

STATEMENT OF

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BEFORE THE

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***The Digital Millennium Copyright Act at 22:
What is it, why was it enacted, and where are we now?***

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INTRODUCTION

Chairman Tillis, Ranking Member Coons, and Members of the Subcommittee:

Thank you for this opportunity to speak with you today about the history, development, and application of the DMCA. I especially welcome this opportunity, as my professional career as a lawyer and scholar has paralleled the development of the modern internet. I have seen the importance of effective intellectual property laws to flourishing individual lives and thriving creative businesses. I began law practice in Chicago at the dawn of the commercial internet in 1995, and for nearly a decade I helped businesses large and small with their first ventures onto the internet. Since 2003, I have been a scholar of intellectual property law, and I recently joined the University of Akron School of Law as Goodyear Chair in IP Law and Director of the [Intellectual Property and Technology Law Program](#). In recent years, I have worked closely with creators and innovators to craft better public policy -- for example, I currently serve as Chair of the Academic Advisory Board of the [Copyright Alliance](#). However, my views are my own, and not those of any institution with which I am affiliated.

Over the years, I have become increasingly concerned that our nation's laws have come to prioritize the interests of a handful of wealthy and powerful businesses over the property rights and well-being of individual creators and the businesses that bring their work to the public. In the 1990s, like many, I was thrilled by the vast promise of online media to educate, liberate, and entertain. It seemed important and reasonable to clear the path, and perhaps tip the scales a bit, for these young, but promising online businesses by crafting safe harbors from the laws that other, more mature businesses had to follow. However, those infant industries grew up fast.

These protections no longer nurture the promise of the future, but, rather, they now rig the game in favor of some of today's most wealthy and powerful businesses.

The DMCA was forged with good intentions. When Congress enacted the DMCA 22 years ago, it believed it was crafting a well-calibrated compromise that would “preserve[] strong incentives for service providers and copyright owners to cooperate *to detect* and *deal* with copyright infringements that take place in the digital networked environment.”¹

Unfortunately, those good intentions have been thwarted. Two challenges arose to frustrate this intent: First, the technological premises underlying the DMCA's Section 512 notice and takedown system became hopelessly outdated within months of its passage. Second, courts have consistently and increasingly narrowed the responsibilities that Section 512 placed on online services – responsibilities that might have preserved some ability and incentives to address online infringement effectively. (I will direct my comments to Section 512, rather than the technical cooperation measures mandated by Section 1201, as the greatest inequities and failed compromises have been under Section 512).

Notice and Takedown: A 20th Century Solution to a 21st Century Problem²

The DMCA notice and takedown system emerged as a compromise between service providers concerned about the burden of managing content transmitted or posted by users, and copyright owners who feared an emerging threat from infringement. Other witnesses at this hearing, particularly those who collaborated on the original legislation, will doubtless provide details as to the history and context of the legislation.

However, one point about the DMCA deserves emphasis: It was based on explicit and implicit assumptions about technological capabilities and the balance of harms between copyright owners and service providers that were rapidly becoming obsolete even as the law was enacted.

The DMCA envisioned stopping online infringement as a problem of identifying a particular infringing file, posted by a particular infringer, and taking it down before it spread too widely to contain. For the most part, service providers were viewed as most likely to contribute to the infringement problem by being indifferent to users' actions, rather than building their businesses to depend on and profit from infringing material.

The legislative history thus indicated the intent that the DMCA would set up a situation where copyright owners and service providers would work together to contain rogue users and infringing files. The copyright owner and the service provider hosting a file could “cooperate *to detect* and *deal with*”³ the infringing file in order to preserve the status quo long enough for the copyright owner to take the infringer who posted the content to court.

¹ S. Rep. No. 105-190, at 40 (1998) (emphasis added).

² See Bruce Boyden, *The Failure of the DMCA Notice and Takedown System* (CPIP 2013), <https://cpip.gmu.edu/2013/12/05/the-failure-of-the-dmca-notice-and-takedown-system-2/>

³ S. Rep. No. 105-190, at 40 (1998) (emphasis added).

This file-based containment view of the online infringement problem was based in part on the experience of courts in early to mid 1990s cases. As Representative Howard Coble observed when introducing the DMCA in the House, the DMCA “essentially codifie[d] the result” in what was considered, at the time, “the leading and most thoughtful judicial decision to date; *Religious Technology Center v. Netcom On-line Communications Services, Inc.*”⁴ In the years that followed, other courts continued to look to the facts of *Netcom* to adjudicate DMCA cases.⁵

While *Netcom* was indeed a thoughtful, well-reasoned case, it was also a product of its facts and time. Those circumstances differ greatly from those that have prevailed for most of the last 20 years.

The facts of *Netcom* are worth briefly considering, both for the influence of the case and what it tells us about some of the implicit assumptions underlying the DMCA. This 1995 decision addressed technology that was already practically obsolete. In that case, Dennis Erlich, a critic of the Church of Scientology, had posted messages containing copyrighted Church writings to a discussion forum service known as Usenet. As was common in the early days of the internet, Erlich did not connect directly to the internet, but rather used a dial-up modem to connect to a particular computer, a bulletin board service (BBS), which was the gateway to the internet for him and about 500 other subscribers to the BBS, which in turn accessed the internet through its ISP, Netcom. Erlich uploaded the messages by connecting to the BBS, which copied them and passed them onto its ISP, Netcom, which then propagated them to other ISPs. Users who subscribed to a Usenet message forum then downloaded the messages from their ISP and/or BBS when they dialed into their internet connection.

In this system, messages were distributed by a set of discrete steps, rather than the seamless and instantaneous communication that today’s users enjoy.

The Church, seeking to contain Erlich and his infringing messages, requested cooperation from the operator of the BBS as well as Netcom. It wanted them to cut off Erlich from the internet and to quickly remove his infringing messages from their computers. Finding them uncooperative, the Church sued them for copyright infringement along with Erlich, seeking to establish precedent that would secure cooperation and active vigilance in future instances. The ISP and BBS had no particular business interest in Erlich’s messages but sought to avoid cutting off customers from the internet and the burden of proactively reviewing user communication for infringement.

The court in *Netcom* declined to hold either the ISPs or the BBS liable, absent specific notice of infringement that it failed to act on. The court thus required notice of a specific, infringing file before action was required.

In sum, the *Netcom* framework, and the DMCA, were designed to address 20th Century online infringement. In this paradigm of online infringement, ordinary court processes were almost, but not quite, quick enough to effectively block the spread of an infringing file. Copyright owners needed a little more time than the several days it would take to go to court to stop the spread beyond

⁴ 144 Cong. Rec. E160 (Daily Ed. Feb. 12, 1998) (Remarks of Rep. Coble introducing the On-Line Copyright Liability Limitation Act); see also H. Rept. 105-551, 11 (1998).

⁵ See, e.g., *CoStar Group, Inc. v. LoopNet, Inc.*, 373 F.3d 544 (4th Cir. 2004).

a point where it could be easily contained. The DMCA stepped into this perceived breach with the Section 512 notice and takedown system. As Professor Bruce Boyden observed, it was intended as a quick, “but temporary, substitute for going into court and getting a temporary restraining order.”⁶

In 1998, the year the DMCA passed, this hope was fairly reasonable. Almost all residential users had dialup, and the maximum speed of 56kbps was a tiny fraction of today’s slowest speeds.⁷ At those speeds, it would take over 10 minutes to download a music file and over a day to download a movie file. Infringement spread slowly.

A year later everything changed. The Napster file sharing program arrived, rendering the DMCA’s assumptions naïve and instantly outdated. Infringement no longer spread from one computer to another, but from many to many, simultaneously. Soon, residential users were beginning to install DSL and then cable modems, and connection speeds greatly increased every year. Infringement now occurs on a vast scale at high speed.

The DMCA is thus built for an era and a problem long gone. First, the DMCA’s file-based containment strategy is hopelessly outdated. Copyright owners are not worried about a particular user uploading a particular infringing *file*. The problem is the non-stop, widespread copying and uploading of creative works by many users. Finding and removing a particular file is usually worthless, as it is likely that many other copies of that work – whether embodied in that file or a different one -- are being posted simultaneously. On many of today’s most notorious websites, finding a particular file would be like looking for a needle in a haystack of infringing files.

Moreover, as the identity of the defendants in many of the most prominent cases show –e.g., YouTube⁸ and Vimeo⁹ – service providers are no longer indifferent intermediaries who might be persuaded to cooperate with copyright owners without too much difficulty. Rather, vastly profitable businesses are built around user-posted content. Infringing works are often among the most attractive works on such sites. The good faith cooperation envisioned by Congress when it passed the DMCA could be a substantial threat to the bottom line of many service providers.

⁶ Bruce Boyden, *The Failure of the DMCA Notice and Takedown System* (CPIP 2013), <https://cpip.gmu.edu/2013/12/05/the-failure-of-the-dmca-notice-and-takedown-system-2/>

⁷ <https://www.nytimes.com/1998/07/02/technology/plugging-in-to-the-internet-many-paths-many-speeds.html>

⁸ *Viacom Int’l, Inc. v. YouTube, Inc.* 676 F.3d 19 (2d Cir. 2012).

⁹ *Capitol Records, LLC v. Vimeo, LLC*, 972 F. Supp. 2d 537 (S.D.N.Y. 2013).

Consider the contrasts between the internet and online infringement circa 1998 and the internet and online infringement today¹⁰:

1998, the year the DMCA passed	Online Infringement Today
Fewer than 3 million pages.	Over 6.4 billion pages ¹¹
Most users on home dialup, and a single song took 10 minutes or more to download.	Users connect from multiple super-fast mobile, home wi fi, and public networks, and a song takes seconds to download.
Online infringement likely started with a particular user, uploading a particular file.	Online infringement occurs constantly as many users and systems upload many different copies of the same work.
Online copyright infringement often spread through the relatively slow, methodical copying of a particular file from one computer to another.	Files spread quickly and simultaneously from many users and sources.
If copyright owners caught and contained an outbreak quickly enough, they could stop the spread of the file and save it from “escaping” into the broader world.	Infringement is a chronic problem that can be suppressed, reduced, and managed, but never fully contained.
Service providers were likely to be more or less indifferent intermediaries that did not derive any great value from infringement.	Many popular and lucrative legal services are built to host user-posted content and benefit greatly from the presence of attractive infringing material.
Infringement notices in the hundreds, at most.	Infringement notices in the billions.

In short, things have changed. The DMCA was never really up to the task of controlling online infringement, even when enacted. Today, it is even less effective and relevant to current conditions.

Some Consequences of the Outdated DMCA

The DMCA notice and takedown system was not built to serve the purpose for which it is used today. Envisioned as a way for copyright owners and service providers to “cooperate to detect and deal with” discrete, file-based “outbreaks” of infringement, it was never intended to manage the chronic problem of vast amounts of non-stop infringement. The DMCA notice and takedown process has become an adversarial – albeit largely automated – process that operates at a vast scale unimaginable to Congress and stakeholders 22 years ago. Copyright owners send millions of notices, online services take down the specific files identified, and online infringement marches on, with only the most obvious and notorious offenses muted, but not stopped.

¹⁰ This table and other portions of this testimony owe a debt to the ideas and content in an earlier paper that I co-authored, A. Abbott, et al., *Creativity and Innovation Unchained: Why Copyright Law Must be Updated for the Digital Age by Simplifying It*, Regulatory Transparency Project of the Federalist Soc’y (Oct. 27, 2017). <https://regproject.org/paper/creativity-innovation-unchained-copyright-law-must-updated-digital-age-simplifying/>.

¹¹ <https://www.worldwidewebsite.com>

DMCA notices have thus notoriously become an endless game of “Whack-a-Mole,” as infringing material pops up constantly, everywhere, far faster than takedown notices can address it file-by-file, as the DMCA expects. The problem is vast. Google alone – just one service – has received over 4.4 billion notices since it started counting.¹² In 2016, the Motion Picture Association of America illustrated the “Whack-a-Mole” problem in a Copyright Office filing by reporting that Disney sent 34,970 takedown notices for Avengers: Age of Ultron for a single site (Uploaded.net) in a three-month period.¹³ NBC Universal sent 58,246 notices for Furious 7 to a single site.¹⁴

The burden of sending DMCA notices falls heaviest on small businesses and individual creators. Several years ago, the Trichordist blog detailed burdens on an indie record label.¹⁵ “Just about a year after hiring two part time people, to do nothing else but issue DMCA takedown notices we’ve crossed the 50,000 notice milestone. The division of labor requires one person just to monitor YouTube, and another handles all DMCA compliant sites such as CyberLockers, Torrent Search Engines, etc. . . . Most of the take downs are for the same title, at the same site, the same day. Day after day during the initial release period of the album (generally the first 60-90 days) it is a constant game of whack-a-mole.”

This small record label employed two full-time employees just to send the same notices to the same sites about the same content over and over again. This was hardly a good use of resources, and more recent reports say this kind of investment is less common, not because infringement has fallen off, but because many small players have given up either trying to enforce their rights or investing in commercial creativity entirely.

For example, indie, LGBTQ filmmaker Ellen Seidler turned into an anti-piracy crusader after her film “And Then Came Lola” was widely pirated. When asked of her interest in funding another film, she said “Well, there’s no way financially I could do it, nor would I want to.”¹⁶

Six years ago, Grammy-winning jazz artist Maria Schneider testified in a hearing similar to this one before the House. She expressed her frustration with the amount of time she spends sending DMCA notices, rather than making music: “The majority of my time is now spent simply trying to protect my work online, and only a small fraction of my time is now available for the creation of music. So instead of the Copyright Act providing an incentive to create, it provides a disincentive.”¹⁷

Things have not really improved since that House hearing six years ago. Streaming services offer some greater opportunities for compensation for artists, but licensing fees and subscription rates are greatly depressed by the widespread availability of infringing content on legal sites. Co-authors and I explained this phenomenon in a 2017 paper:

¹² <https://transparencyreport.google.com/copyright/overview?hl=en>

¹³ <http://cpip.gmu.edu/2013/12/05/the-failure-of-the-dmca-notice-and-takedown-system-2/>

¹⁴ Id.

¹⁵ <https://thetrichordist.com/2012/07/18/the-dmca-is-broken/>

¹⁶ <https://musictechpolicy.com/2012/01/02/the-mtp-interview-indie-film-maker-ellen-seidler-on-how-us-companies-profit-from-piracy-on-rogue-websites/>

¹⁷ <https://vimeo.com/89327769>

Services such as YouTube can take advantage of the DMCA's safe harbor to offer unauthorized content to their customers and evade liability for the copyrighted works uploaded by users. As a result, they don't need to take a license for the works they distribute, or they can take a license but demand bargain basement terms by threatening to relegate copyright owners to the futility of the notice and takedown process. This taints the entire marketplace and inevitably produces a race to the bottom for all licenses.¹⁸

A Phoenix Center report that year found that "DMCA safe harbor exploitation on services like YouTube costs the U.S music industry between \$650 million to over one billion dollars a year in lost revenues."¹⁹

The Courts Have Excused Online Businesses from the Many of the Duties Set by the DMCA

Not only is the DMCA framework outdated and unfit for the purposes for which it has been used, but courts have interpreted key provisions in ways that tip the balance of burdens even more in favor of service providers. Courts have essentially declined to hold online services accountable, even where facts showed they likely knew of and profited from infringement. The problem, in essence, is that Courts have created a very constrained definition of "knowledge" under the DMCA that differs from what would constitute "knowledge" in most legal contexts. It certainly differs from what laypeople would call "knowledge."

Congress intended that the DMCA safe harbors would be unavailable if a service provider had actual knowledge or reason to know of infringement and failed to remedy it. Subsection (c)(1)(A) requires that one seeking the safe harbor:

- (i) does not have actual knowledge that the material or an activity using the material on the system or network is infringing;
- (ii) in the absence of such actual knowledge, is not aware of facts or circumstances from which infringing activity is apparent; or
- (iii) upon obtaining such knowledge or awareness, acts expeditiously to remove, or disable access to, the material . . .

There were a number of ways that Congress anticipated a service provider might have knowledge sufficient to deprive it of the safe harbor. For one thing, where there were large amounts of infringing material present on a site, a copyright owner could send "a representative list of such works at that site." (Subsection c(3)(A)(ii)).

Moreover, knowledge could come from facts and circumstances, rather than a specific notice -- what the legislative history described as "red flag knowledge." The legislative history says that the inquiry, in part, should be "whether infringing activity would have been apparent to a reasonable person operating under the same or similar circumstances."²⁰

¹⁸ A. Abbott, et al., *Creativity and Innovation Unchained: Why Copyright Law Must be Updated for the Digital Age by Simplifying It*, Regulatory Transparency Project of the Federalist Soc'y (Oct. 27, 2017)

¹⁹ <http://www.phoenix-center.org/PolicyBulletin/PCPB41PressReleaseFinal.pdf>

²⁰ S. Rep. No. 105-190, at 44 (1998)

What would make infringing activity apparent to a reasonable person? The legislative history says that “the copyright owner could show that the provider was aware of facts from which infringing activity was apparent,” including the presence of material indicating “that the location was clearly... a ‘pirate’ site...”²¹

Despite this legislative intent that service providers might have constructive notice via facts and circumstances or representative lists, the courts have effectively reduced knowledge to requirement that a copyright owner serve specific notice of specific content, link-by-link, file by file.

Under the case law, service providers can ignore obvious evidence of infringement. For example, in *Viacom v. YouTube*, Viacom showed that YouTube’s founders were aware of infringement and embraced its benefits. They were in fact concerned that reducing infringement would reduce traffic to the site by up to 80 percent. Nevertheless, the court said that even if the jury “could find that the defendants . . . welcomed copyright-infringing material being placed on their website,” the “red flag” provision requires more. Specifically, “knowledge of specific and identifiable infringements of particular items.”

In *Capitol Records v. Vimeo*,³⁷ the court arguably went further. The court noted examples of Vimeo employees turning a blind eye to infringement. It nevertheless held that “the mere fact that a video contains all or substantially all of a piece of recognizable, or even famous, copyrighted music and was to some extent viewed (or even viewed in its entirety) by some employee of a service provider would be insufficient (without more) to sustain the copyright owner’s burden of showing red flag knowledge.”

Among the reasons the court cited was that a given employee cannot be expected to be “an expert in music or the law of copyright.” Thus, an employee might suspect infringement, but so long as they are not certain, there is not red flag knowledge.

This outcome creates the perverse incentive to avoid learning too much, and thus to do anything to police a site’s contents. Under *Vimeo*, employees can work with the content on their website in detail, viewing it, interacting with it, and generally being aware of what is there, but can avoid exposing their employer to liability so long as they remain willfully blind to its copyright status. So far as they know, that video or song could be excused fair use or licensed – even if unlikely, they cannot be sure. As the Second Circuit said, the “ordinary reasonable person . . . is not an expert in music or the law of copyright.”

The current state of the law allows a service provider to build a business model that depends on openly and notoriously hosting infringing content, so long as that content is posted by users. The service provider simply must respond expeditiously to take down files for which it receives a specific DMCA takedown notice—but only those specific files. It is essential, perversely, that its employees avoid actively further screening for or policing infringement in order to avoid specific knowledge of infringement (or reducing the presence of attractive infringing content on its site). It is also well advised to have a “hear, speak, and see no evil” policy when it comes to infringement, but it can certainly tolerate the evil of infringement. Under the DMCA, it’s just good business.

²¹ Id. at 48.

Based on the case law, a service provider is likely to be deprived of the safe harbor only if it receives a DMCA notice identifying a specific infringing file and fails to act, or if an employee viewing infringing content has unusual expertise and specific knowledge to identify it as infringing. Red flag liability is essentially gutted, and purposeful ignorance is the order of the day.

Solutions to Improve the DMCA

Some view the problem of online infringement as inevitable, brought on by the progress of technology. In this view, copyright owners simply must learn to live with infringement and to adjust their business models and lower their expectations. This narrative of technological determinism ignores the important role of laws that shaped what people and businesses chose to do with technology.

Today's online environment, where infringement is largely unrestrained, is as much the product of choices made by Congress in the late 1990s and later courts as it is the result of technological progress. While preventing infringement completely was never possible, a more balanced and effective legal regime would provide more breathing room for creators to thrive. The burden has fallen particularly hard on individual creators and small record labels, publishers, and filmmakers. They deserve better, especially when some of the world's largest and wealthiest companies are profiting from the fruits of their labors while they struggle more than ever.

My recommendations are essentially the same as those proposed by colleagues and other stakeholders for many years, notably by Professor Sean O'Connor at a similar hearing on the DMCA six years ago before the House of Representatives.²²

First, there should be a "notice and *stay-down*" system. While it may not be reasonable to expect businesses to monitor their sites for infringing material without prior knowledge, once a service provider receives a takedown notice for a given work, it should be held to a higher standard. It should monitor for re-posted copies of the same work (not the identical file, but the work) and take down copies pro-actively. All parties would benefit, at least in terms of obtaining legitimate savings and revenue, as there would be fewer notices to send and deal with, and less infringing material. Congress could amend the Section 512 safe harbors to require the implementation of such a system.

The technology for this has long existed – for example, Google uses its Content ID system to monitor and monetize postings on YouTube. Adding infringing works to a filter catalog would automate a notice and stay-down system to deter repeat offenders.

Second, the DMCA's red flag provisions need to be revised to achieve their original intent. At the least, as Professor O'Connor argued, "Willful blindness could be defined to include any institutionalized policy prohibiting monitoring of content or consistent discouraging of employee monitoring or investigation of content posts. Evidence could be internal memos, emails, or other

²² <http://sfs.gmu.edu/cpip/wp-content/uploads/sites/31/2014/03/Testimony-of-Sean-M.-OConnor-March-13-2014.pdf>

communications establishing a de facto “do not look” culture or policy in the case where the service provider’s site has already significant takedown notices.”²³

Conclusion

The DMCA’s notice and takedown system was obsolete on arrival. Later court interpretations have hobbled it further. As a result, the DMCA has left copyright owners with very little realistic protection against online infringement. Instead of a compromise where protecting creators’ rights is a shared responsibility, the burden falls vastly more heavily on copyright owners than on online businesses. In fact, the DMCA has essentially facilitated the establishment and growth of legal businesses whose vast fortunes depend in part on the lack of an effective remedy for online infringement.

Many 1990s policies did a laudable job in encouraging and fostering the growth of an online sector. However, some of those policies have become unbalanced. Where once they fostered infant industries, they now protect wealthy, entrenched incumbents at the expense of smaller, but essential cultural industries and individual creators. It is time to re-balance the scales in favor of a more equitable distribution of burdens that supports both our innovative and creative industries.

²³ Id.