes in the thinking and practices of retailers whose histories were in selling offline. Similarly, the dispute resolution technologies and processes that may be originating online can be expected to manifest themselves in offline processes and institutions. Several companies, for example, have already identified ways in which Internet-based efficiencies can be applied to insurance claims that have not been handled efficiently in the past. This is only one of many possible uses offline of what exists online.

THE NATURE OF ODR

Mediation and arbitration involve a range of processes that allow a neutral third party to work with parties in a dispute. A large part of the expertise of any third party consists of information management. For arbitration, there is a fairly clear process of receiving information, evaluating information, and reaching a judgment. For mediation, the process is more flexible, but decisions about which party to meet with first, what to say to each party, how to frame and reframe information provided to each party, all involve attempts to manage the flow of information.

ODR borrows a framework from the existing models and applies technical resources and expertise that, over the Internet, can be delivered from afar. Where parties are at a distance or when the need is for a cheaper and faster process than can be provided by a court, the whole process may take place online. For other disputes, the use of ODR will be selective, in general being used by the third party when adding technology seems likely to improve the process in some way.
Traditional mediation is fortunate to have, as its most basic feature, the face-to-face meeting, probably the richest of all communications encounters. During such meetings, a wink can be more meaningful than a word, and something said in a soft voice may mean something very different from the same words spoken in a loud voice. In terms of communication, therefore, it is an extremely rich, flexible, and interactive environment. Consequently, the single question asked most often about ODR concerns how dispute resolution can possibly succeed without face-to-face encounters. The easiest response to this is that there are many disputes where face-to-face meetings are not feasible, and that for such disputes there would be no dispute resolution process at all without ODR. ODR, it can be argued, is not meant to replace or be a substitute for face-to-face settings when they can be part of the process. For online disputes, therefore, where parties may be located at great distances, it is not hard to persuade even skeptics that ODR is useful and appropriate.

While the argument that ODR can be employed when face-to-face meetings are not possible is accepted without much resistance, it may turn out to be a bit too facile an answer. ODR will not replace face-to-face meetings when they are possible, but as ODR grows, it will affect the overall process of which face-to-face meetings are a part. ODR may not replace face-to-face meetings, but it may displace them, in the sense that the perceived need for them may change, the frequency with which they are held may change, and how they are conducted may change.

ODR, when used in offline disputes, may not yet appear to be a competitor or substitute for the face-to-face encounter. We are, quite clearly, far from being able to provide as flexible and interactive a communications process online as a meeting in a physical place. We are also not at a point where we can anticipate how video conferencing, when it is widely and reliably available, might be employed. Where the value of ODR is likely to be recognized first in offline contexts is at points in the process of negotiation, mediation, or arbitration that occur before or after a face-to-face meeting. While we recognize that face-to-face encounters are information-rich experiences, we also believe that what happens in between such meetings is, in terms of communication, impoverished and information-poor. What is not noticed by the very same people who point out the great value of face-to-face encounters, is that the communications environment in which ADR is pursued between face-to-face meetings is often not even considered to be a period of time in which progress toward resolution is anticipated. Online tools can change this.

**THE THEORY OF ODR**

ODR is dispute resolution that takes advantage of the Internet, a resource that extends what we can do, where we can do it, and when we can do it. The attraction of cyberspace can almost always be reduced to one or more of the following:

1. When one is online, one can engage in activities at a distance that previously required physical presence.
2. When one is online, one can do things quickly, if not instantaneously, that might have been inconvenient or not doable at all previously.
3. When one is online, one acquires information-processing capabilities that move beyond human capabilities in some way.

The Internet is already employed, almost routinely, for accessing information anywhere it might be located. Indeed, where something is located in a physical sense is not often a question of concern as one seeks information online. There is, from Mediate.com, CRINFO.org, ADRworld.com, and others, a wealth of information about dispute resolution that is available on the Internet. ODR is part of a set of developments that is going beyond the search for information by trying to set up processes online.

The movement from simply accessing information to participating in a process represents a maturing of the Internet. A process can be viewed as a series of informational exchanges. What makes online processes efficient is when these informational exchanges occur between human and machine, rather than between human and human. What makes the design of online processes difficult is that the range of requests permitted to the human by the system must be flexible and broad enough to satisfy the needs of the human. At the same time, however, any possible request must be anticipated so that a suitable and appropriate array of responses is programmed into the machine.

Mediation is a process in which there are large numbers of exchanges of information. It is a more complicated set of interactions than an auction or stock trade or book purchase, which is one reason we have online versions of these processes but less advanced ODR systems. As with everything else connected to computers, what appears first with ODR will be a primitive version of what will appear later. What one can be confident of, however, is that if demand exists, many familiar systems and processes that exist offline can be transformed into online systems and processes. What is understood by ODR entrepreneurs is that there is no reason why dispute resolution processes, or parts of dispute resolution processes, cannot exist in electronic form and be delivered over a network.

We may not yet be able to deliver all the expertise of a mediator over a network. What we should understand, however, is that while network-delivered expertise may, at least in the near future, have limits, the computer linked to the network also adds a quite novel capability, that of processing expertise. The network allows delivery, but what is delivered can originate with a human, with a machine, or both.

THE PRACTICE OF ODR

An online dispute resolution process will not be something that appears fully grown on a single date but, rather, something that will evolve, not only in the capabilities that are built into it, not only in our use of it, but in how we think about it. Nothing on the Net, or the Net itself, should be considered to be like a painting, work of art, or even a book, that is revealed to the public only when it is completed and final. Rather, online programs and capabilities are all works in progress, usable and functional but not final or perfected. Whether the technological object is an online auction or a dispute resolution process, there is a certain threshold of achievement that a first implementation needs to meet before it is presented to the public. But each such technological achievement should
also be judged on the basis of what it suggests about future developmental possibilities.

What are the initial incarnations of ODR likely to include, where are they likely to be used, and what skills are they likely to require of users? The following three aspects of disputes should provide a framework for understanding why some dispute resolution capabilities and systems have already appeared and why we shall have to wait a bit longer for others.

- **Single-issue v. multi-issue disputes:** We already have fairly easy-to-use software to aid in reaching agreement when the parties disagree about only one issue, e.g. money. A much greater challenge is to provide technical resources to assist parties who have many differences and where resolution depends on identifying interests, assigning priorities, and making compromises.

- **Single transaction v. relationship:** Auction disputes involve a single transaction with little likelihood of a future relationship. There are often several different issues that need to be dealt with in auction-related disputes, but any agreement reached is executed almost immediately. Indeed, in a project we did for eBay in 1999, we felt no need even to have written agreements because there was no need for a process of enforcement.

- **Arbitration v. mediation:** We already have a system in place in which thousands of disputes involving domain names and claims of trademark infringement are being arbitrated online. SquareTrade and others are putting Web-based mediation systems in place, but mediation systems involve more complex interactions and require more investment than online arbitration systems.

The existence already of online systems for disputes where money is the only issue, or where there is no relationship in question, or where the dispute is arbitrated rather than mediated, is traceable to the nature of the communications process that is needed to handle such disputes. Successful online examples of the above exist because the communications infrastructure that is needed for them is at the less complex end of the spectrum. Some single transaction problems, for example, might even be handled using email, a form of software that is familiar to almost everyone with an Internet connection. Multi-issue disputes will require something more.

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ONLINE DISPUTE RESOLUTION

THE ROLE OF SOFTWARE

As we move from less complex communication to more complex communication, we move from software that might be bought "off the shelf," in that it is ubiquitous and requires minimal online skills, to software that does more but requires more. If there is anything that is central to the capabilities we have for interacting online, for both delivering expertise and enhancing expertise, it is software. A principal challenge for anyone or any group wishing to provide dispute resolution services over the Net is to find or design software that handles sophisticated levels of communication and yet does not have a high learning curve for users. This is a considerable challenge since if the third party or even one of the disputants is unable to employ the software effectively, the process will not work optimally.

The Net is an ever-growing, infinitely expandable information and knowledge space. It is increasingly easy to deliver information to anyone and to any place from anyone in any other place. Delivering useful, valuable, and expert information, however, is not the same as delivering expertise. Sometimes, information alone may be sufficient to fulfill what a user needs, and the Internet excels at easy, cheap access to information. Often, however, something more than information is required. In this sense, expertise requires an interactive informational process, one where the Web site receives information from a user, processes it in some way, provides some analysis and results to the user, and perhaps then begins the process again.

Consider the situation of a subscriber to an Internet Service Provider (ISP), who has her account cancelled because it was determined that she had allowed others to use her account in ways that violated the ISP's terms and conditions. Anyone in this or any similar situation would want to know whether the subscriber has any rights and, if so, whether there are any legal remedies. In addition, the user might find online a list of persons who had experience in dealing with such problems. There might even be all sorts of information online about strategies that have proven successful in the past in dealing with the problem. This is all information of value, and if the information has come from the Web site of an ODR provider, the sense that the ODR provider has knowledge and expertise will be enhanced.

The principle challenge of expertise, however, goes beyond providing useful information. In an online mediation, information would certainly be provided to the parties as part of the process but the parties will find value in the process only if the mediator does something more. The mediator needs to respond appropriately to communications, to keep the parties "talking," and to move them somehow toward a mutually acceptable solution.

Cyberspace is, increasingly, a place where there are processes available to users as well as information. This should not be surprising since processes are sets of informational transactions and exchanges. What makes building processes out of informational transactions difficult is structuring and regulating the flow of information and the numerous informational exchanges among the parties. Fighting online, negotiating online, and mediating online all involve the sending and exchanging of messages, but it is the third party's management of
and involvement in the message-exchanging process that provides the value the parties are seeking.

Some processes require richer and more flexible means for managing the flow of information, and these processes are inevitably more difficult to build in the online environment. Face-to-face sessions are prized not because of the fact that the parties can see each other’s face but because seeing faces adds new opportunities for communicating information and interacting efficiently. The ongoing goal for ODR programs is to gradually increase the richness of interaction online and thus allow for expertise to be applied more efficiently and effectively.

It was written recently that the Internet is “the biggest collective expert known to humanity.” In some of the online mediations we have done, we have been more willing than we might have been offline to have co-mediators, or to link a mediator with a particular kind of experience with someone with a different kind of experience. The availability of doing this increases not only because of the ease of communication but because the pool of possible mediators is not limited by geographical location.

The linking of people at a distance with machines that can assist these people has the potential to lead to a new conceptualization of the dispute resolution process. The most familiar model assumes that there are three parties to the process, the two disputants and the third-party neutral. Even when there is a multi-party dispute with many disputants, ADR is still commonly thought to be three sided, with all of the disputants grouped together as the two disputants, and joined the third party, the mediator or arbitrator.

As collaborative and consensus-building software applications become both more powerful and more widely used, we may begin thinking of dispute resolution as having a “fourth party,” “at the table,” the technology that works with the mediator or arbitrator. Just as the role of a third party can vary in different contexts, so can the role of the fourth party. It can, in different circumstances, be more or less relied upon and be more or less influential, but the role, nature, and value of this fourth party needs to be understood and recognized.

The fourth party does not, except in a few well-defined instances such as blind bidding, replace the third party. But it can be considered to displace the third party, in the sense that new skills, knowledge, and strategies may be needed by the third party. It may not be co-equal in influence to the third-party neutral, but it can be an ally, collaborator, and partner. It can assume responsibilities for various communications with the parties, and the manner in which the third and fourth parties interact with each other will affect many parts of the dispute resolution process.

A concept of a “fourth party” represented by technology can be jarring, and its acceptance certainly will not be immediate. Yet, new technologies challenge beliefs as well as practices, and concepts as well as doctrines. Some discussion of these issues can be found in Ethan Katsh, The Electronic Media and the Transformation of Law (1989) and Ethan Katsh, Law in a Digital World (1995).

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32 Daniele Bourcier, Patricia Hassett & Christophe Roquilly, Droit et Intelligence Artificielle 20 (2000).
33 Some discussion of these issues can be found in Ethan Katsh, The Electronic Media and the Transformation of Law (1989) and Ethan Katsh, Law in a Digital World (1995).
ongoing development of technological applications can only be expected to grow.
INTERNET GOVERNANCE,
STANDARD SETTING, AND SELF-REGULATION

by Philip J. Weiser

After the initial enthusiasm for a "cyberanarchy," as some have called it, the legal academic literature has moved to embrace the view that governmental decisions and regulation will be critical to — and essential for — the shaping of the Internet's future. In the hopes that our political discourse begins to take a more sober look at the realities of Internet governance and the role of government in it, this Essay offers a preliminary look at the overall framework for Internet regulation, examining in particular the nature and limits of a key private regulator of the Internet: standard-setting organizations and their institution of open, interoperable standards. Whether or not we admit it, the Internet did not develop without government influence and, given its importance, government cannot afford to ignore the limits of standard-setting bodies as a form of self-regulation. Consequently, this Essay argues, using the FCC's recent decision regarding instant messaging as an example, that the government should develop a principled framework for when to mandate open, interoperable standards that have yet to be instituted by private standard-setting bodies.

1 Associate Professor of Law and Telecommunications, University of Colorado. For helpful comments and suggestions, thanks to Julie Cohen, Ellen Goodman, Mark Lemley, Doug Lichtman, Doug Melamed, Tom Nachbar, Jon Nuechterlein, Doug Sicker, Jim Speta, Molly Schaffer Van Houweling, and Heidi Wald.


3 For a good example of the emerging consensus, see Neil Weinstock Netanel, Cyberspace Self-Governance: A Skeptical View from Liberal Democratic Theory, 88 CAL. L. REV. 395 (2000) [hereinafter, "Cyberspace Self-Governance"]; see also, e.g., Lawrence Lessig, The Limits in Open Code: Regulatory Standards and the Future of the Net, 14 BERKELEY TECH. L.J. 759, 762 (1999) ("Everyone now gets how the architecture of cyberspace is, in effect, a regulator. Everyone now understands that the freedom or control that one knows in cyberspace is a function of its code.").

4 On the willingness of government officials to recognize that the Internet is and will be regulated, compare FCC Commissioner Ponders Extent of Regulation Among Rivals on Internet, 77 ANTITRUST & TRADE REG. REP. (BNA) 417, 417 (Oct. 14, 1999) (quoting Commissioner Powell as stating that, "if you don't believe that [current] regulatory choices . . . have a direct and indirect effect on the development of the Internet, you're really missing something.") with Lawrence Lessig, Innovation, Regulation, and the Internet, THE AMERICAN PROSPECT (Apr. 10, 2000) <http://www.prospect.org/archives/V11-10/lessig-1.html> [hereinafter, "Innovation"] (reporting congressional aides as aghast at thought of "regulating" cyberspace); see also Bickerstaff, infra note 9, at 6 ("In effect, the FCC directly and indirectly went about creating a regulatory structure that, despite numerous intervening decisions over almost thirty years, still shapes the computer services marketplace and effectively subsidizes public use of the Internet.").

5 Even advocates of self-regulation acknowledge the role of the U.S. government in the Internet's development and that the government has "always placed some regulation on cyberspace." Llewellyn Joseph Gibbons, No Regulation, Government Regulation, or Self-Regulation: Social Enforcement or Social Contracting for Governance in Cyberspace, 6 CORNELL J.L. & PUB. POL'Y 475, 501 (1997).

6 In so doing, it follows in the visionary work of scholars who have long recognized — at least for Internet time — that government can regulate the Internet most effectively by acting in aid of the
This Essay proceeds in four parts. Part I briefly outlines the Internet's emergence and the changing nature of the debate over its regulatory status. Part II highlights how standard-setting bodies and the Internet's reliance on open standards have shaped the Internet's character in critical ways. Part III proposes an analytical framework for government regulators to use in evaluating whether, and if so when, to impose interoperability mandates on information platforms. Finally, Part IV criticizes, based on the principles set forth in Part III, the FCC's recent decision to impose an interoperability mandate on AOL Time Warner's instant messaging product.

I. LAW AND THE INTERNET

Depending on one's vantage point, the Internet was born in 1969 as a Defense Department project, in 1989 when Timothy Berners-Lee developed the software code that launched the World Wide Web, or possibly even 1992 when the Internet browser made using the Web a multimedia experience and the U.S. government allowed commerce to be conducted on the Internet. In any event, from 1969 to 2000, the dominant ideology of the Internet community resisted almost all forms of conventional government regulation. As a result, many embraced the mantra of "don't regulate the Internet" and others insisted that the Internet, by virtue of its openness and international nature, could not be regulated.

The reality is that the Internet has always been regulated. To be sure, it has not been subject to the full panoply of command and control regulation placed upon, say, the telecommunications industry. Rather, the Federal Communications Commission consciously decided to forbear from regulating information processing or, as it termed it, "enhanced" services like those traditionally provided over the Internet. In so doing, the FCC allowed for other forces — namely, the leadership of the U.S. government in getting the Internet started, the constraints imposed by a standard-setting process led by a community of engineers who insisted on open, non-proprietary standards for the Internet, the self-restraint of companies doing business on the Internet, and/or the free market itself to regulate the shape of and behavior on the Internet.

private organizations that govern the Net, not by staying out of the way entirely. See Joel R. Reidenberg, Governing Networks and Rule-Making in Cyberspace, 45 EMORY L.J. 911, 930 (1996) [hereinafter, "Governing Networks"].

7 For a recitation of this relevant history, see Edward L. Rubin, Computer Languages as Networks and Power Structures Governing the Development of XML, 53 SMU L. REV. 1447, 1449-52 (2000).

8 For a listing of some of the notable scholarship, see Netanel, supra note 3, at 398 n.2.


10 For an explanation of how forces other than "law" regulate conduct, see Lawrence Lessig, The New Chicago School, 27 J. LEGAL STUD. 661, 662-66 (1998) (discussing how markets, social norms, and architecture all regulate conduct).
In 1997, academic commentators analyzing the Internet regularly exclaimed that “the strongest argument for self-regulation is that it works,” pointing to the Web’s exponential growth. Following this sentiment, the U.S. government also championed self-regulation by industry to address public policy questions raised by Internet commerce, including technical standard setting. The basic ideal of self-regulation is that a community can police itself through either the development of norms of conduct, private law enforced by contract, technological architecture, or some combination of the three. This ideal, however, has been subject to all too little critical examination. In areas involving technical standard setting, the case for deferring to private organizations seems particularly strong, as technical standards are an area where industry participants are likely to have “superior knowledge of the subject compared to a government agency.” In addition, when it comes to standard setting (as opposed to, say, privacy policy), the institution of an open standard can be a self-executing act (whereas other areas like privacy policy require the maintenance of an adjudication mechanism to monitor compliance). Thus, in

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11 Gibbons, supra note 5, at 484.
12 See President William J. Clinton & Vice President Albert Gore, Jr., A Framework For Global Electronic Commerce Sec. 9 (1997) (“Standards are critical . . . as they can allow products and services from different vendors to work together”; “the marketplace . . . should determine technical standards and other mechanisms for interoperability”).
13 Commentators continue to debate the advantages and disadvantages of technological approaches, such as filtering, for addressing Internet issues such as spam (i.e., junk email), undesirable content (e.g., pornography), and privacy. Lawrence Lessig, for example, highlights the risk that filters pose to the Internet’s open architecture, assailing such measures on this ground. See Lawrence Lessig, The Spam Wars, THE INDUSTRY STANDARD (Dec. 31, 1998) <http://www.thestandard.com/article/display/0,1151,3006,00.html> (assailing use of programs designed to limit spamming through blacklisting); Lawrence Lessig, Tyranny in the Infrastructure, WIRED 5.07 (July 1997) <http://www.wired.com/wired/5.07/cyber_rights.html> (terming the Platform for Internet Content Selection, PICS, which is used to filter out pornography, “the devil”). Others have defended such private solutions. See David G. Post, What Larry Doesn’t Get: Code, Law, and Liberty in Cyberspace, 52 STAN. L. REV. 1439 (2000). Yet others, in a third camp, have looked for intermediate solutions that would combine the use of such technologies with government involvement in the ratings system to address private censorship concerns. See Thomas B. Nachbar, Paradox and Structure: Relying on the Government To Preserve the Internet’s Unregulated Character, 85 MINN. L. REV. 215 (2000). Unfortunately, a careful assessment regarding the proper role for such technological solutions is beyond the scope of this Essay.
14 As one commentator put it, “[r]ules are established by mutual agreement, and like the old West, each person defends his or her own electronic homestead; violating the few rules that exist is punished through technology, social forces, or system administrators.” Gibbons, supra note 5, at 481.
15 See Cass R. Sunstein, Television and the Public Interest, 88 CALIF. L. REV. 499, 504 (2000) (“[D]espite its growing importance, the general topic of self-regulation has received little academic attention.”). For a notable exception, see Angela J. Campbell, Self-Regulation and the Media, 51 FED. COMM. L.J. 711 (1999).
17 As Cass Sunstein put it, “[w]ithout an enforcement mechanism, a code might have no effect at all, indeed it might be a form of public deception.” Sunstein, supra note 15, at 555. Indeed, without such a system, the incentive for non-compliance will prove alluring to those who can compete without having to follow the restrictions. See id. at 556 (“A special problem here is that in
terms of critically evaluating the proper balance between the alternatives of government abdication, oversight, and regulation, appreciating the nature of standard setting is an important part of understanding the government's basic commitment to self-regulation as the dominant mode of Internet governance.\textsuperscript{18}

In retrospect, the year 2000 may emerge as the year when opinion began to shift on the role of law and regulation in shaping the Internet. In his important book published late in 1999, Lawrence Lessig championed the role of law in preserving liberty on the Net, thereby challenging the popular view that government regulation should be fought at all costs.\textsuperscript{19} Moreover, despite the "hands off the Internet" rhetoric, Congress continues to evaluate a series of laws that would shape the future of the Internet.\textsuperscript{20} Finally, despite the suggestion that technology would render law irrelevant in shaping the Internet's future, a series of high-profile cases, including those involving Napster,\textsuperscript{21} the use of decryption software to make DVDs available over the Internet,\textsuperscript{22} and eBay's legal action against a company that copied its auction listings,\textsuperscript{23} demonstrated that the irrelevance of law to the Internet's future had been greatly exaggerated.\textsuperscript{24} In short, the sooner legal commentators and policymakers fully appreciate the important relationship between law and the Internet, the better able they will be to make intelligent choices regarding how regulation will play a critical part in shaping the Internet's future.

II. STANDARDS AND THE INTERNET

The most formidable regulatory regime that has governed the Internet to date is the institution of open standards that has allowed the Internet to grow exponentially as a network of networks. Indeed, many technology companies initially failed to appreciate just how significant the basic open protocols were to the Internet's success. Microsoft, for example, believed that the open protocol for documents, HyperText Markup Language (HTML), would be displaced by

\textsuperscript{18} It is also important, of course, to examine critically the effectiveness of self-regulation as to other matters such as privacy policy where the initial self-regulatory efforts have not been encouraging. See \textit{Federal Trade Commission, Privacy Online: Fair Information Practices in the Electronic Market-place 34-35} (May 2000) (critiquing the lack of effective enforcement mechanisms and noting that, "notwithstanding several years of industry and governmental effort, only 8% of heavily-trafficked Web sites display a seal from one of the self-regulatory seal programs.").

\textsuperscript{19} \textsc{Lawrence Lessig, Code and Other Laws of Cyberspace} (1999).


\textsuperscript{22} Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294 (S.D.N.Y. 2000).


\textsuperscript{24} A number of commentators have made this point. See, e.g., Charles Fried, \textit{Perfect Freedom or Perfect Control}, 114 HARV. L. REV. 606, 630-36 (2000) (reviewing \textsc{Lawrence Lessig, Code and Other Laws of Cyberspace} (1999)).
the use of its dominant and proprietary word processing program, Microsoft Word.\textsuperscript{25} Despite Microsoft's ambitions, a series of open protocols, such as the basic protocol that facilitates data transport, the Transmission Control Protocol/Internet Protocol (TCP/IP) and others such as HTML, have gained wide acceptance, enabling millions to use the Internet. These standards, in large part because they were open and endorsed by trusted standard-setting committees, helped drive the development of new applications and encourage the increased usage of the Internet.

The close relationship between the Internet's success and voluntary standard-setting organizations reflect a happy coincidence of events. During the formative years when individuals in the scientific, research, and governmental communities began envisioning the emergence of what would become the Internet, the telecommunications establishment — then represented by the AT&T monopoly — viewed the Internet skeptically and rejected an offer to manage its infrastructure.\textsuperscript{26} In retrospect, the fact that the Defense Department's Advanced Research Projects Administration (ARPA), along with individuals in the academic community, developed the basic architecture for the Internet meant that no one owned the Internet's protocols or had to pay a license for their use.\textsuperscript{27} Thus, the Internet's standards were open and approved by standard-setting bodies like the Internet Engineering Task Force (IETF)\textsuperscript{28} and were not proprietary ones held by AT&T.\textsuperscript{29}

The Internet's openness created a virtuous cycle where members of the Internet community continued to improve upon its basic architecture by adding new functionalities that were placed in the public domain, thereby making the Internet a more valuable network.\textsuperscript{30} On the supply side, a culture emerged whereby developers would work with one another and rely on open standards rather than compete with one another to establish the basic architecture that


\textsuperscript{26} See John Naughton, A Brief History Of The Future 115-17 (1999).

\textsuperscript{27} See Nathan Newman, Storming the Gates, 11 American Prospect (Apr. 10, 2000) <http://www.prospect.org/archives/V11-10/newman-n.html> ("Largely funded by the federal government, open-source software was the creative force behind the explosion of the computer industry; it also drove development of the Internet and still comprises much of the Internet's inner workings.").

\textsuperscript{28} For an overview of the IETF, which is acknowledged to be the most important Internet standards body, see Internet Engineering Task Force, Overview of the IETF (visited Jan. 10, 2001) <http://www.ietf.org/overview.html>; Scott Bradner, The Internet Engineering Task Force, in OPEN SOURCE: VOICES FROM THE OPEN SOURCE REVOLUTION 47 (Chris DiBona et al. eds. 1999).

\textsuperscript{29} It seems reasonable to assume that AT&T would have sought to keep the Internet's basic standards proprietary, as it ultimately did so with the operating system invented at Bell Labs, UNIX. See Lawrence Lessig, Open Code and Open Societies: Values of Internet Governance, 74 Chi. Kent L. Rev. 1405, 1411 (1999) [hereinafter "Open Code"].

\textsuperscript{30} The phenomenon that a network becomes more valuable as more persons use it (such as the telephone, fax machine, or email) is often referred to as a "network effect." See Michael L. Katz & Carl Shapiro, Network Externalities, Competition, and Compatibility, 75 Am. Econ. Rev. 424 (1985); Michael L. Katz & Carl Shapiro, Systems Competition and Network Effects, 8 J. Econ. Persp. 93 (1994); Mark A. Lemley & David McGowan, Legal Implications of Network Economic Effects, 86 Cal. L. Rev. 479 (1998); Carl Shapiro & Hal R. Varian, Information Rules 173-226 (1998).
supports the Internet. Because trusted standard-setting organizations adopted these key standards and made them open, developers did not have to worry about these standards being ignored and defeated, thereby undermining the value of any applications built off of those standards. In a particularly clever move that helped to entrench these arrangements as to some key Internet technologies, Richard Stallman, the founder of the Free Software movement, set up a legal regime for open source using a license that relied on the power of copyright—the General Public License (or GPL)—to guarantee that any improvements on the basic code be contributed back to it.

The positive feedback loop experienced on the supply side of the Internet’s development also drove the demand side growth of the Internet as well. As economists have explained, the economics of information goods, like those supplied on the Internet, differ markedly from traditional industrial goods. For starters, information goods are often expensive to produce, but very cheap to copy (particularly if they are in a digital format); thus, as an economist would put it, when the marginal cost of a product is very close to zero, people should not be surprised when companies adopt unconventional strategies like giving products away for free. The other key dynamic, which reinforces the value of giving away information goods for free, is that companies supplying such products are often concerned about establishing a dominant network. As on the supply side, the demand side also benefits from the virtuous cycle that the more users who join a network, the more valuable it is. Thus, whether the network is AOL instant messaging users, eBay auction customers, or Napster users, the more individuals who use the product, the more valuable it is. Significantly, provided that the basic platform of the Internet is open and accessible, the various

31 See Sharon Eisner Gillet & Mitchell Kapor, The Self-Governing Internet: Coordination by Design in COORDINATING THE INTERNET 15 (eds. Brian Kahin & James H. Geller 1997) ("As a practical matter, the [open] platform architecture greatly simplifies -- and therefore expedites -- the development of interoperable Internet applications."). The work by the U.S. government’s Advanced Projects Research Association facilitated the emergence of such a culture. See Newman, supra note 27 (“ARPA’s network harnessed the resources of universities to provide a continuous stream of free software to improve its functionality.”). As a result, many Internet companies took the perspective “[t]he Internet is not, by its nature, intellectual property-based; it’s standards-based,” and adopted “a radical commitment to open standards.” Victoria Slind-Flor, Daniel Scheinman, Cisco Systems, Inc., THE NAT’L L.J., B1 (May 31, 1999) (quoting Daniel Scheinman, Cisco System Inc.’s General Counsel).

32 The importance of trusted standard-setting organizations like the IETF cannot be underestimated, as other industries have yet to coalesce on standards for key products, such as the format for medical records. See Jonathan Zittrain, What the Publisher Can Teach the Patient: Intellectual Property and Privacy in an Era of Trusted PRIVICATION, 52 STAN. L. REV. 1201, 1246 (2000) (noting this fact, due to a collective action problem, and contrasting it with the development of trusted standards for the sale of music on the Internet).

33 See Clayton P. Gillette, Interpretation and Standardization in Electronic Sales Contracts, 53 SMU L. REV. 1431, 1434 (2000) (“[K]nowing that all others in the industry will be moving simultaneously, each party is assured that it will not be ostracized from the network by moving to what all consider a superior standard.”).


35 See Shapiro & Varian, supra note 30, at 24.
applications that ride on top of it — instant messaging, auctions, or digital music — can all enhance the value of the Internet itself, particularly because its open protocols assures both users and developers that it will be a stable standard.

The supply side and demand side developments stemming from the Internet's open platform have contributed greatly to the Internet's popularity and increased use. On today's Internet, individuals, whether as developers or users, benefit from what engineers have called the Internet's "end-to-end" architecture principle. In short, "end to end" means a commitment to (1) openness (both in terms of its basic standards and in the culture of the standard-setting organizations themselves); (2) modularity and protocol layering; and (3) the shifting of intelligence and control to the edge of the network. 36 Significantly, the norm of end-to-end architecture reflected a particular policy that facilitated open access to applications made available on the Internet. Whether and how Internet standards follow this principle in the future will impact greatly on matters ranging from privacy to security policy. 37 Thus, policymakers cannot afford to ignore the work of technical standard-setting committees. 38

Numerous commentators have championed the role of government in maintaining a communications commons and preserving the Internet's end-to-end architecture, Lawrence Lessig and Yochai Benkler being two of the most prominent. 39 In the "Internet space," a central question is how much of the Internet should be governed as a commons as opposed to as private property. eBay's website, for example, which lists a large number of items for auction, could be viewed as a commons where anyone could have access to the listings and could re-list them. Not surprisingly, eBay maintains that such an approach would deprive it of the incentive to build a better directory of listings and that


37 In fact, concerns about privacy and security, among other things, have placed considerable pressure on the commitment of network architects to the end-to-end principle. See David D. Clark & Marjory S. Blumenthal, Rethinking the Design of the Internet: The End to End Arguments vs. the Brave New World (Aug. 10, 2000) <http://ebusiness.mit.edu/research/TPRC-Clark-Blumenthal.pdf>.


39 See Lessig, Open Code, supra note 29, at 111 (stressing the importance of the end-to-end principle); Lawrence Lessig, The Limits in Open Code: Regulatory Standards and the Future of the Net, 14 BERKELEY. TECH. L.J. 759 (1999) (championing open code as key to protecting liberty); Yochai Benkler, Communications Infrastructure Regulation and the Distribution of Control over Content, 22 TELECOMMUNICATIONS POLICY 183, 195 (1988) (urging policymakers to "a broad social distribution of communicative functions, rather than policies likely to lead to a concentrated model of communications").
copying its listings should be barred as an illegal trespass.\textsuperscript{40} By prevailing on this claim in a recent case, eBay took a first step to establish a limitation on the commons principle.\textsuperscript{41} Unfortunately, the property right granted to eBay, unlike the right available under copyright, appears to be unqualified and does not discriminate between a Consumer Reports reporter who wants to list eBay's prices versus a competitor who wants to "free ride" on eBay's network to build its own rival auction site.\textsuperscript{42}

The ongoing struggle to define the nature of the Internet commons takes place in the shadow of an old debate among economists and lawyers: under what conditions does society face the "tragedy of the commons" problem.\textsuperscript{43} The strong version of this theory maintains that common property, such as the set of protocols and architecture that created the Internet, cannot be maintained over time because individuals will realize that it is in their individual self-interest to be a "free rider" and not the "sucker" who devotes effort to maintaining property that benefits others. On this view, it is irrational to devote time and energy to community endeavors. Obviously, the strong version of this theory fails to explain a variety of civic engagements, including the devotion of numerous engineers who spent time in standards-setting committees developing the basic protocols that made the Internet possible. Nonetheless, it is important to acknowledge that this perspective raises an important governance concern for the Internet's future: The greater amount of resources that are stake, the more difficult it may be to rely on informal methods of coordination.\textsuperscript{44} Put differently, history suggests that the development of open source (as opposed to proprietary) innovations in a commercial environment will be the exception, not the rule.\textsuperscript{45}

The shift in the Internet from an entirely open standards-based model to one where there are increasing uses of proprietary standards for critical functions raises a serious question for Internet governance. As long as the basic standards

\textsuperscript{40} eBay, Inc. v. Bidder's Edge, Inc., 100 F. Supp. 2d 1058, 1065 (N.D. Cal. 2000).

\textsuperscript{41} Id. at 1066.

\textsuperscript{42} This criticism is at the heart of the Law Professors' amicus brief to the Ninth Circuit. See Bidder's Edge, Inc. v. eBay, Inc., No. 00-15995, Brief of Amicus Curiae by Mark A. Lemley and 27 Other Professors of Law 12-13 (June 22, 2000) <http://www.law.berkeley.edu/institutes/bclt/pubs/lemley/bedgeami.pdf>. For an application of an appropriately tailored free rider concern, see International News Service v. Associated Press, 248 U.S. 215 (1918); NBA v. Motorola, Inc., 105 F.3d 841, 845 (2d Cir. 1997).

\textsuperscript{43} For a good discussion of the phenomenon where a collective good, such as a community park, is left to wither because no individual enjoys a property interest in it and takes responsibility for its maintenance, see Garrett Hardin, The Tragedy of the Commons, 162 SCIENCE 1243 (1968).

\textsuperscript{44} The formalization of Internet governance continues to be a challenging process, particularly as there is a strong commitment to keep the government out of it. With respect to the effort to develop a regime for regulating the use of domain names, many have criticized strongly the work of the Internet Corporation for Assigned Numbers and Names (ICANN). See Lawrence Lessig, A Bad Turn for Net Governance, THE INDUSTRY STANDARD, Sept. 18, 1998 <www.thestandard.com/article/display/0,1151,1718,00.htm>; A. Michael Froomkin, Wrong Turn in Cyberspace: Using ICANN to Route Around APA and the Constitution, 50 DUKE L.J. 17 (2000); Jonathan Weinberg, ICANN and the Problem of Legitimacy, 50 DUKE L.J. 187 (2000).

\textsuperscript{45} See Lessig, Open Code, supra note 29, at 107 ("The idea that through this collective, essentially volunteer, effort, one of the most powerful operating systems on the planet could be developed is, to put it mildly, surprising.").
were in the public domain, the Internet's architecture contained a form of self-
control that ensured that individuals and developers could easily access critical
functions. But as the Internet moved to accommodate commerce, the incentives
for developing proprietary applications — and the increased difficulty in
maintaining a categorical commitment to openness — were going to be difficult
to contain. Indeed, the larger the Internet community becomes, the more difficult
it is to maintain a completely “commons” model. The dynamics introduced by
the transformation of the Internet from a public commons to a growing private
marketplace thus creates challenges both for the existing standard-setting
committees and, where critical standards remain proprietary, for government as
well.

By adopting an open standard, an industry places a key value proposition —
the underlying platform — outside of proprietary ownership and thus facilitates
the broad adoption of the standard. The Internet, while today’s most significant
case of how standards can structure an industry, merely follows prior models of
this dynamic, such as the railroad industry’s adoption of a standard gauge
nationwide and the electric industry’s adoption of AC power and a standard
plug. The powerful logic for open standards, however, masks the often more
powerful self-interest in maintaining a proprietary standard, which possibly
obscured AT&T’s appreciation of the Internet’s future significance at its creation
and Microsoft’s appreciation for open standards as it was just starting to take off.
This dynamic presents a different form of the tragedy of the commons: the
Internet community as a whole will sometimes be better off with open,
interoperable standards, but an individual company will often see sticking with a
proprietary standard as in its best interest. A second and related dynamic that
drives companies to develop proprietary standards are that open standards
developed or approved by a standard-setting body may constrain a company’s
control over its network and/or its ability to innovate, as open standards are often
set at the lowest common denominator. Thus, the future of open standards

46 As Professor Lessig explains, the danger of owning the commons that forms the Internet
experience is that “[i]f the code of cyberspace is owned . . . it can be controlled; if it is not owned,
control is much more difficult.” LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 7
(1999). See also Oxman, supra note 9, at 5 (The internet’s “openness is driven by the sharing of
that common communications protocol: IP, the Internet protocol, developed by early Internet
pioneers. No one owns the Internet protocol, no one licenses its use, and no one restricts access to
it.”).

47 PHILIP EVANS & THOMAS S. WURSTER, BLOWN TO BITS 33 (1999).

is always an incentive for one company to try to . . . change standards and leave other companies
inoperable, but there is a tremendous incentive for the community as a whole to prevent that.”)
(quoting Tim Berners-Lee); Morris & Ferguson, infra note 49, at 87 (“Simply stated, competitive
success flows to the company that manages to establish proprietary architectural control over a
broad, fast-moving, competitive space.”).

49 Some commentators have criticized such standards. See Charles R. Morris & Charles H.
Ferguson, How Architecture Wins Technology Wars, HARV. BUS. REV., March-April 1993, at 86,
89 (“Because they are set by committees, they usually settle on lowest-common denominator,
compromise solutions.”). Others have stressed that such standards are “good enough.” See EVANS
& WURSTER, supra note 47, at 31 (acknowledging the “lowest common denominator” criticism, but
explaining that “at some point in advance of a technology, generic standards become good enough
faces challenges both from the incentive of companies to extract value from the development of new standards and to increase their control over their network. In 1995, before the Internet became big business, private standard-setting bodies like the IETF could focus on the technical merits of proposed standards without the distorting influence of private companies that would benefit depending on the ultimate outcome. As the stakeholders in the future of the Internet become more diverse and more concerned with the impact of the Internet's development on their profits, stable, open, and end-to-end-based standards may well become the exception, not the norm. Take the case of instant messaging, for example. Instant Messaging, or IM, relies on the Internet transport protocols and adds a Names and Presence Directory to facilitate real-time communication. Unlike email, IM providers have yet to agree on an open, interoperable protocol that enables all users of the service to reach one another. But with the high stakes in a battle to "win" this new network market, AOL has not been eager to share its network externality with others. AOL claims that its actions reflect legitimate concerns about privacy and security, but others, including the FCC, have concluded that AOL is "dragging its feet" to maintain a dominant position that might suffer in a world where IM was an interoperable service.

Although direct government oversight of the deliberations or outcome of Internet standard setting would be quite controversial, antitrust oversight of the setting of Internet standards will undoubtedly increase as the area becomes ripe for anticompetitive conduct. In particular, antitrust enforcers (and courts) should guard against two particular concerns: (1) the use of standard-setting bodies to freeze technology, either through delay or refusal to certify a new for their advantages in universal acceptance to outweigh their disadvantages in any specific application.

50 Noting this phenomenon, Carl Shapiro and Hal Varian emphasize that "[o]pen standards can . . . be 'hijacked' by companies seeking to extend them in proprietary directions, and thus in time gain control over the installed base." SHAPIRO & VARIAN, supra note 30, at 257.

51 Lawrence Lessig, Innovation, Regulation, and The Internet, THE AMERICAN PROSPECT (Apr. 10, 2000) <http://www.prospect.org/archives/V11-10/lessig-1html> [hereinafter "Innovation"] ("[E]nd-to-end is a norm among network architects [that] is increasingly becoming displaced as other players move onto the field"); Margaret Jane Radin & R. Polk Wagner, The Myth of Private Ordering: Rediscovering Legal Realism in Cyberspace, 73 CHI.-KENT L. REV. 1295, 1309 (1998) ("Achievement of stability in self-regulated commons is often thought to be dependent on the degree to which the cooperators are a close-knit, homogenous cultural group."); Reidenberg, Lex Informatica, supra note 38, at 592 ("[I]t is unlikely that the consensus model will persist to function effectively because global networks now reflect more diverse interests."); cf. Alan Schwartz & Robert E. Scott, The Political Economy of Private Legislatures, 143 U. PENN. L. REV. 595, 650-51 (1995) ("[T]heory suggests that a private legislature with a membership similar to that of the ALI and NCCSUL and procedures similar to theirs will have a strong status quo bias and sometimes will be captured by powerful interests.").

52 Memorandum Opinion and Order at 73 ¶ 169, In the Matter of Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner Inc. and America Online, Inc., Transferees, to AOL Time Warner, Inc., Transferee, FCC 01-12, (rel. Jan. 22, 2001) (No. 00-30) [hereinafter "AOL Order"].

53 Antitrust law recognizes that where organizations are motivated by public interest concerns — as opposed to economic self-interest — courts should be more reluctant to assign antitrust liability. See United States v. Brown Univ., 5 F.3d 658, 677-78 (3rd Cir. 1993).
technology; and (2) the non-disclosure of information that enables a company to control key proprietary technology used in a purportedly open standard. But as antitrust can only safeguard a fair competitive process, it will be up to government regulators to decide whether to condone de facto, proprietary standards or to enforce some form of open access regime to preserve the Internet’s commitment to open standards for its key functions. In so doing, government regulators will have to be mindful of the difficulty of superintending open access regimes, not to mention setting technical standards.

III. INFORMATION PLATFORMS AND GOVERNMENT REGULATION OF STANDARDS

A challenging question for Internet governance and government regulators is how to maintain a core commitment to open standards for the basic Internet architecture and whether, if at all, to ever mandate some form of openness as to critical extensions of the Internet. As the Internet is increasingly becoming the central communications platform of the future, the government will have no

54 See Allied Tube & Conduit Corp. v. Indian Head, Inc., 486 U.S. 492 (1988) (holding that an anticompetitive refusal to certify a new product as safe gives rise to an antitrust claim); Ernest Gellhorn & W. Todd Miller, Competitor Collaboration Guidelines – A Recommendation, 42 ANTITRUST BULLETIN 851, 864 (1997) (“Where innovation is important and the duration of product life cycles brief, delay in the approval of a standard critical for entry into a market can be as effective as a direct exclusion.”); Stephen Breyer, A Theory of Regulation 115 (1985) (noting this concern); FTC STAFF REPORT, STANDARDS AND CERTIFICATION 2 (1983) (“Participants in the standards process often have incentives to promulgate standards that enhance their own competitive position at the expense of their competitors or consumers.”).

55 Because standard-setting bodies generally impose a reasonable compulsory licensing policy on their participants, they often require that all patented technology be disclosed and made available for licensing before being included in an approved standard. See Joseph Farrell & Carl Shapiro, Standard Setting in High-Definition Television, BROOKINGS PAPERS: MICROECONOMICS 1992 at 42 (discussing this practice of the American National Standards Institute). Thus, when Dell withheld such information and later sought to charge a premium for access to its patented technology, the Federal Trade Commission challenged this tactic under the antitrust laws. See Federal Trade Commission press release, “Dell Computer Settles FTC Charges; Won’t Enforce Patent Rights for Widely Used Computer Feature (Nov. 2, 1995) <www.ftc.gov/opa/1995/9511/dell.htm>; see Mark A. Lemley, Antitrust and the Internet Standardization Problem, 28 CONN. L. REV., 1041, 1086-87 (1996) (describing incident).

56 As FTC Chairman Robert Pitofsky put it, “The role of government [antitrust] enforcers, therefore, is not to interdict legitimate industry self-regulation but to ensure that such efforts are consistent with the operation of competitive markets.” Antitrust Implications of Entertainment Industry Self-Regulation to Curtail Violence, Testimony Before U.S. Senate Judiciary Committee 9 (Sept. 20, 2000) <http://www.ftc.gov/os/2000/09/jctestimony.htm>.

57 As one commentator points out, the government’s involvement in this area would mean a partial return to its prior approach of helping to ensure the centrality of open standards. See Newman, supra note 27 (“[T]he government’s abdication has left Internet development increasingly in the hands of self-interested companies seeking commercial advantage rather than maximum innovation and compatibility for consumers.”). In theory, the government continues to champion the virtues of open standards, but it has done little in practice to advance that goal. See Mark A. Lemley, Standardizing Government Standard Setting Policy for Electronic Commerce, 14 BERKELEY TECH L.J. 745, 748-57 (1999).

58 For a list of government-mandated interoperability mandates in the telephony context, see AOL Order, supra note 52, at 79 n.487.
choice but to address this issue. Due to its historical pedigree as a government and academic creation, the Internet grew up under the "end-to-end" principle. Thus, the Internet differs markedly from traditional telecommunications networks, which maintained the intelligence of the network in the center, were often operated by monopoly providers, and were heavily regulated. For the last thirty years, when the Internet was an "application" that relied on telecommunications, the FCC distinguished between telecommunications and information services, regulating the latter, but not the former. But as Internet technology displaces traditional telecommunications networks, the old regime of regulation will become increasingly antiquated. Anticipating the development of a new regulatory regime, this Part introduces the concept of an "information platform" and outlines how regulators should evaluate whether to mandate interoperability between different service providers.

A. Information Platforms

Lawyers are just starting to understand how the basic architecture of the Internet relates to regulation and the role of government. Timothy Wu, building off the Internet’s end-to-end principle and the increasingly accepted point that "code is law," has highlighted how the law should distinguish between the "applications" that ride on the Internet and the basic standards that are developed by standards bodies such as the IETF. This argument makes sense as far as it goes, but it risks imposing too sharp a dichotomy between applications and basic standards. In particular, it suggests that the Internet’s basic architecture and commitment to the end-to-end principle will be relatively static and self-sustaining. In so doing, this perspective does not appreciate that the evolution of the Internet such that certain of today’s proprietary applications may emerge as tomorrow’s information platforms. Thus, if the end-to-end principle is to be protected in the future not just as to today’s basic standards, but also as to the critical information platforms of the future, it will require regulators to develop a new approach to Internet regulation.

59 I use the term “information platforms” because it appropriately conveys that a platform can be either comprised of hardware or software. To my knowledge, the only other academic use of a related term is in Douglas Lichman, Property Rights in Emerging Platform Technologies, 29 J. LEGAL STUD. 615 (2000).

60 Lessig, The Law of the Horse, supra note 38, at 509 n.31 (collecting sources); Timothy Wu, Application-Centered Internet Analysis, 85 VA. L. REV. 1163, 1183 (1999) (“study of the Internet also works from a sufficiently general common denominator: the set of standards that define the Internet”); Fried, supra note 24, at 609 (“there is nothing preconventional about how communications takes place between a user and her machine”).

61 Wu, supra note 60, at 1164 (“[N]early everything that ‘counts’ about the Internet from a legal standpoint is a function of the particular application at issue and not of the basic Internet protocols.”).

62 See Carr, supra note 48, at 178 (“[T]he days of the open Internet may be numbered.”); Mark A. Lemley, The Law and Economics of Internet Norms, 73 CHI.-KENT L. REV. 1257, 1283 (1999) [hereinafter “Internet Norms”] (“[I]t is not too hard to imagine a future in which the [Internet’s] protocol – or the wires, or the implementing software – is proprietary.”); see also Neil Weinstock Netanel, Cyberspace 2.0, 79 TEX. L. REV. 447, 450 (2000) [hereinafter “Cyberspace 2.0”] (“We are rapidly entering a domain of media conglomerates’ proprietary control of content, distribution, and
Rather than an "application-centered Internet analysis," policymakers should focus on an "information platform-centered analysis." In particular, if a given Internet function is merely an application that rides on top of Internet infrastructure, policymakers need not worry about claims that other parties should have access to this application. But for software programs or hardware that facilitates the use of other applications, policymakers will need to consider whether an open access or interoperability mandate makes sense as a means of preserving the Internet's open architecture. The difficult challenge here is to distinguish between two categories that are not fixed: While some software programs will clearly be information platforms (such as the Internet browser), others (such as instant messaging services) may initially be a stand-alone application, but will become an information platform that supports other applications. Unfortunately, not only will finding the right answers here be difficult, but it will also be challenging to determine what are the right questions.

Because the development of standards profoundly impacts the Internet economy, policymakers cannot reject categorically the argument for imposing interoperability mandates on the ground that Internet standards are voluntary and not coercive. To be sure, Johnson and Post are technically correct in stating that "[a]ll are free to decline to follow the standard and to obey some other protocol, and they will communicate only to those who, literally, speak their language," but this suggestion is akin to responding to a criticism of a lack of privacy or free speech on the Internet by telling users to "turn off their computer." The reality is that a widely adopted Internet standard, whether of the open or proprietary kind, does not afford an opportunity for exit. To use an analogy of a defeated standard, one does technically have a choice between using Betamax or VHS VCRs, but in today's world, such a free choice is no choice at all. Thus, where

63 DAVID R. JOHNSON & DAVID G. POST, And How Shall the Net Be Governed?: A Mediation on the Relative Virtues of Decentralized, Emergent Law, in COORDINATING THE INTERNET 74 (Brian Kahin & James H. Keller eds. 1997); see also Dawn C. Nunziato, Exit, Voice, and Values on the Net, 15 BERKELEY TECH. L.J. 753 (2000) (arguing that ease of exit protects users in cyberspace); David Post, Governing Cyberspace, 43 WAYNE L. REV. 155, 169 (1996) ("[B]ecause America Online's ability to 'impose' rules contrary to that collective will is severely constrained by the ability of its subscribers to move somewhere else - to 'vote with their electrons.'").

64 A review of Lessig's CODE AND OTHER LAWS OF CYBERSPACE offered this very response. See David Pogue, Don't Just Chat, Do Something, N.Y TIMES BOOK REV., Jan. 30, 2000 <http:partners.nytimes.com/books/00/01/30/reviews/000130.30poguet.html>.

65 In network markets where a dominant standard is likely to emerge, there may be only a small "window of opportunity" before the technology with the largest installed base gains an insurmountable advantage. David & Greenstein, infra note 69, at 14. As Mark Lemley explained, "The nature of the Internet, and indeed of most computer software markets, is such that a single standard is likely to emerge as the dominant one at each of several levels of performance." Mark A. Lemley, Antitrust and the Internet Standardization Problem, 28 CONN. L. REV. 1041, 1052 (1996).

66 Similarly, where a subscriber is "locked-in" to a particular service because of prohibitively high switching costs, they also lack such a choice. To get around this problem, proponents of the “exit” theory sometimes posit hypotheticals of Internet markets where no one network emerges as dominant. See Nunziato, supra note 63, at 768 (analyzing issues under counterfactual assumption of five, equally sized ISPs).
a standard becomes dominant in a network industry (or where a customer is locked-in to a particular standard\textsuperscript{69}), there may well be a public value in a "general regime of open access."\textsuperscript{68}

Government regulation of standards concerning information platforms is hardly a novel concept. Unfortunately, lawyers have tended to leave the study of the matter to economists,\textsuperscript{69} rarely considering when government involvement in standard setting is appropriate.\textsuperscript{70} In broadcasting, for example, the FCC endorsed the NTSC standard for color television and has been closely involved in the development of a standard for digital television.\textsuperscript{71} By contrast, the government refrained from regulating the standards used in wireless telephony, leading to a proliferation of standards.\textsuperscript{72} In a third way, the FCC endorsed the setting of an open standard for settop boxes by an industry group (Cablelabs) to set a standard and certify compliance.\textsuperscript{73} With the Internet, the challenge of standards regulation poses special difficulties, including that information platforms can be either physical — such as a broadband connection like a cable modem — or logical — such as a technical specification that facilitates compatibility between two instant messaging services — and that Internet markets tend to be very dynamic.

B. Towards a Principled Framework for Regulating Information Platforms

Given the lack of careful attention by the FCC or commentators to the challenges of regulating information platforms, the FCC's decision in the AOL/Time Warner matter to regulate instant messaging (discussed in Part IV, 67 Even if dominance is not the issue, it is possible that a lock-in theory might justify regulatory oversight. The lock-in concern, which underlay the Supreme Court's decision in Eastman Kodak Co. v. Image Technical Servs., Inc., 504 U.S. 451, 465-78 (1992), remains controversial in that it condones that consumers may not appreciate the consequence of accepting higher switching costs. See SHAPIRO & VARIAN, supra note 30, at 146-47. Whether consumers appreciate it or not, many Internet companies most certainly do their best to provide "sticky" applications so as to "lock-in" consumers to individual services.

68 Lemley, Internet Norms, supra note 62, at 1281; see Netanel, Cyberspace Self-Governance, supra note 3, at 427 ("To the extent that such exclusion substantially reduces the number of persons with whom the dissenter might potentially communicate, it also carries a loss of "network benefits").

69 See, e.g., Farrell & Shapiro, supra note 55, at 6 (looking at case of high definition television as one posing the problem of "how to pick a single version of a promising new technology when multiple incompatible versions are available but ordinary marketplace rivalry is (at least arguably) undesirable."); Paul A. David & Shane Greenstein, The Economics of Compatibility Standards: An Introduction to Recent Research, 1 ECON. INNOV. NEW. TECH. 3, 3 (1990) (noting that questions regarding "compatibility and voluntary standard setting have emerged as having central strategic significance.").

70 Two notable exceptions are Kathleen M.H. Wallman, The Role of Government in Telecommunications Standards Setting, 8 COMM.LAW CONSPECTUS 235 (2000) and Mark A. Lemley, Standardizing Government Standard-Setting Policy For Electronic Commerce, 14 BERKELEY TECH. L.J. 746 (1999). See also BREYER, supra note 57, at 96-119 (addressing the subject through the lens of automobile standards set by the National Highway Traffic Safety Administration (NHTSA)).

71 Wallman, supra note 70, at 243-46.

72 Id. at 246-47.

73 Id. at 247-49.
below) — as well as its notice of inquiry related to whether cable companies should provide open access to cable modems — may well spark a valuable dialogue concerning the issues presented in regulating information platforms. As an initial matter, regulation will need to develop a method for identifying what information platforms must be shared in some fashion. By so doing, regulators can avoid imposing restrictions on platforms that need not be regulated while allowing critically important platforms to go unregulated. In particular, I recommend that regulators consider at least three types of concerns before deciding whether to regulate an information platform: (1) the rationale for why access to a particular platform is critical and outweighs the risk of discouraging investment; (2) the extent to which the government can rely on natural incentives for platform creators to open their platforms; and (3) the seriousness of any implementation difficulties. In developing these three criteria, I do not mean to suggest that other considerations will not be important, but, at a minimum, that regulators should focus on these three. Unfortunately, as discussed below, the FCC failed to do just that in its AOL/Time Warner decision mandating interoperability of IM systems.

1. Relative Costs and Benefits of an Open Access Mandate

In considering whether or not to impose a regulatory mandate on an information platform, the threshold determination is what rationale justifies such a step. Put simply, not all information platforms merit government intervention to facilitate interoperability; thus, while government-mandated interconnection between new entrant and incumbent monopoly telephone networks addresses concerns about a dominant incumbent’s ability to exclude competitors through denying interconnection, regulators need not worry about such concerns with regard to video game console platforms, where there are a number of formidable competitors who are in the midst of a marketplace rivalry. As for the rationale for regulatory oversight, Lessig and other advocates of preserving a robust information commons on the Internet regularly invoke two distinct rationales for government regulation: (1) the importance of facilitating competition and

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74 See AOL Order, supra note 52.

75 Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, GN Docket No. 00-185, Notice of Inquiry (“Cable Open Access Inquiry”), FCC 00-355 (rel. Sept. 28, 2000).

76 It is worth noting that this task is not for telecommunications regulation alone, but also implicates intellectual property and antitrust law.

77 In discussing the decision to regulate, I have simplified the issue by not discussing alternate forms of regulation, some of which, such as disclosure, are much less intrusive than others. For a contrast between two forms of regulation of information platforms (interconnection versus unbundling), see Phil Weiser, Paradigm Changes in Telecommunications Regulation, 71 U. COLO. L. REV. 819, 827-37 (2000).

innovation; and (2) protecting liberty and the ability to speak and be heard using the medium. 80

The heart of the debate about government’s role in the future of the Internet’s development may well focus on the import of the rationale for regulation. At times, Lessig’s concern with the specter of proprietary control of key Internet standards appears to lead to a categorical command for government oversight. 81 To be sure, government should be concerned about the future development of the Internet, 82 but Lessig’s deep distrust of commercial development of proprietary standards (as opposed to open standards) overlooks a number of important countervailing considerations, 83 including that forced sharing of facilities, intellectual property, or a customer base should not be ordered lightly, as doing so threatens to undermine investment incentives. 84

The incentive for investment concern must be taken seriously as a counterweight to the rationale for mandating some form of shared access to an information platform, as it helps regulators avoid the trap of “ex post” (or, in English, after-the-fact) thinking. From the ex post perspective, ordering some form of interconnection to AOL’s instant messaging service, for example, appears not to undermine any existing investment; from an ex ante (i.e., before-the-fact) perspective, however, the question is whether AOL would have made

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79 Lessig, Innovation, supra note 51 (arguing for Internet regulation over broadband access to preserve innovation).

80 On the liberty front, Lessig highlights the concern that closed architectures will enable regulators (be they public or private) to regulate through hidden code. See Lessig, CODE, supra note 19, at 107-08. In terms of facilitating a vibrant marketplace of ideas, the government can act by regulating information platforms as well as through subsidizing certain types of speaking opportunities. See Netanel, Cyberspace 2.0, supra note 62, at 472-75 (discussing PublicNet proposal offered in ANDREW SHAPIRO, CONTROL REVOLUTION: HOW THE INTERNET IS PUTTING PEOPLE IN CHARGE AND CHANGING THE WORLD WE KNOW (2000)).

81 Lessig’s argument, advanced along with Mark Lemley, that cable modems must be subject to an open access regime appears to reflect this sentiment. See Written Ex Parte of Professor Mark A. Lemley and Professor Lawrence Lessig at 15, Application for Consent to the Transfer of Control of Licenses MediaOne Group, Inc. to AT&T Corp., (No. 99-251) (visited Feb. 1, 2001) <http://cyber.law.harvard.edu/works/lessig/cable/fcc/fcc.html>. Apparently, Lessig’s categorical concern with open architectures stems from his view that both commerce and government can limit individual freedom where Internet architectures are controlled by particular companies:

"In a world where the code writers were the sort of people who governed the Internet Engineering Task Force of a few years ago, the government’s power to regulate code would be slight. The underpaid heroes who built the Net have ideological reasons to resist government’s mandate. They are not likely to yield to its threats. And unlike some commercial interests, they do not have millions riding on a single architecture winning out in the end. Thus, they would provide an important check on government’s power over the architectures of cyberspace."

Lessig, CODE, supra note 19, at 52.

82 See James Boyle, A Nondelegation Doctrine for the Digital Age?, 50 DUKE L.J. 5, 16 (2000) (“Internet regulation . . . through ‘private’ bodies empowered by the government . . . should not escape completely from the world of democratic and constitutional review.”).

83 Lessig’s distrust of commercialization of Internet standards leads him to suggest that commerce will invariably be of the concentrated economic power variety. See David G. Post, What Larry Doesn’t Get: Code, Law, and Liberty in Cyberspace, 52 STAN. L. REV. 1439, 1451 (2000).

84 See Weiser, supra note 77, at 831 n.53.
the critical investments at that time had they known that they would be forced to share some of the benefits (in this case the network externality of a large customer base) with their competitors. In many cases, it may well be that not mandating some form of sharing will enable a dominant firm to maintain and/or extend its monopoly power, but that judgment should be the result of reasoned analysis, not assumed to be the case.\(^{85}\)

The type of reasoning I have in mind is aptly illustrated by Judge Boudin’s thoughtful concurrence in the *Lotus* case.\(^{86}\) In particular, that case involved whether Borland could utilize Lotus’ familiar command hierarchy without infringing its copyright.\(^{87}\) But, like the question of whether to mandate an open, interoperable standard, the *Lotus* case addressed the appropriate level of copyright protection to afford to user interfaces with which users may well have become “locked-into” because of high switching costs. In concluding that Lotus did not deserve protection for the command hierarchy, Judge Boudin concluded that withholding copyright protection is warranted where “one places a very high value on public access to a useful innovation that may be the most efficient means of performing a given task.”\(^{88}\) Put simply, when protecting an innovation from open access would threaten to “fenc[e] off access to a commons”\(^{89}\) and provide far more reward than necessary to encourage innovation, such protection would more likely limit, rather than enhance, consumer welfare.\(^{90}\)

The most challenging aspect of assessing the costs and benefits of open access is how to conceptualize the free speech value of open architectures. For some, such as Lessig, this value appears to dictate a categorical insistence on openness for all Internet standards. Unfortunately, as noted above, such an approach may mean that parties never invest in development or that a procompetitive standards development process is cut short. One possibility for addressing the issue might be to view this value as a tie-breaker for when the

\(^{85}\) Some might suggest that the appropriate categorical position is to allow a network monopoly to control a standard until toppled by the forces of “creative destruction.” See Richard Posner, *Antitrust in the New Economy* 4 (speech delivered to American Law Institute on Sept. 14, 2000) [<http://www.ali-aba.org/aliaba/Posner_101100.htm>] (“The gale of creative destruction that Schumpeter described, in which a sequence of temporary monopolies operates to maximize innovation that confers social benefits far in excess of the social costs of the short-lived monopoly prices that the process also gives rise to, may be the reality of the new economy.”).


\(^{87}\) Id. at 820.

\(^{88}\) Id. at 819.

\(^{89}\) Id.

\(^{90}\) As Judge Boudin explained:

> But if a better spreadsheet comes along, it is hard to see why customers who have learned the Lotus menu and devised macros for it should remain captives of Lotus because of an investment in learning made by the users and not by Lotus. Lotus has already reaped a substantial reward for being first; assuming that the Borland program is now better, good reasons exist for freeing it to attract old Lotus customers: to enable the old customers to take advantage of a new advance, and to reward Borland in turn for making a better product.

*Id.* at 821.
importance of protecting investment issue does not tip clearly in one direction or the other. Another approach would be to mandate interconnection only as to truly crucial media, such as those involving voice communications, for example.

2. The Natural, Market Incentives for Openness

Even where there is an important rationale for an open access regime, regulators should hesitate before regulating an information platform because there are natural, market incentives for a provider to open up its platform that might well obviate the need for a regulatory mandate. As an initial matter, lawyers, regulators, and courts should recognize the difference between sharing access to a customer base for a platform of users and making a platform available for developers. In either case, the platform owner decides to share the network externalities that its platform enjoys; however, the opening up of the platform for developers to build complementary applications presents analytically different issues than allowing access to a company’s customer base to a direct competitor whose product could be a potential substitute.

In general, companies will generally choose to open up access to their platforms to enable developers to create new applications for them. A product that can be shared with friends, loaned out and rented, repeatedly accessed, or sold in a resale market is obviously more valuable to a user than one that can be accessed only once, under controlled conditions, by only a single party.

The strong version of this argument is that the platform owner, even if a monopolist, will never discriminate against such applications. See James B. Speta, Handicapping the Race for the Last Mile?: A Critique of Open Access Rules for Broadband Platforms, 17 Yale J. on Reg. 84 (2000) (“A monopolist generally has no incentive to ‘extend’ or ‘leverage’ its monopoly into the market for complimentary goods, because to do so would simply diminish consumer demand for the monopoly good, and thereby diminish total profits.”). Other commentators have qualified this argument to point out situations where such discrimination might occur. See Steven C. Salop & R. Craig Romaine, Preserving Monopoly: Economic Analysis, Legal Standards, and Microsoft, 7 Geo. Mason L. Rev. 625 n.26 (1999) (listing situations); see also James B. Speta, Tying, Essential Facilities, and Network Externalities: A Comment On Piraino, 93 NW. U. L. Rev. 1277, 1282 (1999) (pointing out that Microsoft’s predatory actions vis-a-vis Netscape can be explained on the ground that Microsoft viewed the browser as a partial substitute for the operating system).

Even taking account of such cases, however, regulators should realize that a proprietary and/or discriminatory access strategy is quite risky and is likely to occur only where a company establishes a strong monopoly in the platform market.

Lessig, Innovation, supra note 51.

Few Regulatory Obstacles Seen for AOL Time Warner, COMM. DAILY, Jan. 11, 2000, available at 2000 WL 4694269 (reporting that “[t]here’s not many cases of closed access working very well, restricting content to one location and making people come to you. . . . It would be a mistake for
individual company’s belief that it could successfully pull off a discriminatory
access strategy, the more risk that it might do so, thereby giving government
regulators understandable cause for concern. 95

An analytically distinct question for regulators is whether natural, market
incentives will encourage a platform owner to allow interoperability of its
platform to its direct competitors’ rival products. As an initial matter, it is again
important to recognize that whether it is eBay’s auction site or AOL’s IM
services, regulation should recognize the importance of investment incentives by
not requiring the sharing of network externalities in all situations. 96 To be sure,
the fear of tipping in network markets such as instant messaging, the Internet
backbone, and plain old telephone service is a crucial concern for competition
policy, as evidenced by the Department of Justice action against the
MCIWorldcom/Sprint merger and AT&T’s abuse of its dominant position in the
local market at different points during the past century. 97 Nonetheless, regulators
must be careful not to mandate an interoperable standard too soon, lest they cut
short a healthy competitive battle and/or afford the interested parties to develop
an interoperable standard on their own. 98 Moreover, even in the context of a
“winner take all” standards battle, there are incentives to settle on an open
standard, lest a company end up in Apple’s position vis-a-vis IBM-compatible

95 In the case of AOL/Time Warner, that concern appears to be what drove the Federal Trade
Commission and Federal Communications Commission to each impose regulatory safeguards as a
condition of approving the merger. For a review of some of the relevant economic literature, see
David & Greenstein, supra note 69, at 21 (“Inasmuch as compatibility is an aspect of product
quality, it is hardly surprising that some contributors to the antitrust literature have alleged that a
dominant firm has an incentive to manipulate the interface between system components over which
it has proprietary control, and other, potentially complementary system components.”). In terms
of the general antitrust theory to address such conduct, it might well fall under a “raising rivals’ costs”
theory, see Thomas G. Krattenmaker & Steven C. Salop, Anticompetitive Exclusion: Raising

96 Joseph Farrell, Creating Local Competition, 49 FED. COMM. L.J. 201, 210 (1996) (“Just as we
would not want to reduce the life of a patent from seventeen years to seventeen minutes, since that
would reduce innovative effort, so also it would be unwise policy to make all developers of
network externalities share them in all circumstances.”).

97 For a description of the tipping concern in the Internet backbone, see Complaint, United States v.
AT&T, its anticompetitive refusal to interconnect took place both in the early part of the nineteenth
century as to local competitors, see Farrell, supra note 96, at 203-04; MILTON L. MUELLER JR.,
UNIVERSAL SERVICE 45-46 (1997), and in the later part of the century as to long distance
competitors like MCI, see MCI v. AT&T, 708 F.2d 1081 (7th Cir. 1982).

98 As Mark Lemley has recognized, “[C]ompetition to set the standard for the next generation of
products may still serve a valuable purpose if it drives innovation the market.” Lemley, Internet
Standardization, supra note 55, at 1055; see Michael I. Krauss, Regulation vs. Markets in the
Development of Standards, 3 S. CAL. INTERDISC. L. J. 781, 805 (1994) (arguing that the Betamax-
VHS battle pushed each standard to new heights); Michael J. Schallop, The IPR Paradox:
Leveraging Intellectual Property Rights to Encourage Interoperability in the Network Computing
Age, 28 AIPLA 195, 211 (2000) (suggesting that property rights can encourage investment and that
network effects will encourage the development of an interoperable standard); cf. Lemley,
Standardizing Government Standard-Setting, supra note 57, at 756 (recognizing complex
assessment necessary to select between open and closed standards).
PCs. Put simply, in evaluating whether to mandate interconnection between two rival products, regulators must be self-conscious that watchful waiting can sometimes be the best policy.

3. Implementation Challenges in Mandating Access to an Information Platform

Finally, even where the government concludes that a platform is very important to consumers and that there is too much of a risk that it will be abused, the government faces a series of implementation challenges related to its ability to devise and administer a workable regulatory regime. First, in dynamic areas, government should be concerned that its involvement in standard setting might slow technological development. Second, in devising a new regulatory regime, government should consider the reliability of the information upon which it decides to act. In many cases, a classic problem for an agency will be the quality of information it considers in evaluating a proposed standard; as then-Judge Breyer put it regarding the setting of automobile standards, “the agency fears that industry information is biased, outside sources must themselves rely on industry information, and in-house sources are inadequate.”

As for information platforms, the industry players are less likely than those in the automobile industry to present a united front on the optimal regulatory strategy, thereby giving government regulators a richer texture of information. This diversity of information, like that the FCC received in considering regulations of instant messaging, does not necessarily place an agency in a superior position to confronting a united industry front, as competitors will sometimes use the regulatory process to assist them on issues they could not win in the marketplace. In contrast to the reliability of information presented on the merits of whether to intervene, a competitor-suggested interconnection standard

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99 Written Ex Parte of Professor Mark A. Lemley and Professor Lawrence Lessig at 15, Application for Consent to the Transfer of Control of Licenses MediaOne Group, Inc. to AT&T Corp., (No. 99-251) (visited Feb. 1, 2001) <http://cyber.law.harvard.edu/works/lessig/cable/fcc/fcc.html> (“Beta v. VHS and Apple vs. Microsoft both tell us that customers primarily care about content and applications and will flock to the vendor that gives them the best and widest selection of each.”); Morris & Ferguson, supra note 49, at 90 (noting how Macintosh’s refusal to open its platform hurt it in the marketplace).

100 For a discussion echoing these concerns and adding the one of “industry capture,” see Lemley, Internet Standardization, supra note 55, at 1063-64.

101 Ferguson & Morris, supra note 49, at 89 (criticizing governmentally developed standards as resistant to change); David & Greenstein, supra note 69, at 30 (“government should not mandate standards if they are likely soon to require revision”).

102 Breyer, supra note 54, at 111-12.

103 On that issue, competitors to AOL, such as Microsoft and Yahoo!, requested the imposition of an interconnection mandate whereas AOL argued that no such mandate was necessary or appropriate. Don Clark, Internet Rivals Attempt to Open Up AOL’s Instant Message System, WALL ST. J., July 26, 1999, at B2 (detailing AOL’s efforts to keep other services from accessing its Instant Messaging platform).

104 See, e.g., AOL Order, supra note 52, at 14 (Powell, dissenting) (“Increasingly, one of [competitors’] responses, even if the largely unregulated Internet realm, is to seek the assistance of the government either to intervene directly and impede the market leader, or to use the threat of regulation as business leverage with that player.”).
should be crafted in a manner that is enforceable, as the competitor will be the
direct beneficiary of such a mandate.

The final implementation concern is that where an agency remains unsure
about whether it can enforce effectively a proposed standard, it should be very
reluctant to impose one, as difficult-to-enforce or vague standards can only invite
more disputes and potentially undermine respect for the agency. In particular,
where an agency does not understand fully how its mandate will work in practice,
it may be tempted to defer some difficult issues for later resolution by leaving
key points vague or open to further inquiry. Taking this approach, however, may
well undermine the effectiveness of any mandate and will ultimately deepen any
concerns about the agency's ability to address complicated technology issues.
One possible mechanism for avoiding this trap is for the agency to articulate an
output-based goal, such as interconnection between different services, and leave
the matter to a private body to develop the appropriate technical resolution of the
issue. This approach, which the FCC essentially adopted in its regulation of
instant messaging as part of its approval of the AOL/Time Warner merger,
follows in the path of what some have described as "audited self-regulation." Obviously, for such an approach to work, the identified body must be equipped
to take on the task at hand and the relevant government agency must be qualified
to ensure that the assigned task is completed successfully. Thus, even for
government to implement interoperability mandates with the assistance of such a
body, it must possess the technical know-how to ensure that the relevant
standards-setting body handled its charge in an effective and reliable manner.

IV. INSTANT MESSAGING AND INTERCONNECTION MANDATES

The U.S. government's first foray into regulating Internet standards and new
information platforms came in the FCC's review of the AOL/Time Warner
merger, where it imposed an interoperability mandate on AOL's instant
messaging services. As Commissioner Powell's dissent in this matter
highlights, there is understandable cause for criticism of this action on both
procedural and substantive grounds. For present purposes, I will not address

105 See Breyer, supra note 54, at 112 ("The agency must develop practical standards capable of
easy, widespread application."); Ken Auletta, Final Offer, THE NEW YORKER, 43 (Jan. 15, 2001)
(quoting Chief Judge Posner, mediator in the Microsoft case, as stating that an essential criterion
for a decree is that the proposed standards be "sufficiently clear to be judicially administerable and
that (even if clear) they would not impose an undue administrative burden on the district court,
which would have to administer the decree.").

106 For a list of areas in which the government uses such an approach, see Douglas C. Michael,

107 Technically, AOL offers two distinct instant messaging products: AOL's Instant Messager
(AIM) and ICQ's instant messaging service. See AOL Order, supra note 52, at 12. For simplicity
purposes, I shall refer to two products collectively as "AOL's instant messaging services."

108 In a partial dissent from the FCC's Order, Commissioner Michael Powell offered both sets of
criticisms, highlighting that the action did not reflect a genuine merger specific concern warranting
a conditional approval and that the substantive case for the conditions had not been adequately
developed. See infra note 116.
the procedural point that industry-wide regulation should not be mandated in the context of a specific merger. On substance, regardless of its shortcomings, the FCC’s order is very significant in that it identified an information platform worthy of regulation. In so doing, the FCC identified a model of regulating information platforms that may become increasingly significant in ensuring an “information commons”: an interconnection or compatibility mandate. By not addressing the issue in a general rulemaking, however, the FCC failed both to develop a coherent analytical framework for regulating information platforms and did not suggest what other platforms might merit such regulation.109

Instant messaging may well represent a precursor for new Internet-based technologies that will become important information platforms of the future. Instant messaging programs work over the basic Internet Protocol, adding a Names and Presence Directory (NPD) that enables users of instant messaging (IM) to know which other users are online.110 Estimates of the number of IM users vary, but the FCC placed the number at 150 million users for AOL’s system alone;111 given the usefulness of this service for real-time interactions and its suitability for handheld, wireless devices, it seems likely that this number will continue to increase dramatically. Indeed, for certain users, IM may partially substitute for, as well as heavily supplement, email usage and even the telephone.112 Given the network nature of this market (its value is proportionate to its number of users), AOL has emerged as the early market leader (based on its AOL Instant Messenger and ICQ products). Thus far, AOL has maintained proprietary control over its NPD, refusing to allow other IM services, such as that operated by Microsoft, to have access to its base of customers.113 In response, Microsoft and others insisted first that AOL accept an open standard promulgated by the IETF, and later requested that the FCC impose such a condition in approving the merger between AOL and Time Warner.114

The FCC’s AOL/Time Warner Order’s treatment of IM takes the agency into novel terrain. Under the mantle of protecting against the creation of undue market power in “advanced IM high speed service (AIHS),” the agency instituted — for the first time in its history — a regulatory regime for an Internet-based information platform comprised of software (as opposed to hardware).115

109 Among other things, the FCC also avoided explaining why it had authority to regulate instant messaging.
110 AOL Order, supra note 52, at 57.
111 AOL Order, supra note 52, at 59.
112 Nick Wingfield, Changing Chat: Will Instant Messaging be the Dial Tone of the Future?, WALL ST. J., Sept. 18, 2000 at R38 (Sept. 18, 2000) (43 percent of daily IM users report using less email as a result of IM and 59 percent report using the telephone less).
113 See AOL Order, supra note 52, at 73-74; see also Don Clark, AOL and Apple Team Up to Offer Instant Messaging, WALL ST. J., July 30, 1999, at B6 (noting that Instant Messaging could be a very important platform and discussing efforts to create open access to AOL’s customer base); Don Clark, Internet Rivals Attempt to Open Up AOL’s Instant Message System, WALL ST. J., July 26, 1999, at B2 (detailing AOL’s efforts to keep other services from accessing its Instant Messaging platform).
114 See Wingfield, supra note 112, at R38 (noting efforts to lobby the FCC).
115 Commissioner Powell pointed out the novelty of the action: “Unlike traditional
particular, the order mandates that AOL cannot deliver AIHS unless and until it complies with one of two mandates. Option One requires AOL to implement a server-to-server interoperability system adopted by the IETF or another widely recognized industry standards-setting body to allow access for other providers to AOL’s NPD such that “[t]he adopted standard shall ensure that AOL Time Warner shall afford the same quality in processing transactions to and from the other provider as it affords to its own.” 116 Option Two requires AOL to file a petition demonstrating that it has entered into a written contract providing server-to-server interoperability with a significant, unaffiliated actual or potential competitor and to commit to negotiate in good faith with other providers interested in such an arrangement. Finally, the FCC provided that, should AOL Time Warner be able to demonstrate that it has not been a dominant provider (i.e., holds a 50 percent or less market share) of IM services for at least four consecutive months, it shall be not be subject to either of the above mandates.

In terms of setting a precedent for future regulation of information platforms, the FCC’s AOL/Time Warner Order failed to set forth a principled model of analysis that includes the key considerations set out in Part III. For starters, the FCC did not develop the clear record for explaining why IM is a critical service or analyze the market incentives for openness in this context. Insofar as the FCC offered a general principle for imposing an interoperability mandate, it suggested that a “tipping” concern justifies such a step. 117 This analysis, however, misses the mark in several key respects. First, the FCC failed to focus on the facts that AOL’s rivals had not made their IM programs interoperable nor had AOL implemented an interoperable standard between its two IM products (AIM and ICQ); 118 taken together, these facts suggest that the market is not in imminent danger of tipping, as AOL had neither taken the obvious action to expedite that dynamic and its rivals had not yet undertaken an obvious self-help remedy. 119

telemcmmunications infrastructure, like cable or DSL, that affect Internet transmission, IM is a software application born purely of the mother Internet. We accept this child with little appreciation of what the responsibility entails.” Press Statement of Commissioner Powell (Jan. 11, 2001) <www.fcc.gov/Speeches/Powell/Statements/2001/stmkp101.html>; AOL Order, supra note 52, at 13 (Powell, dissenting) (“The result [in the AOL Order] is a regulatory foray across a border consistently held to be inviolate.”). Again, Powell’s point appears to be, in considerable part, a procedural criticism of the FCC’s choice to act in the context of a merger review. See AOL Order, supra note 52, at 2 (Powell, dissenting) (“Our merger ‘conditions’ more often look like rules, reflecting judgments that, if true, affect the entire industry and not just the parties. As such, they should be entertained, if at all, in a broader-based proceeding.”).

116 AOL Order, supra note 52, at 81.

117 By pegging the interoperability mandate to AOL’s maintenance of a 50 percent market share, the FCC endorsed the fear that IM has already or shortly will “tip” to AOL, though the FCC did constrain itself to adhere to the standards required by the antitrust laws. In particular, Section 2 of the Sherman Act imposes a duty to interconnect on a monopolist where interconnection is necessary to compete.

118 Commissioner Powell pointed this out in dissent, as well as noting that recent studies suggest that the marketplace developments are far from conclusive. See AOL Order, supra note 52, at 4, 10 (Powell, dissenting).

Second, the FCC decision appeared to disregard reports that the rivalry — and the lack of interoperability — actually helped to drive Microsoft and Yahoo! to enhance the effectiveness and increase the reach of their products, with both companies’ market shares growing rapidly.\(^1\)\(^2\) Third, as the browser war illustrates, Microsoft’s ability to overcome a rival’s early lead should not be underestimated.\(^1\)\(^2\)

Unfortunately, the FCC’s order does not suggest any analytical framework for evaluating the rationale for an open access mandate. To the extent that the FCC realized its imposition of an interoperability mandate would cut short a marketplace battle, it seemed to suggest that the standards battle would not be pro-consumer.\(^1\)\(^2\) As noted above, there was evidence that the marketplace battle spawned innovation, so the FCC should have been clearer on what justified the imposition of an interoperability mandate. To be sure, some commentators have highlighted that lingering uncertainty and the use of proprietary standards can create inefficiencies,\(^1\)\(^3\) but the jury is still out on this score. Finally, and most troublingly, the FCC’s failure to suggest a more general analytical framework for information platform regulation leaves industry players in related areas such as broadband transport provided by cable modems and interconnection in the Internet backbone in the dark about what to expect in the future.\(^1\)\(^4\)

On the positive side, the FCC’s AOL/Time Warner Order demonstrated that agency’s appreciation for relying on private standard-setting committees, and indeed empowering them, when regulating information platforms. To date, the FCC has relied on private standards in critical cases such as those for cellular telephone networks as well as in relying on Cablelabs to develop and superintend the settop box standard. Indeed, of the three major sets of considerations set out above, the FCC followed the most critical one in that it did not set up a regime


\(^{1\)\(^2\)} Mark Lemley’s perspective back in 1996 is worth remembering:

Take the Microsoft-Netscape browser battle as an example. Which of these companies is the dangerous monopolist who must be stopped? The immediate answer from those schooled in the operating system market may be: Microsoft. But it is Netscape, not Microsoft, that has an 85% market share today, and it would seem odd to prosecute a fringe competitor in such a market. People interested in the industry can spend hours debating who will win this competition; perhaps that fact alone should incline antitrust enforcers against acting at all.


\(^{1\)\(^2\)} AOL Order, *supra* note 52, at 71 (“And even if Microsoft's NPD did grow to rival AOL's, the result would be merely a duopoly, not the healthy competition that exists today in electronic mail and that we hope will exist in new IM-based services and AIHS in particular.”).

\(^{1\)\(^2\)} Jeffrey Church & Neil Gandal, *Network Effects, Software Provision, and Standardization*, 40 J. IND. ECON. 85, 100 (1992) (“Since our analysis suggests that there is a suboptimal amount of standardization in the market with competitive technologies, one can conjecture that the inefficiency would be exacerbated if the technologies were proprietary.”).

\(^{1\)\(^2\)} For a discussion of the cable modem issue, see Weiser, *supra* note 77, at 827-37. For one on the Internet backbone issue, see Hatfield, *supra* note 36, at 2-3.
which would lock the industry into a particular standard and quite probably slow technological change.

In short, by taking its first foray into information platform regulation in the context of a merger review, the FCC did not develop a clear and principled analysis for how it will approach the issue of information platforms in the future. Indeed, it may well be the case that IM regulation is critical to the public interest and warrants the FCC's regulatory oversight, but its defense of the conditions imposed in the AOL/Time Warner Order do not make the case. Moreover, the importance of developing a principled analytical framework is not merely to justify the merits of a particular action, but also to enable would-be regulated parties to take steps to regulate their own conduct short of government intervention. To develop an appropriate set of criteria for information platform regulation, the FCC should build off its AOL/TW precedent by developing a coherent analytical framework that outlines where, when, and how open architectures will be protected through regulatory oversight.

V. CONCLUSION

The advent of the Internet offers policymakers and lawyers an opportunity to experiment with and appreciate the development of new legal models to regulate important policy concerns. In particular, the Internet's reliance on private standard setting as a means of self-regulation will continue to attract attention and scrutiny as it constitutes an important alternative to a formal statutory or administrative law regime. As the Internet develops, its initial commitment to openness and the end-to-end principle will not be self-sustaining, thus requiring the government to develop an approach to regulating critical information platforms. From examining the case of instant messaging, commentators and policymakers can begin to understand what types of questions to ask regarding where government intervention is necessary, even though the FCC's order is not a model on this score. The FCC's order is a model, however, in avoiding unnecessary government standard setting by providing incentives for private parties to do so. How the new regime for regulating information platforms will develop remains to be seen, but insightful analysis and sound experimentation with different approaches may help regulators navigate their way through this difficult terrain.
UNIVERSAL CITY STUDIOS, INC. V. REIMERDES: PROMOTING THE PROGRESS OF SCIENCE AND THE USEFUL ARTS BY DEMOTING THE PROGRESS OF SCIENCE AND THE USEFUL ARTS?

by Eric W. Young¹

I. INTRODUCTION

It is the year 2010. The technological prowess of the publishing industry has blossomed. Books are no longer printed in paper format. All books, like Jack London's *Call of the Wild*, are available exclusively via a new technology called a Digital Book Reader.² The text of Mr. London's classic novel can be viewed only by connecting the Digital Book Reader to a broadband-internet connection, commonplace in many homes in the year 2010. The text is then downloaded to the Digital Book Reader. In order to download the text, users must submit payment via credit card to *Mass Market DigiBook*, a large on-line supplier of authored works. Payment of the fee only allows the user one week of use. Additionally, the downloaded file is protected from copying by technology that automatically "dissolves" the file exactly 168 hours after initial download. If the user requires additional use, they must resubmit payment.

Now, imagine that your son, Chris, an academically sound and industrious 4th grade student, is required to write a paper on Mr. London’s *Call of the Wild*. Furthermore, Chris is somewhat of a computer genius. He is aggravated by the fact that he can only access the *Call of the Wild* for 168 hours. He needs to be able to keep certain portions of the text so that he may include it in a digital presentation he plans to make for extra credit points. Through application of Chris’ computer programming knowledge, he is able to develop a computer program that he aptly calls *FairUseMaker*. The program can circumvent the copyright protection measures inherent in the digital book, thus allowing permanent preservation on the hard drive of his personal computer. The next day at school he conveys this new-found ability to his classmates. Many of his classmates express an interest in obtaining the computer code that circumvents the copyright protection measures of the Digital Book Reader and digital books. Subsequently, he emails the code to all his classmates. His best friend, David, posts just the computer code on a web site so that his cousin, Brian, living in another state, can use the code for the same purpose for which it was invented. David’s cousin then inserts a link on his personal web page linking to the site David created.

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² A "Digital Book Reader" is a made-up device for purposes of this hypothetical.
Two weeks later Mass Market DigiBook sues Chris, David, and Brian for violation of the Anti-Trafficking provision of the Digital Millennium Copyright Act.\(^3\) Chris, David, and Brian assert that the purpose of the FairUseMaker was to allow "fair use" of Call of the Wild. The judge, however, finds the three boys "traffickers" of anti-circumvention technology and issues a permanent injunction disallowing posting of the code or linking to the code.

If this situation seems unlikely to occur, it isn't. Just recently the United States District Court for the Southern District of New York came to the same conclusions on facts similar to those posited above.\(^5\) The opinion, written by Judge Kaplan, failed to recognize the importance of the "fair use." This comment evaluates the decision of the Southern District of New York. Part II discusses the historical background of DVD players and DVDs, the Digital Millennium Copyright Act, and the development of DeCSS. Part III details the facts that were before the Court in Reimerdes. Part IV discusses the reasoning that led to the Court's decision in Reimerdes. Part V presents an analysis and critique of the Court's holding in Reimerdes.

II. HISTORICAL BACKGROUND

A. The Emergence of DVDs

A Digital Versatile Disc (DVD) is a high capacity optical disc used to store everything from massive computer applications to full-length movies.\(^6\) DVDs are similar in physical size and appearance to a CD-ROM;\(^7\) however, the storage capacity of a DVD is much greater than that of a CD-ROM.\(^8\) The development

\(^3\) See 17 U.S.C. § 1201(a)(2) (2000). This provision reads in pertinent part, "No person shall . . . offer to the public, provide, or otherwise traffic in any technology . . . that (A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work protected under [the Copyright Act]; (B) has only limited commercially significant purpose or use other than to circumvent a technological measure that effectively controls access to a work protected under [the Copyright Act]; or (C) is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing a technological measure that effectively controls access to a work protected under [the Copyright Act]." Id.


\(^5\) See Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294 (S.D.N.Y. 2000). This decision centered on the creation, posting, and linking of DeCSS a computer code used to circumvent CSS, the copyright protection device, inherent in Digital Versatile Disks (DVD's) and DVD players. Id. This case is currently on appeal and is set for trial before the 2nd Circuit Court of Appeals on May 1, 2001. On appeal the appellant, Reimerdes, argues in their brief that the District court's interpretation of the pertinent portions of the Digital Millennium Copyright is too broad. The appellant urges that the interpretation violates his First Amendment rights and fair uses that should be enjoyed by ordinary DVD owners, computer scientists and others. See EFF 2600 Appellate Reply Brief in MPAA v. 2600 Case (visited Mar. 8, 2001)<http://www.eff.org/Ip/Video/MPAA_DVD_cases/20010319_ny_eff_appeal_reply_brief.html>.


\(^7\) Id.

\(^8\) Id. A CD-ROM stores 650MB of data whereas a DVD can store 4.7GB of data. One gigabyte is
of DVD began as a battle between two standards. The battle was between Time Warner-Toshiba and Sony-Phillips. As a result of this battle of standards, computer companies (led by IBM) insisted that the battling DVD proponents agree upon a single standard. Eventually this battle resulted in the development of the DVD Consortium. This consortium consisted of ten companies.

In 1997, the first DVD players hit the U.S. market. Previous to this release, however, the Motion Picture Association of America (MPAA), the Consumer Electronics Manufacturers Association (CEMA), and members of the computer industry put together an ad hoc group to discuss the technical problems of protecting digital video from piracy. This group is called the Copy Protection Technical Working Group. This concern prompted the development of technological measures to protect DVDs from piracy. Two principles guided the development of these technological measures. These two principles were: (1) that the copy protection system not be mandatory — dividing devices (DVD

equal to 1,024 megabytes. So, a DVD can store almost seven and one half times the amount of information as a CD-ROM can. There are also two-layer standard DVDs that can hold up to 8.5GB and DVDs can be double-sided, increasing the maximum data storage capability of one two-layer standard DVD to 17GB.

A War of Standards, Sony-Phillips vs. Time Warner-Toshiba (visited Oct. 7, 2000) <http://www.monterey.edu/students/dh/farleyaaronm/world/dvd/war.html>. Sony, Phillips, and friends backed the MMCD standard, while the competing SD standard was backed by Toshiba, Time Warner, and company:

The standards that the factions were independently developing incorporated two similar but different digital technologies. Sony-Phillips proposed their original DVD format as being a one-sided disc that had two layers: the top one on a piece of translucent plastic, the bottom one on a standard reflective layer. Their player’s laser beam had a special focusing mechanism that could read either layer instantaneously, thus effectively doubling the disc’s running time without having to flip sides. The Toshiba/Time Warner Brothers DVD group had insisted all along that a dual-layer approach is basically unworkable, and that a dual-sided disc is infinitely easier to make. It was obvious that a repeat of the classic "VHS vs. BETA" scenario, which split the video market in the early eighties, was about to do the same to the DVD market.

Id.

10 Id.

11 Id.


13 Id. These ten companies were: Hitachi, JVC, Matsushita, Mitsubishi, Phillips, Pioneer, Sony, Thomson, Time Warner, and Toshiba. Id.


16 See Bloom, Copy Protection, supra note 15, at 1268.

17 Id.

18 Id.
players) into compliant and noncompliant. The medium (DVDs) would have to be protected in such a way as to not play on noncompliant devices and, (2) the medium protection system would be cost effective, which in turn would not allow protection against the most determined hackers, "since that level of security would require more computing power than is reasonable . . ."19

Two protection measures developed: (1) DVD Regional Codes20 and the (2) Content Scrambling System (CSS).21 CSS will play an integral role in the continuing discussion of this paper. Although the movie industry originally felt these anti-piracy technologies would be sufficient to protect their copyrighted material, it was only a matter of time before CSS was cracked, and copying of DVDs was a reality.

B. The Digital Millennium Copyright Act

President Clinton signed the Digital Millennium Copyright Act (DMCA) into law on October 28, 1998.22 The DMCA incorporated and implemented two 1996 World Intellectual Property Organization (WIPO) treaties: The WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT).23 The DMCA, thus, addressed a number of significant copyright-related issues.24

20 See DVD Regional Locking (visited Oct. 8, 2000) <http://www.dvdcity.com/dvdregions.html>. The movie industry, with the help of the electronics industry, included a block in DVD players that would ensure that DVD discs would not be transportable between the various markets around the world. There are six regional DVD codes. In essence, regional coding ensures that a player marketed in one territory will refuse to play a disc intended for another territory. A search on the Internet, however, returned numerous sites purporting to sell "Region Free DVD" players; therefore, allowing any DVD to be viewed, regardless of what region it originated from. See, for example <http://www.codefreedvd.com/dvd_dvdregionlockingexplained.htm>.
21 Bloom, Copy Protection, supra note 15, at 1268:

CSS is a low cost method of scrambling MPEG-2 video, developed by Matsushita. Descrambling requires a pair of keys. One of the keys is unique to the disk, while the other is unique to the MPEG file being descrambled. The keys are stored on the lead-in area of the disk, which generally can only be read by compliant drives (see above footnote, however). Keys can be passed from a DVD drive to a descrambler over a PC bus using a secure handshake protocol. The purpose of CSS is twofold. First and foremost, it prevents byte-for-byte copies of a MPEG stream from being playable since such copies will not include the keys. Second, it provides a reason for manufacturers to make compliant devices, since CSS scrambled discs will not play on noncompliant devices. Anyone wishing to build a compliant device must obtain a license, which contains the requirement that the rest of the copy-protection system be implemented.

Id. Licenses can be obtained from the DVD Copy Control Association <http://www.dvdcoca.org/dvdcoca/>.
24 Id. at 1.
The provision of the DMCA relevant to this discussion is that relating to circumvention of technological protection measures and the exceptions therein. Each of the WIPO treaties mentioned above contain language obligating member states to prevent "circumvention of technological measures used to protect copyrighted works, and to prevent tampering with the integrity of copyright management information." Article 11 of the WCT and Article 18 of the WPPT deal with this need to protect copyrighted materials from circumvention measures. Section 103 of the DMCA added a new chapter 12 to Title 17 of the U.S. Code following the lead and mandate of the two treaties. Section 1201 implements the obligation to provide "adequate and effective protection against circumvention of technological measures used by copyright owners to protect their works." Section 1201(a)(1)(A) reads:

(a) Violations Regarding Circumvention of Technological Measures.
(1)(A) No person shall circumvent a technological measure that effectively controls access to a work protected under this title [the Copyright Act].

Section 1201(a)(1)(A) divides technological measures into two categories: Unauthorized access to copyrighted work, and unauthorized copying of protected works. Making or selling devices or services whose purpose is to circumvent

25 Id. at 3.
26 WIPO Copyright Treaty (adopted by a diplomatic conference in Geneva), Dec. 20, 1996, art. 11. This article reads:

Contracting Parties shall 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.

Id.


27 WIPO Performances and Phonograms Treaty (adopted by a diplomatic conference), Dec. 20, 1996, chap. 4, art. 18. This article reads:

Contracting Parties shall provide adequate legal protection and effective legal remedies against the circumvention of effective technological measures that are used by performers or producers of phonograms in connection with the exercise of their rights under this Treaty and that restrict acts, in respect of their performances or phonograms, which are not authorized by the performers or the producers of phonograms concerned or permitted by law.

Id.

28 U.S. Copyright Office, Summary, supra note 23, at 3.
29 Id.
30 See id. at 1.
31 Id.
33 See U.S. Copyright Office, Summary, supra note 23, at 3-4.
technological measures, so that unauthorized accessing or copying can be accomplished, is prohibited under certain circumstances.\(^\text{34}\)

Those circumstances where unauthorized access or copying is prevented are: (1) when the device or service is primarily designed or produced to circumvent; (2) where the device or service has only a limited commercially significant purpose or use other than to circumvent; or (3) where the device or service is marketed for use in circumventing.\(^\text{35}\) Section 1201(a)(2) reads:

\begin{quote}
(a)(2) No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that —
\end{quote}

(A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work protected under this title [the Copyright Act];

(B) has only limited commercially significant purpose or use other than to circumvent a technological measure that effectively controls access to a work protected under this title [the Copyright Act]; or

(C) is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing a technological measure that effectively controls access to a work protected under this title [the Copyright Act].\(^\text{36}\)

A number of exceptions were built into Section 1201.\(^\text{37}\) One exception relates to law enforcement, intelligence, and government activities, and it applies to the entire section.\(^\text{38}\) There are other exceptions relating to Section 1201(a), the provision dealing with the category of technological measures that control access to works.\(^\text{39}\) The broadest exceptions are contained in sections 1201(a)(1)(B)-(E).\(^\text{40}\) These sections establish a continuous administrative rule-making process to determine the effect of the prohibition against circumvention.\(^\text{41}\) The boundaries of the exemption are to be determined through periodic rulemakings by the Librarian of Congress, upon the recommendation of the Register of Copyrights, who in turn is to consult with the Assistant Secretary of Commerce for Communications and Information.\(^\text{42}\) The DMCA initially provided for two years in which these guidelines or definitions concerning the exceptions could be announced.\(^\text{43}\) A notice published in the Federal Register solicited comments to

\(^{34}\) See id. at 4.

\(^{35}\) See id.


\(^{37}\) See U.S. Copyright Office, Summary, supra note 23, at 5.


\(^{39}\) See U.S. Copyright Office, Summary, supra note 23, at 5.

\(^{40}\) Id.

\(^{41}\) Id.

\(^{42}\) Id.

\(^{43}\) Id.
assist in this determination. The deadline for comments was subsequently twice extended. The determinations became effective October 28, 2000.

In addition to this broad exception there are seven other exceptions (six unique to the DMCA and the other, the Fair Use exception). These exceptions are:

1. **Nonprofit library, archive, and educational institution exception**: (section 1201(d)). The prohibition on the act of circumvention of access control measures is subject to an exception that permits nonprofit libraries, archives and educational institutions to circumvent solely for the purpose of making a good faith determination as to whether they wish to obtain authorized access to the work.

2. **Reverse Engineering**: (section 1201(f)). This exception permits circumvention, and the development of technological means for such circumvention, by a person who has lawfully obtained a right to use a copy of a computer program for the sole purpose of identifying and analyzing elements of the program necessary to achieve interoperability with other programs, to the extent that such acts are permitted under copyright law.

3. **Encryption Research**: (section 1201(g)). An exception for encryption research permits circumvention of access control measures, and the development of the technological means to do so, in order to identify flaws and vulnerabilities of encryption technologies.

4. **Protection of Minors** (section 1201(h)). This exception allows a court applying the prohibition to a component or part to consider the necessity for its incorporation in technology that prevents access of minors to material on the Internet.

5. **Personal Privacy** (section 1201(i)). This exception permits circumvention when the technological measure, or the work it protects, is capable of collecting or disseminating personally identifying information about the online activities of a natural person.

6. **Security Testing** (section 1201(j)). This exception permits circumvention of access control measures, and the development of technological means for such circumvention, for the purpose of testing the security of a computer, computer system or computer network, with the authorization of its owner or operator.

7. **Fair Use**: (section 107 of the Copyright Act). Section 1201 does not prohibit the act of circumventing a technological measure that prevents copying. By

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47 See U.S. Copyright Office, Summary, supra note 23, at 5-6.
contrast, since the fair use doctrine is not a defense to the act of gaining unauthorized access to a work, the act of circumventing a technological measure in order to gain access is prohibited.48

Sections 1203 and 1204 allow for civil and criminal penalties to be levied against violators of Section 1201.49 Section 1203 gives courts the power to levy monetary damages and equitable remedies (e.g., injunctions).50 Under this Section, the court has the discretion to diminish or excuse these remedies in cases of innocent violations.51 The violator must prove, however, that "[he] was not aware and had no reason to believe [his] acts constituted a violation."52 Libraries, archives, and educational institutions are entitled to complete remission of damages in this type of circumstance.53

Upon the signing of the DMCA into law, President Clinton stated, "[t]hrough enactment of the Digital Millennium Copyright Act, we have done our best to protect from digital piracy the copyright industries that comprise the leading export of the United States."54 The Act has, however, had an impact on other areas not envisioned by Congress or the President.

C. Putting the De in CSS

In November of 1999, a small group of Norwegian programmers developed a means to circumvent CSS protection on DVDs.55 The group called themselves MoRE (Masters of Reverse Engineering).56 One member of this programming group, a sixteen-year-old boy, received the most attention from the press and authorities.57 Norwegian authorities arrested the boy as well as the boy's father.58 The Norwegian Police Economic Crime Unit was reported as saying: "[t]he charges concern whether [the boy] developed a cracker program that breaks the (DVD) copying code and distributed it on the Internet ..."59 The teen asserted that he had not broken any laws and that the purpose of the code was written to

48 Id. at 5, 6.
52 Id.
54 Statement on Signing the Digital Millennium Copyright Act, 34 WEEKLY COMP. PRESS DOC. 2168, 2169 (Oct. 28, 1998).
58 Id.
59 Doug Mellgren, Norwegian Teen Faces Charges in DVD Security Case, ASSOCIATED PRESS NEWSWIRES, Jan. 26, 2000, available in 2000 WL 18463475. The teen's web site reportedly received up to 10,000 hits per day as word spread that the code was available. Id.
view lawfully purchased DVDs on computers operating Linux, not for copying. The teen and his fellow programmers named the code "DeCSS." DeCSS is only a 60 KB utility. Once the DeCSS utility is run and the DVD file decrypted, the decrypted file can then be saved to the user's hard drive. In simpler terms, DeCSS unscrambles DVDs and allows viewing on non-compliant machines, as well as copying. However, "[s]ince DVD movies can range in size from 4.7 GB to 9.4 GB and recordable DVD has at best 2.5 GB capacity (or 5.2 GB for double-sided discs) direct DVD copying is unfeasible."

Immediately after the teen's arrest, the DVD Copy Control Association (DVDCCA) sued 27 named and 72 unnamed defendants over the posting of the circumvention code. The DVDCCA argued that if the distribution of the code was not stopped, illegal copying of DVDs would proliferate, and the film industry would be irreparably harmed. The DVDCCA alleged theft of their trade secret (that of CSS). Judge William J. Elfving in Superior Court in Santa Clara County, California granted a preliminary injunction against those individuals who posted the code, stating that the posting amounted to a theft of trade secrets. However, the court refused to grant an injunction against linking

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60 Linux is an Intel-processor-based alternative to Unix. Linux (pronounced lin-nucks) is currently used by millions of people around the world. The operating system has made some inroads into corporate life, especially as an inexpensive substitute for high-priced Unix web servers. DVDs, at the time of the creation of the circumvention code, could not be viewed on computers running Linux. See CNET Glossary (visited Sept. 27, 2000) <http://coverage.cnet.com/Resources/Info/Glossary/Terms/linux.html>.


62 Movie Studios Win Preliminary Injunction Barring Website Operators from Distributing Software that Permits Users to Decrypt and Copy Movie DVDs, 22 ENT. L. REP. 13, 13 (2000).


64 Id.


66 Andy Patrizio, Why the DVD Hack was a Cinch (visited Feb. 15, 2000) <http://www.wired.com/news/print/0,1294,32263,00.html>. Next year 4.7 GB recordable DVD drives will be available, making duplication of DVD discs much easier. However, the total data volume of a typical movie DVD is between 7 and 9 GB of data. You can't "burn" this to a regular CD, since a CD only holds 650 MB of data. The only people for whom DVD piracy is profitable are the professional pirates who own expensive equipment and for whom CSS encryption is not a problem. These types of pirates do bitwise copies, which means that their pirate copies are precise duplicates of the originals, including the CSS encryption. The DVD player will notice no difference between such a copy and the original version. CSS cannot stop this kind of piracy.


68 See id.


to other sites that contained the code.\textsuperscript{71} The court felt that such an injunction would be "overbroad and extremely burdensome."\textsuperscript{72}

At the same time the DVDCCA took action, major Hollywood studios reacted to the proliferation of DeCSS.\textsuperscript{73} These major Hollywood studios, acting through the Motion Picture Association of America (MPAA), stated that DeCSS could cost the industry billions of dollars yearly and that the DVD industry was a "product under siege."\textsuperscript{74} The MPAA sued the website, 2600.com, seeking an injunction preventing the site from posting or linking to the DeCSS code.\textsuperscript{75} This suit alleged violation of the DMCA and will be discussed in the following sections in detail.\textsuperscript{76}

The Internet community responded to this legal action in various ways. For instance, open-source\textsuperscript{77} advocates responded by putting DeCSS on as many sites as they could.\textsuperscript{78} E-mail campaigns emerged supporting the Norwegian teen that created DeCSS and boycotts of Hollywood products were propounded on many sites.\textsuperscript{79} Legal funds were established to help with the teen's defense.\textsuperscript{80} The organization entitled OpenDVD\textsuperscript{81} and others claimed the MPAA was "chipping away at personal copying rights in the name of copyright protection."\textsuperscript{82} Bumper stickers were distributed at the LinuxWorld 2000 convention reading, "Free Jon Johansen" (the Norwegian teen) and "Coding is Not a Crime."\textsuperscript{83} Flyers were passed out at movie theaters with the code printed on them and t-shirts were sold with the code printed on them.\textsuperscript{84}

Mark Lemley, a University of California at Berkeley law professor, was quoted as saying in response to this burgeoning crisis: "I think the DMCA as it's

\textsuperscript{71} Id. at *4.
\textsuperscript{72} Id.
\textsuperscript{74} Id.
\textsuperscript{75} Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294 (S.D.N.Y. 2000). 2600.com is the web site for a leading hacker magazine.
\textsuperscript{76} See id.
\textsuperscript{77} Open-source is defined as: "A method and philosophy for software licensing and distribution designed to encourage use and improvement of software written by volunteers by ensuring that anyone can copy the open source and modify it freely." Open Source (last modified Dec. 12, 1999) <http://wombat.doc.ic.ac.uk/foldoc/index.html>.
\textsuperscript{78} Adam Gifford, DVD 'Piracy' Battle Line Drawn, NEW ZEALAND HERALD, Jan. 25, 2000, available in 2000 Westlaw 7609600.
\textsuperscript{80} Id. However, the teen probably did not need a whole lot of money as he reportedly was offered jobs at major computer companies.
\textsuperscript{81} OpenDVD's website is: <http://www.opendvd.org>.
\textsuperscript{84} Id.
written is a disastrous statute. Congress probably didn’t think all the way through the ramifications of the way they structured the bill.”\textsuperscript{85} He asserted that the DMCA could erode the fair use doctrine.\textsuperscript{86} “It’s a real mistake to try to roll back technology . . . My fear is if we sort of lose these freedoms by degree, no one will really notice.”\textsuperscript{87} Clearly, the battle lines were being drawn for the subsequent decision in \textit{Reimerdes}.

### III. The Facts of Universal City Studios, Inc. v. Reimerdes

A defendant’s company (Eric Corley’s), 2600 Enterprises, Inc., publishes a magazine entitled, \textit{2600: The Hacker Quarterly}.\textsuperscript{88} \textit{2600: The Hacker Quarterly} is considered a “bible” to the hacker community.\textsuperscript{89} The name of the magazine commemorates hackers, who in the 1960’s successfully found a way to explore “un-accessible” areas of the telephone system.\textsuperscript{90} This ability was accomplished by using a 2600-hertz tone over a long distance trunk connection to gain access to “operator mode.”\textsuperscript{91} The website is a companion to the defendant’s magazine and is primarily managed by Mr. Corley.\textsuperscript{92} The website has been in existence since 1995.\textsuperscript{93}

Beginning in November of 1999, the source and object code for DeCSS was posted on the \textit{2600.com} website.\textsuperscript{94} Additionally, the website provided links to other sites that supposedly “mirrored” or offered DeCSS for download.\textsuperscript{95} The links to the “mirror” sites took three forms:\textsuperscript{96} (1) A link was provided to a website.\textsuperscript{97} The linked website would then, itself, contain a link from which

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\textsuperscript{85} \textit{Id.}
\textsuperscript{86} \textit{Id.}
\textsuperscript{87} \textit{Id.}
\textsuperscript{88} See Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294, 308 (S.D.N.Y. 2000).
\textsuperscript{89} \textit{Id.}
\textsuperscript{90} \textit{Id.}
\textsuperscript{91} \textit{Id.}
\textsuperscript{92} Id. at 309.
\textsuperscript{93} \textit{Id.}
\textsuperscript{94} See \textit{Reimerdes}, 111 F. Supp. 2d at 312.
\textsuperscript{95} \textit{Id.} A mirror site is:

A Web site that is a replica of an already existing site, used to reduce network traffic (hits on a server) or improve the availability of the original site. Mirror sites are useful when the original site generates too much traffic for a single server to support. Mirror sites also increase the speed with which files or Web sites can be accessed: users can download files more quickly from a server that is geographically closer to them. For example, if a busy New York-based Web site sets up a mirror site in England, users in Europe can access the mirror site faster than the original site in New York. Sites such as Netscape that offer copies or updates of popular software often set up mirror sites to handle the large demand that a single site may not be able to handle.

\textsuperscript{96} See \textit{Reimerdes}, 111 F. Supp. 2d at 312.
\textsuperscript{97} \textit{Id.}
DeCSS could be downloaded. These pages might or might not contain other information than the link to DeCSS. The link from 2600.com's website would bring the web user to a website that provided links to other pages which purportedly contained links to DeCSS. (3) By following the link, the download of DeCSS began immediately, albeit from a website other than the defendant's.

Subsequently, the plaintiffs, eight major motion picture studios (including Universal City Studios), discovered the availability of DeCSS on the Internet. This discovery occurred in October 1994 through the investigative arm of the Motion Picture Association of America (MPAA). The plaintiffs responded by sending out numerous cease and desist letters to sites that had DeCSS available for download. 2600.com failed to remove the code or the links from their website. Consequently, the plaintiffs brought suit against Eric Corley and two others.

The federal district court granted a preliminary injunction on January 20, 2000, enjoining defendants from posting DeCSS. Plaintiffs also sought to enjoin the defendants from providing links to other sites containing the DeCSS code. The court declined to hear this issue, because the plaintiffs failed to raise the issue in their complaint. 2600.com observed the court’s order and removed any posting of the DeCSS code on their website; however, in an act of "electronic civil disobedience," the defendants maintained links to over 500 sites that contained the code. The site, in furtherance of their "electronic civil disobedience," posted a banner that read: "Stop the MPAA." 2600.com also

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98 Id.
99 Id.
100 Id.
101 Id.
102 See Reimerdes, 111 F. Supp. 2d at 312.
103 Id.
104 Id.
105 Id.
106 Id. The two other defendants entered into consent decrees with the plaintiffs. Furthermore, plaintiffs amended the complaint to add 2600 Enterprises, Inc. as a defendant. Id. at 312, n.91.
107 Universal City Studios, Inc. v. Reimerdes, 82 F. Supp. 2d 211 (S.D.N.Y. 2000). A preliminary injunction was also granted on January 21, 2000 by the Superior Court, Santa Clara County, California. See DVD Copy Control Association, Inc. v. McLaughlin, 2000 48512 WL (Cal. Superior Jan. 21, 2000). The DVD Copy Control Association, Inc. sought a preliminary injunction against several individuals - requiring that they desist from posting the DeCSS code on their websites and desist from linking to other sites that did. Id. The state court granted the injunction in part; however, it refused to enjoin the defendants from linking to other sites. Id. It is important to note that the injunction granted by the state court was based on trade secret laws and not a violation of the Digital Millennium Copyright Act as is the federal case. Id.
108 Reimerdes, 111 F. Supp. 2d at 312.
109 Id.
110 Id.
111 Id. at 312-13.
urged their users to post, in as many different cyber locations as possible, DeCSS.\footnote{Id. at 313.}

Plaintiffs then sought a permanent injunction against defendants from posting the DeCSS code and from providing links to any other sites that contained the code.\footnote{See id. at 313.} The action was based upon violations of the Digital Millennium Copyright Act (DMCA).\footnote{Reimerdes, 111 F. Supp. 2d at 313.} The court on August 17, 2000 determined that the defendants had in fact violated the DMCA and were permanently enjoined from posting the DeCSS code or from providing links to other sites that did.\footnote{Id. at 346. See also Amended Final Judgment, id. at 346-47.}

\section*{IV. The Reasoning of the Court in Universal City Studios, Inc. v. Reimerdes}

The court in \textit{Universal City Studios, Inc. v. Reimerdes} faced many issues. These included: (1) Whether the defendants violated the Anti-Trafficking provision of the DMCA;\footnote{See 17 U.S.C. § 1201(a)(2) (2000).} (2) Whether the defendants’ conduct fell into one of the exceptions afforded under the Act; (3) Whether linking to other sites that contain the DeCSS code is prohibited by the DMCA; (4) Whether the DeCSS code is protected speech for First Amendment purposes;\footnote{See Reimerdes, 111 F. Supp. 2d at 327-333.} and, (5) Whether injunctive relief against dissemination of DeCSS is barred by the prior restraint doctrine, the overbreadth doctrine, or vagueness.\footnote{Id. at 333-41.}

\subsection*{A. The Court Found a Violation of the Anti-Trafficking Provision of the DMCA}

First, section 1201(a)(2) of the DMCA states in relevant part that:

No person shall . . . offer to the public, provide or otherwise traffic in any technology . . . that --

(A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a work protected under [the Copyright Act];

(B) has only limited commercially significant purpose or use other than to circumvent a technological measure that effectively controls access to a work protected under [the Copyright Act]; or

(C) is marketed by that person or another acting in concert with that person with that person’s knowledge for use in circumventing a technological measure that
effectively control access to a work protected under [the Copyright Act].

Judge Kaplan concluded that defendants had "offered and provided and, absent a court ruling, would continue to offer and provide DeCSS for download . . . ." DeCSS is, the court reasoned, "technology" as defined by the DMCA. The DMCA clearly defines "circumvent a technological measure" as, "descrambling a scrambled work, decrypting an encrypted work, or 'otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner . . . .""

During pretrial proceedings and at the trial, Corley argued that CSS is so weak an encryption method that it does not "effectively control" access to plaintiffs' copyrighted material and, thus, cannot be protected by this part of the DMCA. Judge Kaplan responded to this argument by quoting language from the DMCA. The DMCA states, "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, without the authority of the copyright owner, to gain access to a work." The court further reasoned that:

One cannot gain access to a CSS-protected work on a DVD without application of the three keys that are required by the software. One cannot lawfully gain access to the keys except by entering into a license with the DVD CCA [DVD Copyright Control Association] under authority granted by the copyright owners or by purchasing a DVD player or drive containing the keys pursuant to such a license . . . CSS "effectively controls access" to copyrighted DVD movies. It does so, within the meaning of the statute, whether or not it is a strong means of protection.

This reading of the statute is furthered, the court stated, by an investigation into the legislative history of this section of the DMCA. The legislative history was clear, according to Judge Kaplan, "that a technological measure 'effectively controls access' to a copyrighted work if its function is to control access . . . ."

Therefore, CSS in its ordinary operation (without the presence of some program like DeCSS) actually worked and "effectively controlled" access within the meaning of the statute. Furthermore, the court reasoned that if the statute intended protection only to be offered to "efficacious" methods of protecting copyright, then the statute would be useless or "gutted" because any method that

\[\text{119 Reimerdes, 111 F. Supp. 2d at 317.}\]
\[\text{120 Id.}\]
\[\text{122 See Reimerdes, 111 F. Supp. 2d at 317.}\]
\[\text{123 Id.}\]
\[\text{125 Reimerdes, 111 F. Supp. 2d at 317-18.}\]
\[\text{126 Id. at 318.}\]
\[\text{127 Id.}\]
\[\text{128 See id.}\]
is circumvented would, if adopting Corley's view, be ineffective. The Court opined that application of the statute in the manner Corley espoused would provide protection to those methods that do not need it and leave unprotected those methods that do.

Having established that CSS effectively protects plaintiffs' copyrighted works, the court turned to the question of whether DeCSS was designed primarily to circumvent CSS. Judge Kaplan concluded, based on admissions by both the creator of DeCSS and Corley, that DeCSS's sole purpose was the decryption of CSS. Therefore, the Court found that absent any statutory exception, defendants "clearly violated Section 1201(a)(2)(A) by posting DeCSS to their web site."

The Court resolved, simply, whether defendants had violated Section 1201(a)(2)(B) by reasoning that a violation of Section 1201(a)(2)(B) naturally follows a violation of Section 1201(a)(2)(A). Defendants argued that the true reason for the creation of DeCSS was not to violate copyright, but rather to allow DVDs to be viewed on computers operating Linux. The court dispensed with this argument quickly. It held that the true reason for the creation of DeCSS did not matter because defendants still violated the anti-trafficking clause of the DMCA.

"[T]he question whether the development of a Linux DVD player motivated those who wrote DeCSS is immaterial to the question whether the defendants now before the Court violated the anti-trafficking provision of the DMCA. The inescapable facts are that (1) CSS is a technological means that effectively controls access to plaintiffs' copyrighted works, (2) the one and only function of DeCSS is to circumvent CSS, and (3) defendants offered and provided DeCSS by posting it on their web site. Whether defendants did so to infringe, or to permit or encourage others to infringe, copyrighted works in violation of other provisions of the Copyright Act simply does not matter for purposes of 1201(a)(2). The offering or provision of the program is the prohibited conduct..."
and it is prohibited irrespective of why the program was written, except to whatever extent motive may be germane to determining whether their conduct falls within one of the statutory exceptions.\footnote{Universal City Studios, Inc. v. Reimerdes, 111 F. Supp. 2d 294 (S.D.N.Y. 2000).}

In conclusion, the court found that the defendants violated Section 1201(a)(2)(A) of the DMCA.\footnote{See id.} The Court turned next to defendants' asserted statutory exceptions.\footnote{Id. at 319-24.}

B. The Court Finds No Statutory Exception Applicable

Defendants in this case raised four statutory defenses (exceptions) to their actions.\footnote{Id.} The exceptions were contained either in the DMCA or the Copyright Act.\footnote{Id.} The exceptions claimed were: (1) reverse engineering; (2) encryption research; (3) security testing; and, (4) fair use.\footnote{See id.} The defendants, in their post-trial memorandum limited their argument to only the Reverse Engineering defense, but Judge Kaplan discussed all their originally claimed defenses in his opinion and concluded that all four were "entirely without merit."\footnote{Reimerdes, 111 F. Supp. 2d at 320.} The Court's handling of these four defenses will be discussed in turn.

1. Reverse Engineering

The reverse engineering exception of the DMCA provides that one may circumvent, or develop and employ technological means to circumvent access-control measures in order to achieve interoperability with another computer program provided that doing so does not infringe another's copyright.\footnote{17 U.S.C. § 1201(f)(1), (2) (2000).} Furthermore, one may make the results of this reverse engineering effort available to others, if the person [in question] ... provides such information ... solely for the purpose of enabling interoperability of an independently created computer program with other programs, and to the extent that doing so does not constitute infringement ... ."\footnote{17 U.S.C. § 1201(f)(3) (2000).} The Court did not find the reverse engineering exception applicable to the defendants.\footnote{Reimerdes, 111 F. Supp. 2d at 319.}

In finding that this exception was not available to the defendants, the Court determined that Section 1201(f)(3) permits only the one who performed the reverse engineering the right to disseminate that information.\footnote{17 U.S.C. § 1201(f)(3) (2000).} Here, the defendants did not reverse engineer anything, "[t]hey simply took DeCSS off
someone else’s website and posted it on their own." Additionally, the Court reasoned that, even if defendants had done the reverse engineering themselves, they could only post DeCSS for the sole purpose of providing interoperability and the defendants in this case did not post DeCSS solely for interoperability purposes. Therefore, the Court concluded that this exception would not apply to the defendants’ case.

2. Encryption Research

The encryption research exception provided in Section 1201(g)(4) of the DMCA states in relevant part:

Notwithstanding the provisions of subsection (a)(2), it is not a violation of that subsection for a person to —

(A) develop and employ technological means to circumvent a technological measure for the sole purpose of that person performing the acts of good faith encryption research described in paragraph (2); and

(B) provide the technological means to another person with whom he or she is working collaboratively for the purpose of conducting the acts of good faith encryption research described in paragraph (2) or for the purpose of having that other person verify his or her acts of good faith encryption research described in paragraph (2).

Paragraph (2) sets the parameters for determining whether or not the circumvention of the technological measures for encryption research was done in good faith. The encryption research was done in good faith if:

(A) the person lawfully obtained the encrypted copy, phonorecord, performance, or display of the published work;

(B) such act is necessary to conduct such encryption research;

(C) the person made a good faith effort to obtain authorization before the circumvention; and

(D) such act does not constitute infringement under this title. To determine if good faith had occurred, the Court considered factors such as:

whether the results of the putative encryption research [were] disseminated in a manner designed to advance the state of knowledge of encryption technology versus facilitation of copyright infringement, whether the person in question [was] engaged in legitimate study of or work in encryption, and whether the

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150 Id.
151 Id.
152 Id.
153 Id. at 320-21 (citing 17 U.S.C. § 1201(g)(4) (2000)).
results of the research [were] communicated in a timely fashion to the copyright owner.155

The court concluded that defendants made no effort to provide the results of the DeCSS effort to the copyright owners.156 There was no evidence to suggest that the defendants made any good faith effort to obtain permission from the copyright owners, and furthermore, defendants were not engaged in encryption research.157 Therefore, the court concluded, defendants could not fall under the exception provided in Section 1201(g).158

3. Security Testing

The security testing exception, found in Section 1201(j) of the DMCA is limited to:

assessing a computer, computer system, or computer network, solely for the purpose of good faith testing, investigating, or correcting [of a] security flaw or vulnerability, with the authorization of the owner or operator of such computer system or computer network.159

The Court found that nothing in the record of Reimerdes indicated DeCSS had anything to do with testing computers, computer systems, or computer networks.160 Additionally, the defendants did not seek authorization from the plaintiffs in any manner.161 This exception, the court found, had no bearing on the case.162

4. Fair Use

The defendants' final attempt at a statutory exception was the fair use doctrine.163 This doctrine is codified in Section 107 of the Copyright Act.164 The fair use doctrine states in its simplest form that others (those other than the copyright owner) may make limited use of portions of a copyrighted work.165 These uses can include the right "to reprint or quote a suitable part of a copyrighted book or article in certain circumstances."166 fair use promotes

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156 Reimerdes, 111 F. Supp. 2d at 321.
157 Id.
158 Id.
160 Reimerdes, 111 F. Supp. 2d at 321.
161 Id.
162 Id.
163 See id.
165 See Reimerdes, 111 F. Supp. 2d at 321.
166 Id.
"artistic criticism, teaching and scholarship, and other socially useful forms of expression."\textsuperscript{167}

The Court acknowledged that certain uses deemed fair would still violate the DMCA.\textsuperscript{168} The Court worked its way around the conflict between the DMCA and the fair use doctrine by holding fast to the fact that defendants were not charged with copyright violation.\textsuperscript{169} Rather the Court held that defendants were charged with circumventing a technological measure that controlled access to copyrighted works in violation of the DMCA.\textsuperscript{170} Had Congress wanted fair use to apply to situations like the one before us, the Court noted, Congress would have said so.\textsuperscript{171}

The policy concerns raised by defendants were considered by Congress. Having considered them, Congress crafted a statute that, so far as the applicability of the fair use defense to Section 1201(a) claims is concerned, is crystal clear. In such circumstances, courts may not undo what Congress so plainly has done by 'construing' the words of a statute to accomplish a result that Congress rejected. The fact that Congress elected to leave technologically unsophisticated persons who wish to make fair use of copyrighted works without the technical means of doing so is a matter for Congress unless Congress' decision contravenes the Constitution, a matter to which the Court turns below. Defendants' statutory fair use argument therefore is entirely without merit.\textsuperscript{172}

C. The Court Found Linking to Other Sites Violates the DMCA

The Court posited that: "The 'dispositive question is whether linking to another web site containing DeCSS constitutes 'offer[ing DeCSS] to the public' or 'provid[ing] or otherwise traffic[ing]’ in it within the meaning of the DMCA.'\textsuperscript{173} To answer this question the Court announced that consideration of the different types of linking is paramount.\textsuperscript{174} A discussion of what "linking" is and what different types of "linking" exist was put forth by the Court.\textsuperscript{175} The types of linking the court discussed can be seen in Part III of this paper above.

The Court further stated that trafficking in something involves engaging in that something by conduct that involves awareness of the nature of the subject of the trafficking.\textsuperscript{176} To "provide" something, the Court noted for purposes of the DMCA, is to make it available and to "offer" is "to present or hold out that something for consideration."\textsuperscript{177} Judge Kaplan concluded that the anti-trafficking

\textsuperscript{167} Id.
\textsuperscript{168} Id. at 322.
\textsuperscript{169} Id.
\textsuperscript{170} Id.
\textsuperscript{171} See Reimerdes, 111 F. Supp. 2d at 322.
\textsuperscript{172} Id. at 324.
\textsuperscript{173} Id. (alteration in original).
\textsuperscript{174} Id.
\textsuperscript{175} Id.
\textsuperscript{176} Id. at 325.
\textsuperscript{177} Reimerdes, 111 F. Supp. 2d at 325.
provision of the DMCA is “implicated where one presents, holds out or makes a circumvention technology device available, knowing its nature, for the purpose of allowing others to acquire it.” 178

The Court concluded that links to sites where the DeCSS downloading is automatically begun once the user clicks on the link is trafficking. 179 Also, links to sites that provide only the DeCSS code or simply provide another link to the code is trafficking. 180 The last type of linking, where the page linked to contains a “good deal” of content other than DeCSS, the Court posited is more troublesome. 181 However, the Court held, regardless of the potential problems with banning links to these types of pages, that defendants’ conduct involved the active solicitation of others to post the code and by doing so they offered or otherwise trafficked in the DeCSS code. 182

D. The Court Found DeCSS Not Fully Protected by the First Amendment

The Court began its argument for not granting computer code full First Amendment protection by stating:

It cannot seriously be argued that any form of computer code may be regulated without reference to First Amendment doctrine. The path from idea to human language to source code to object code is a continuum. As one moves from one to the other, the levels of precision and, arguably, abstraction increase, as does the level of training necessary to discern the idea from the expression . . . Only a relatively small number of skilled programmers and computer scientists will understand the machine readable object code. 183

The court held that all computer code — whether source code or object code — is a means of expressing ideas, and the First Amendment must be brought into play before code may be prohibited or restricted. 184 However, determining the level of scrutiny to be applied to statutes or regulations that prohibit or restrict computer code is the question of most importance, the Court noted. 185 The Court stated that simply because “words, symbols and even actions convey ideas and evoke emotions does not inevitably place them beyond the power of government.” 186

Two categories of restrictions on speech have been developed by the Supreme Court: (1) content-based restrictions (restrictions based on the message, ideas, or subject matter of the contents), and (2) content-neutral restrictions (restrictions not motivated by a desire to limit the message). 187 The restriction on

178 Id.
179 Id.
180 Id.
181 Id.
182 Id.
183 Reimerdes, 111 F. Supp. 2d at 326.
184 Id. at 327.
185 Id.
186 Id.
187 Id.
speech is subject to a legal standard depending upon the type of restriction (either content-based or content-neutral). Restrictions on non-speech elements of expressive conduct, the Court claimed, should receive a content-neutral analysis.

In upholding a regulation of non-speech elements or content-neutral restrictions, the restriction must serve an important governmental interest and restrict First Amendment principles no more than necessary. The court determined that DeCSS has a sufficiently high level of functional, non-speech elements inherent in it (as do all computer programs) to deserve only a content-neutral analysis under the First Amendment doctrine.

The Court asserted that in passing the test employed for content-neutral or non-speech elements, the DMCA was a law passed to further an important governmental interest — that of suppressing copyright piracy and to promote the availability of copyrighted works in digital form, not of suppressing the expressive content that may be inherent in DeCSS and code similar to it. Furthermore, the Court expressed that the regulation (DMCA) is no more restrictive than it needs to be. The Court consequently stated:

Accordingly, this Court holds that the anti-trafficking provision of the DMCA as applied to the posting of computer code that circumvents measures that control access to copyrighted works in digital form is a valid exercise of Congress’ authority. It is a content neutral regulation in furtherance of important governmental interests that does not unduly restrict expressive activities ... [The holding is a narrow one, however limiting itself] (1) to programs that circumvent access controls to copyrighted works in digital form in circumstances in which (2) there is no other practical means of preventing infringement through use of the programs, and (3) the regulation is motivated by a desire to prevent performance of the function for which the programs exist rather than any message they might convey.

E. The Court Found No Merit in the Defenses of Prior Restraint, Overbreadth, or Vagueness

1. Prior Restraint

The Court engaged in a discussion of the past ways in which the Prior Restraint doctrine had been used successfully to thwart attempts to regulate

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188 Id.
189 See Reimerdes, 111 F. Supp. 2d at 328.
190 Id. at 327-28.
191 Id. at 329.
192 Id. at 329-30.
193 Id. at 330.
194 Id. at 332-33.
195 Prior restraint is a restriction imposed by the government on speech before the speech is actually expressed. Prior restraints have been held to violate the First Amendment.
speech and found those instances incompatible with the situation before it. The Court focused more on the reasons for the restriction (combating piracy and protecting the monopoly granted to copyright owners), and found the First Amendment interests of DeCSS minimal. The Court concluded this discussion by stating, "[h]ence, those of the traditional rationales for the prior restraint doctrine that relate to inhibiting the transmission and receipt of ideas are of attenuated relevance here."

2. Overbreadth

The Court attacked defendants' contention "that Section 1201(a)(2) is unconstitutional because it prevents others from making fair use of copyrighted works by depriving them of the means of circumventing plaintiffs' access control system," by holding that the overbreadth of the statute is not substantial enough. The Court noted that it did not really know if the interests of third parties asserted by the defendants in applying the overbreadth doctrine were substantial, and whether the DMCA as applied in this case would affect their ability to make fair use of the plaintiffs' copyrighted materials. The Court emphasized the fact that substantially all of plaintiffs' copyrighted materials (motion pictures) were available on videocassette and potentially, unknown third parties that may be affected by the DMCA and the overbreadth doctrine could make fair use of the videocassettes.

3. Vagueness

The Court quickly dismissed defendants' complaint that the DMCA is vague and cannot be understood by persons of ordinary intelligence. It asserted that one who "engages in some conduct that is clearly proscribed [by the challenged

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196 Reimerdes, 111 F. Supp. 2d at 335.
197 Id.
198 Id.
199 The Overbreadth Doctrine holds that if a statute is so broadly written that it deters free expression, then it can be struck down on its face because of its chilling effect - even if it also prohibits acts that may be legitimately forbidden.
200 Reimerdes, 111 F. Supp. 2d at 326.
201 Id. at 337.
202 Id. It is interesting to note, however, that Judge Kaplan admits that Congress has prohibited technologically unsophisticated persons who wish to make fair use of encrypted copyrighted works from doing so, while allowing those who are technologically sophisticated the ability to exercise fair use. See id. at 338. The technologically unsophisticated, I would posit, are vast in numbers compared to the technologically sophisticated.
203 Reimerdes, 111 F. Supp. 2d at 339.
204 The Vagueness Doctrine requires that a criminal statute state explicitly and definitely what acts are prohibited, so as to provide fair warning and preclude arbitrary enforcement.
205 Reimerdes, 111 F. Supp. 2d at 339.
statute] cannot complain of the vagueness of the law as applied to the conduct of others.\textsuperscript{206} Therefore, the defendants could not argue vagueness.\textsuperscript{207}

\textbf{F. The Court's Remedy}

The Court granted the plaintiffs' request for a permanent injunction barring the defendants from posting the DeCSS code on their websites and from knowingly and intentionally linking (for the purpose of providing access to DeCSS) to sites that provide or link to DeCSS code.\textsuperscript{208} Furthermore, the defendants were required to pay costs, but the Court declined to allow the payment of plaintiffs' attorneys' costs by the defendants as is allowed in the DMCA.\textsuperscript{209}

\textbf{G. The Court's Remedy is Not Futile}

The court admitted that it was troubling that since DeCSS was already plastered all over the Internet that an injunction might be futile.\textsuperscript{210} However, Judge Kaplan decided that countervailing arguments overcome this "horse out of the barn" concern.\textsuperscript{211} Judge Kaplan commented:

\begin{quote}
[A]ny such conclusion effectively would create all the wrong incentives by allowing defendants to continue violating the DMCA simply because others, many doubtless at the defendants' urging, are doing so as well.\textsuperscript{212}
\end{quote}

The Court was further concerned with the opinion that a single Internet user could conceivably destroy intellectual property rights by posting DeCSS on the web.\textsuperscript{213} Judge Kaplan concluded that equity should look "skeptically" at the idea that a defendant has done the entire harm that can potentially be done and therefore an injunction would be warrantless.\textsuperscript{214} Judge Kaplan concluded, "[defendants] will not be allowed to continue [posting DeCSS] simply because others may do so as well."\textsuperscript{215}

\textbf{V. ANALYSIS: THE DECLINE OF FAIR USE}

A robust public domain in existing information and in various creative uses of copyrighted or otherwise exclusively owned information similarly is not intended to displace professional commercial production. It is, however, intended to assure that enough cultural raw material is available to

\begin{footnotes}
\item[206] See id. (quoting Village of Hoffman Estates v. Flipside, 455 U.S. 489, 495 (1982)).
\item[207] See Reimerdes, 111 F. Supp. 2d at 339.
\item[208] Id. at 346-47.
\item[209] Id.
\item[210] Id. at 344.
\item[211] Id.
\item[212] Id.
\item[213] Reimerdes, 111 F. Supp. 2d at 344.
\item[214] Id.
\item[215] Id.
\end{footnotes}
nonprofessionals for reworking, so that users can create their own collages and expressions of the world and participate in the production of their own information environment.\textsuperscript{216}

\textbf{A. The Doctrine of Fair Use}

The major shortcoming of the \textit{Reimerdes} decision is its failure to give sufficient recognition to the importance of fair use. In order to analyze this shortcoming, a basic understanding of the fair use doctrine is required. Section 107 of the Copyright Act codifies the fair use doctrine.\textsuperscript{217} The fair use defense to copyright violation claims permits copying for certain purposes.\textsuperscript{218} These purposes can include criticism; comment; news reporting; teaching; scholarship or research; and parody.\textsuperscript{219} These criteria are mentioned in the codification of the fair use doctrine.\textsuperscript{220}

If a defendant's use falls into one of the categories mentioned above it does not necessarily render that use fair.\textsuperscript{221} The use must also comport with "four factors" enunciated in the statute.\textsuperscript{222} These four factors are: (1) Is the use educational or commercial?; (2) What is the nature of the copyrighted work?; (3) What is the amount of the copyrighted work taken?; and (4) What is the economic effect on the work taken?\textsuperscript{223} The doctrine of fair use allows a holder of the privilege to use copyrighted material in a reasonable manner without the consent of the copyright owner.\textsuperscript{224}

\textbf{B. The Reimerdes Decision}

The Court in the Southern District of New York failed to take into consideration the importance of the fair use doctrine and the erosive effect that the DMCA and the Court's decision in \textit{Reimerdes} have and will continue to have on that doctrine. Accepting the Court's reading of the DMCA to prohibit any person from offering to the public, providing or otherwise trafficking in any technology, product, service, device, component, or part thereof if it permits a consumer to circumvent technological measures designed to control access to the copyrighted work, is the beginning of this derogation of the fair use doctrine.

For the Court to adopt the plaintiff's position, it would have to agree that Congress intended radically and fundamentally to change copyright law by

\textsuperscript{219} Id.
\textsuperscript{220} Id.
\textsuperscript{221} See Zavin, \textit{supra} note 218, at 180.
\textsuperscript{223} Id.
prohibiting any access to digital copyrighted works, even if such access is necessary to make fair use by those in lawful possession of the work.\textsuperscript{225}

A more tenable view would be that Congress intended the anti-circumvention provisions of the DMCA to aid in the fight against piracy, by giving the copyright holder additional tools to enforce the traditional rights already granted to copyright holders, not by extending them so as to defeat the existing, important right of fair use.\textsuperscript{226} The Court acknowledged that the fair use doctrine "traditionally has facilitated literary and artistic criticism, teaching and scholarship, and other socially useful forms of expression."\textsuperscript{227} This decision does not further the acknowledged purpose of the fair use doctrine; instead it subordinates it by granting the copyright holder additional rights traditionally not permitted.

C. The Fear of a Pay-Per-Use Society

There is a fear, expressed by many commentators, that products such as books, movies, magazines, newspapers, etc. could become available only on a pay-per-use basis, thus preventing the possibility that works would ever enter the public domain, and thereby eliminating the fair uses currently permitted by copyright law.\textsuperscript{228} If technological measures that prevent access to materials continue to receive the protection of the DMCA and the courts, it is conceivable that materials traditionally in the public domain could only be accessed by paying a fee every time a user wished to access the material.

David Nimmer posited the following scenario (the scenario in the \textit{Introduction} parallels his scenario): Louisiana cookbooks from the 1890's are now available only electronically.\textsuperscript{229} There are technological measures protecting these electronic cookbooks (technological measures allowed under the DMCA and given further support by the \textit{Reimerdes} decision). To circumvent these measures would be a violation of law, punishable by fines and the possibility of prison.

To the extent that the service charged the same access fee for [the cookbooks] as for new [cookbooks] subject to copyright protection, the effective result would

\textsuperscript{224} See \textit{Narell v. Freeman}, 872 F.2d 907, 913 (9th Cir. 1989).
\textsuperscript{226} See id.
\textsuperscript{227} \textit{Reimerdes}, 111 F. Supp. 2d at 321.
\textsuperscript{229} Nimmer, \textit{Riff}, supra note 228, at 713.
be to convert public domain works into royalty-generating items . . . [This scenario] requires payment to gain access even to works that nominally lie in the public domain, such as works from centuries past, even if the purpose of the access is for one that the law favors, such as to quote a few sentences for scholarly purposes. Under [this] scenario, the work itself is effectively placed under lock and key . . ..

The Court in Reimerdes failed to recognize this potential destruction of the fair use doctrine. It found that Congress did not mean for the fair use exception to apply to the DMCA, i.e., to acts of “providing technology designed to circumvent technological measures that control access to copyrighted works.”

In fact, the Court relies heavily on the distinction made in the DMCA between (1) measures that prevent unauthorized access and (2) measures that prevent unauthorized copying. This distinction the Court found important because Section 1201(a)(1) does not “apply to subsequent actions of a person once he or she has obtained authorized access to a copy of a [copyrighted] work . . . .” [and found that] “the traditional defenses to copyright infringement, including fair use, . . . fully applicable” provided the ‘access is authorized.’

Stated in simpler terms, Section 1201(a)(1) does not prohibit the act of circumventing a technological measure that prevents copying, once lawful access is acquired. Section 1201(a), however, does prohibit circumventing technology used to gain access to copyrighted material. Thus, one who is unable to develop circumventing technology on his own to copy a lawfully accessed copyrighted material would be prevented from making the fair use that is purportedly allowed under the DMCA. In order for this technological novice to make a copy of lawfully accessed material they must rely on the ingenuity of others. Unfortunately, the anti-trafficking provision of the DMCA would prevent this reliance. The Court acknowledged that the DMCA, “leave[s] technologically unsophisticated persons who wish to make fair use of copyrighted works without the technical means of doing so . . . .”

Section 1201(a)(2), the anti-trafficking provision of the DMCA, does not, according to the Court, have anything to do with copyright (despite the fact that the title of the act is the Digital Millennium Copyright Act [emphasis added]). Instead, Section 1201(a)(2) deals only with “offering or providing technology that may be used to circumvent technological means of controlling access to copyrighted works.” To avoid this affront against fair use, users should:

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230 Id. at 713.
231 See Reimerdes, 111 F. Supp. 2d at 322.
232 See id. at 316, 323.
233 Id. at 323 (quoting Judiciary Comm. Rep. 18).
234 Reimerdes, 111 F. Supp. 2d at 323.
236 See Reimerdes, 111 F. Supp. 2d at 324.
237 Id. at 324.
238 Id. at 319.
resist the efforts of owners of copyrighted materials [to] quash the development of software [(e.g., DeCSS, added by author)] that gives users the power to manipulate and fit to their own needs the cultural or information products that they use. It is of central importance to reverse the attempts to use the DMCA to close up the software layer of the information environment and diminish the possibility that a robust public domain will in fact lead to widespread accessibility to the basic building blocks of participation in our public conversation.

It is not too hard to imagine a system in which copyrighted material (e.g., a book or movie) is restricted on a pay-per-use basis and where the ability to copy even small portions of a legally obtained work is denied. Only those individuals who have the technological prowess to circumvent the technology would be allowed to make fair use of the copyrighted material. "If the courts apply Section 1201 as written, the only users whose interests are truly safeguarded are those few who personally possess sufficient expertise to counteract whatever technological measures are placed in their path." 239

Return to the scenario posited in the Introduction. Chris (our technologically savvy student) would be found guilty of developing a circumvention technology that gained access to a copyrighted material. Recall that Chris' FairUseMaker utility would effectively retain access to the work after the allotted 168 hours, thus violating Section 1201(a)(1). Therefore, he would be guilty of trafficking (by the act of e-mailing FairUseMaker to his classmates) in circumventing technology. David and Brian would also be guilty of trafficking in circumventing technology.

Furthermore, all his friends who used the utility would be guilty of gaining access to a copyrighted material they no longer had a legal right to access. The only way Chris would be able to perform his in-class presentation would be by paying for the use to view The Call of the Wild within at least 168 hours prior to the presentation. Clearly, Reimerdes and the DMCA could lead us down the path to a society where we own very little and must pay every time we want to use something. We would in essence be a "pay-per-use" society. "[T]he possibility of [these] scenarios calls forth the need to temper the categorical reach of [this] basic provision [of the DMCA]." 240

**D. The Aftermath of the Reimerdes Decision**

Unfortunately, the Court's decision in Reimerdes did little to calm the troubled waters whirling around the issue of DVDs, CSS, and DeCSS. Although 2600.com is no longer posting the DeCSS code on their web site or providing links to other web sites that contain the code, they are providing a list of web site addresses (in non-linkable form) that contain the DeCSS code. 241 Mr. Corley, on the 2600.com web site, stated:

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239 Benkler, *From Consumers to Users*, supra note 228, at 577.


242 *How You Can Help* (visited Oct. 17, 2000) <http://www.2600.com/news/1999/1227-help.html>. This site contains approximately 440 URLs to sites that contain the DeCSS code. Although a user...
We can no longer post DeCSS on our site nor can we link to it. We still have the right to list those sites that have it in non-linkable form and we also have the right to speak out against the injustice we’re being hit with. The MPAA would like those rights taken away as well. We cannot allow them to succeed.\textsuperscript{243}

Offshore DeCSS sites sprang up immediately after the decision with names like, \textit{Do Not Sue Me}.\textsuperscript{244} David Touretzky, who testified at the \textit{Reimerdes} trial\textsuperscript{245} and is a member of the faculty and Principal Scientist in the Computer Science Department at Carnegie Mellon University,\textsuperscript{246} subsequent to the \textit{Reimerdes} decision developed a “DeCSS Gallery.”\textsuperscript{247} Professor Touretzky provides in his gallery an English translation of the DeCSS code, a song containing the DeCSS code, a dramatic reading of the DeCSS code, and a picture of the code.\textsuperscript{248} Professor Touretzky considers the gallery an “academic publication.”\textsuperscript{249} In possibly an even stranger manner of posting the code, DeCSS is embedded in a textual adventure game and to get to the code the character in the game must find the code (which is carved in a small stone) and destroy the MPAA lawyer that guards the stone.\textsuperscript{250} Even mainstream publications were troubled by the decision. \textit{U.S. News and World Report} published the following remark:

The Motion Picture Association of American is the junkyard dog of the digital

cannot click on one of the addresses provided in the list, they can highlight the address, right-mouse click, copy the address, paste the address into their browser location bar, and find the code this way. The author followed these steps and had downloaded the DeCSS code to his computer in a matter of minutes. The author is already looking over his shoulder waiting for the MPAA to come knocking.


\textsuperscript{246} \textit{People} (visited Oct. 18, 2000) <http://www.cs.cmu.edu/people/directory/1405.html>. Professor Touretzky’s personal web page (<http://www.cs.cmu.edu/~dst/>) provides many links to various pages concerning the DeCSS controversy. Included are links to trial transcripts, commentaries by other noted academics, links to the DeCSS code, and thorough explanations of DeCSS and how it works.


\textsuperscript{250} Don Clark et al., \textit{Pump It Up}, \textit{THE WALL ST. J.}, Sept. 28, 2000, at B6, available at 2000 WLWSJ 26611336. Once the MPAA lawyer is slain, the lawyer bleeds, dies, and is consumed by maggots.
age: It has the same bone-snapping jaws, the same indiscriminate nose. It will
clap on anyone and anything, including law-abiding couch potatoes watching
TV.251

VI. CONCLUSION

Clearly, the proliferation of DeCSS will be hard to stop. Individuals have the
capability to pass the code along in Internet chat rooms where it is nearly
impossible to detect and prevent. 2600.com, furthering its call for “electronic
civil disobedience,” has read the wording of the injunction in such a way that it
continues to provide lists of web sites containing the DeCSS code. Members of
academia have posted galleries of the code and mainstream publications have
questioned the ruling.

Copyright has as a primary goal the securing of a fair return for an author’s
creative labor; however, it also has the ultimate goal of promoting artistic,
scholarly, and creativity for the good of the general public.252 Copyright grants
authors rights to provide incentives to create, but the Copyright Act also provides
users the right to fair uses. The evolution of the Internet is “stretching the current
framework for traditional copyright protection.”253

The DMCA was to bring United States copyright “squarely into the digital
age,”254 providing the elasticity that copyright law needed in order to meet the
demands of the digital age. However, the DMCA and the Court’s decision in
Reimerdes have not stretched copyright law, rather, they have shortened and
tightened it. “Reactionary or ill-considered laws” (like the DMCA) can have the
adverse effect of frustrating technological and creative advancement.255 Courts
are forced to decide cases based on legal doctrines that “may no longer
adequately address current realities and challenges.”256 Fair use has been
derogated by the DMCA and the Reimerdes decision. Professor Julie Cohen257
asserted that:

[T]here is a strong likelihood that the increasing use of persistent access control
technologies [such as the encryption on DVDs] will sharply curtail the access
privileges that individuals have enjoyed under the fair-use doctrine and other
limitations on copyright scope.258

252 See Gaffney, *A Comparative Analysis, supra* note 228, at 613.
255 See Heinrich, *At the Crossroads, supra* note 228, at 1043.
256 Id. at 1044.
257 Professor Cohen is an Associate Professor of Law at Georgetown University Law Center.
258 Julie Cohen, *Rulemaking on Exemptions from Prohibition Against Circumvention of Technological Measures that Control Access to Copyrighted Works: Testimony of Julie E. Cohen,*
On September 18, 2000, the Federal Communications Commission (FCC) issued a ruling that allows Hollywood to require the manufacturers of digital VCRs, high-definition televisions, cable set-top boxes, and related equipment, to implement copy restriction technology into the devices.259

By inserting instructions into the digital programming stream that are obeyed by the hardware, the studios are able to control the public’s ability to save or copy programming. Since the devices will only permit the consumer to copy the content that the studios code as copyable (not likely to be much, if anything), the public’s fair use rights would effectively be extinguished in the digital television realm.260

Do you want to make a copy of the latest Friends or Law and Order episode? Do you own a High Definition television? Too bad. Hollywood could potentially prevent you from making that copy, thus preventing you from being able to watch the episode at a later time. Do you want to circumvent that technology so you can make that copy? You had better not. The DMCA and the courts will stop you.

Clearly, the DMCA has failed in its effort to “master the intricate details of this complex subject.”261 To deflect the deleterious effects of the DMCA and the Reimerdes decision, courts should reject technology control suits and the legislature should include a broad fair-use exemption in the anti-circumvention section of the DMCA.262 Courts should apply the fair use doctrine as it has been developed to situations like the one in Reimerdes or the hypothetical in the Introduction. Application of the DMCA is not the “fair” approach.

The DMCA and Judge Kaplan’s decision in Reimerdes, in their attempt to “promote the progress of science and the useful arts,” have eroded an important, fundamental doctrine of copyright law. This “promotion” will lead to the eventual divestment of copyrighted works from the public domain — works that could foster further creative and scientific advancements. A “pay-per-use” society is on the horizon; a society wherein owners of copyrighted materials have constant and continuous control over those materials. Elementary school students and teachers, law professors, and others in pursuit of scholarly, scientific, or creative achievements would be prevented from employing the fair use doctrine to aid in their pursuits. This “promotion” effectively results in a “demotion of the sciences and useful arts.”

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260 Id.

261 Nimmer, Riff, supra note 228, at 740.

262 See Benkler, From Consumers to Users, supra note 228, at 577.