Comments of the Center for Democracy & Technology and the R Street Institute

April 1, 2016

The Center for Democracy & Technology and the R Street Institute thank the Copyright Office for the opportunity to respond to its extensive inquiry into the impact and effectiveness of the safe harbor provisions of the Digital Millennium Copyright Act (DMCA). The Center for Democracy & Technology (CDT) is a nonprofit advocacy organization working to advance democratic values in the digital age. The R Street Institute (R Street) is a non-profit, non-partisan public policy research organization whose mission is to engage in policy research and outreach to promote free markets and limited, effective government.

The Internet could not have become what it is today without the immunity provided by section 230 of the Communications Act and the limitations on liability in section 512 of the DMCA. Those provisions allow online service providers to create the platforms and services that users rely on to access information and creative content, communicate with one another, and create and share their own original works. The flexibility of section 512 has fostered continued evolution and refinement in the mechanisms used to address online infringement without sacrificing the values of free expression and innovation that Congress sought to protect in enacting the DMCA.

No constituency is entirely content with every aspect of the DMCA’s safe harbors or notice-and-takedown process. Lawful content has been removed from online services due to mistaken or abusive notices, infringing content has reappeared notwithstanding the issuance of complete and valid takedown notices, and service providers have been subject to significant liability risk despite efforts at good-faith compliance with the DMCA’s requirements. However, the DMCA has been successful in balancing the competing interests of rightsholders, service providers, and users as the Internet and World Wide Web have evolved from curious adjuncts to proprietary content and services into immensely powerful tools for commerce, civic engagement, and free expression. This success could not have been achieved – and it could not be maintained – had Congress not expressly rejected imposing a duty on intermediaries to monitor and police the activity of their users.

Instead of a duty to monitor, the DMCA’s notice-and-takedown process relies on cooperation between rightsholders and service providers in combatting online infringement. Cooperation has also led to innovative and voluntary approaches to addressing infringement that go beyond what the DMCA requires. These voluntary measures work best when they display the same attributes that have led to the successful multistakeholder governance of the Internet: openness and transparency. It is not always an easy peace, but it is a durable one.
I. General Effectiveness of Safe Harbors

1. Are the section 512 safe harbors working as Congress intended?

Congress crafted section 512’s safe harbors to provide certainty for online and Internet service providers so that “the efficiency of the Internet will continue to improve and that the variety and quality of services on the Internet will expand.”¹ As the scope and the scale of online activity have increased substantially since Congress created the DMCA, so has the public interest in the continued growth and development of online services and the providers’ interests in certainty with regard to copyright infringement. Section 512 continues to appropriately balance copyright owners’ interests in addressing unauthorized reproduction and distribution of their works with the interests of creators of online content in free expression.²

As the Internet has grown, so has the number of takedown requests. While the increase in notices and takedowns heightens the burden for both rightsholders and service providers to combat infringement, it also reflects the degree to which section 512 has succeeded in accomplishing Congress’ goals of promoting economic growth, innovation, and creativity on the Internet. The Internet today is a much larger “network of networks” than it was in 1998.³ The increased volume of infringing activity deserves continued attention but is more than offset by the Internet’s expanding potential as a powerful tool for distributing and accessing creative works, allowing creators and rightsholders unprecedented opportunities to share and monetize their works while giving consumers increasingly diverse choices of how, when, and what content they access. In short, section 512 has helped to grow the economic and cultural “pie” for both creators and consumers of electronically distributed creative works.⁴

---

² S. Rep. No. 105-190, at 21 (“The provisions in the bill balance the need for rapid response to potential infringement with the end-users’ legitimate interests in not having material removed without recourse.”).
⁴ “Last year alone, U.S. audiences legally consumed nearly 3.5 billion hours of movies online. They spent many of those hours using a smartphone, tablet, or other mobile device on services like TV Everywhere, Netflix, Hulu, HBO GO, VUDU, Amazon, Target Ticket, and EpixHD, to name just a few. And because of partnerships with innovative consumer electronics companies, consumers have many new options for enjoying our members’ content in their living room, enabled by affordable and easy to use devices like Roku, Chromecast, AppleTV, Xbox, and Playstation.” The Rise of Innovative Business Models: Content Delivery Methods in the Digital Age, Hearing Before the Subcomm. on Courts, Intellectual Property, and the Internet of the H. Comm. on the Judiciary, 113th Cong. 3 (Nov. 26, 2013) (“Innovative Business Models Hearing”) (statement of John McCoskey, Executive Vice President and Chief Technology Officer, Motion Picture Association of America). See also Michael Masnick, Michael Ho, Joyce Hung & Leigh Beadon, The Sky Is Rising 2-5 (3d ed., 2014), available at https://www.cccanet.org/wp-content/uploads/2014/10/Sky-Is-Rising-2014.pdf (concluding that “innovation and improvements in technology opening up tremendous new opportunities for creators, for the public and for those who serve both.”).
There is no reason why the growth of these mutual benefits should not continue. However, the continued insistence by some that online providers should undertake a duty to monitor for infringing material is troubling. Creating such a duty, whether through a so-called notice-and-staydown regime or a similar enhanced “duty of care” effectively undermines the neutrality of online services, turning them into gatekeepers. Requiring online service providers to act as gatekeepers runs directly counter to Congress’ intent and the plain language of the statute. It would also destabilize the balance struck by section 512, which along with section 230 of the Communications Act provides the foundation on which much of the Internet as we know it stands. While refinements in the execution of the respective duties of rightsholders and service providers under section 512, and voluntary measures to supplement those duties, are warranted, statutory alteration of those duties is not.

2. Have courts properly construed the entities and activities covered by the section 512 safe harbors?

Throughout the evolution of online services, courts have been asked to decide whether new services fit within section 512’s classification system. On the whole, courts have construed the statute’s language flexibly. This flexibility has helped section 512 remain relevant in the face of ever-changing technology and has avoided the constraining effects that a rigid reading might have had on innovation for online services.

Section 512 divides online service providers into four categories, but within each of those there is room to provide services in many different ways. There are providers of unmanaged hosting, offering connectivity and server space for whatever applications (website hosting, email services, data backup) their customers choose to deploy, often with little granular access to or control over the content customers store using their services. There is a variety of user-generated content platforms, some of which are tailored to distributing or sharing a particular type of content (e.g., photos or video) and others of which are more tailored to enabling users to store or back up data without regard to the type of content. There are numerous websites that publish a mix of their own content and user-generated content – for example, newspaper sites that publish their own articles but also allow for user-generated content.

---

5 See, e.g., Section 512 of Title 17: Hearing Before the Subcomm. on C (2014) (“Section 512 Hearing”) (written statements of Sean M. O’Connor, Entrepreneurial Law Clinic, University of Washington (Seattle); Paul Doda, Elsevier; and Maria Schneider, musician).
8 See Viacom Int’l, Inc. v. YouTube, Inc., 676 F.3d 19, 38 (2nd Cir. 2011) (affirming that a narrow construction of “by reason of storage” would not meet the statute’s purpose), but see Gardner v. CafePress, Inc., No. 3:13-1108, 2014 U.S. Dist. LEXIS 25405, *8 (S.D. Cal. 2014) (failing to find that CafePress was, as a matter of law, a service provider because its services went beyond facilitating sales when it determined retail prices for goods sold through its site and paid users only a commission for those sales).
comments and discussion. In some cases the user-generated content functions may be relatively minor or ancillary, while in others they may be a key part of the site’s purpose or function.

Providers of each of these kinds of hosting services are eligible for safe harbor protection because courts have recognized that section 512(c) need not be limited to passive hosting. Major sectors of the Internet economy are based on organizing and distributing user-generated content in compelling ways, and these services rely on the legal certainty that safe harbors provide in order to operate. That certainty, however, often comes at a high price. For example, in UMG v. Shelter Capital the court ultimately found that the video streaming service, Veoh, was eligible as a provider under section 512(c), but the company ended in bankruptcy as a result of the extended legal battle. This hard-won certainty should be preserved, not re-litigated at the expense of more innovative start-ups.

3. **How have section 512’s limitations on liability for online service providers impacted the growth and development of online services?**

It is difficult to overstate section 512’s impact on the development of online services. Companies like Google, Amazon, and eBay have sought protection in section 512’s safe harbors, and websites like Reddit, imgur, and Tumblr might not exist but for the certainty provided by section 512. Indeed, many online providers, whether they specialize in search, user-generated content, or cloud storage and computing, “must engage in all kinds of acts that expose them to potential copyright infringement liability,” but would hesitate to invest in technologies and services that improve the “speed and capacity of the Internet” without the certainty of limited liability provided by section 512.

The success of section 512 in achieving Congress’ goals is due in large part to the safe harbors’ flexibility in adapting to new services and technologies. Although the process of adaptation requires difficult decisions and, at times, uncertainty, the basic framework of the safe harbor provisions remains resilient. The statute contemplates cooperation between rightsholders and service providers in addressing infringement. Beyond that direct cooperation, section 512 incentivizes collaboration between rightsholders and service providers in lawful means to make content available to users.

---

9 See Viacom, 676 F.3d at 39-40 (discussing how various functions relate to the “by reason of the storage at the direction of the user” language); UMG Recordings, Inc. v. Shelter Capital Partners LLC, 718 F.3d 1006, 1016 (9th Cir. 2013) (“Veoh”) (“We agree that the phrase ‘by reason of the storage at the direction of the user’ is broader causal language than UMG contends, ‘clearly meant to cover more than mere electronic storage lockers.’” ) (quoting UMG Recordings, Inc. v. Veoh Networks, Inc., 620 F. Supp. 2d 1081, 1088 (C.D. Cal. 2008)).


Whether in the form of innovative licensing models or voluntary enforcement measures, section 512 creates an environment in which these collaborative efforts can develop.

4. How have section 512’s limitations on liability for online service providers impacted the protection and value of copyrighted works, including licensing markets for such works?

Much of copyright law can be seen as a legal response to technologies that can facilitate the creation and distribution of copies, and developments in those technologies has been met with calls to adapt the legal regime to the specific issues they raise. As with previous technologies, electronic sharing and digital media formats have created new methods and opportunities for the creation, sale, licensing, and distribution of creative works, but they have also created challenges for the protection of the exclusive rights granted to authors by the Copyright Act. The DMCA and section 512 are among a number of legal doctrines that are essential to the digital marketplace and free expression.

As with earlier technologies that have led to major developments in copyright law, competition and innovation may prove as vital to deterring infringement as legal mandates and prohibitions. When “legitimate copyrighted works are available conveniently at competitive prices . . . that is going to dissuade piracy in the first instance.” As content owners and service providers continue their collaborative efforts to distribute legitimate copies of creative works online, new models will emerge to meet user demand that might otherwise be met through infringement. Answering the challenges new technology poses to the protection of rights is an ongoing effort, but the result is a more efficient and robust marketplace for creative works.

5. Do the section 512 safe harbors strike the correct balance between copyright owners and online service providers?

The DMCA “fully respects and extends into the digital environment the bedrock principle of ‘balance’ in American intellectual property law for the benefit of both copyright owners and users.” Section 512 furthers this balance by placing burdens on the parties best suited to handle them. In view of their

---

13 See Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53 (1884) (upholding copyright protection for photographs after lithography was used to reproduce a photo of Oscar Wilde); Sony Corp. of America v. Universal City Studios, Inc., 464 U.S. 417 (1984) (ruling that making home recordings of complete television shows for the purpose of time-shifting is not infringement); Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2d Cir. 2001) (granting a permanent injunction against posting of the DeCSS file decryption program online).
14 The home recording technology at issue in Sony v. Universal eventually died, but a competing technology (VHS) went on to become a successful outlet for the sales of audiovisual works. The disruptive technologies surrounding the reproduction and transfer of digital copies, such as those in Sony, led to a plethora of new licensing and distribution models for music and video which improved access to and choice among legitimate options for online consumers.
15 Innovative Business Models Hearing at 3 (statement of Paul Misener, Amazon.com).
superior knowledge of authorship, licensing, and applicable exceptions to exclusive rights, rightsholders bear the responsibility of issuing complete and accurate takedown notices. In view of their control of their services and ability to reach subscribers, service providers bear the responsibility of removing content, taking reasonable steps to contact the subscriber, and receiving counter-notices.

Shifting those burdens to require service providers to both locate and remove material that may be infringing upsets the commonsense balance of section 512 and creates risks and incentives that, as discussed below, run counter to the purpose of the statute and the public interest in free expression. Severe collateral consequences could flow from a decision to upend intermediaries’ role in the online ecosystem through copyright enforcement burden-shifting – including a drastic loss of emerging voluntary and judicial protections for fair use.

II. Notice-and-Takedown Process

6. How effective is section 512’s notice-and-takedown process for addressing online infringement?

Section 512’s notice-and-takedown regime is effective at streamlining copyright enforcement online while preserving important values embedded in the structure and objectives of the DMCA. Apparent structural inefficiencies in content removal reflect the considered judgment of Congress regarding the most efficient ways of promulgating public policy through private, informal and extrajudicial processes.

The notice-and-takedown process incorporates values of free expression, user privacy, fair process, and accurate copyright enforcement by imposing formal requirements for the removal of content from the Internet. By providing clear procedural steps for service providers to follow – and sheltering them from litigation risk if those steps are followed – the notice-and-takedown process fosters service providers’ “basic, vital and salutary function – namely, providing access to information and material for the public.” By imposing formal identification requirements and the obligation to consider fair use, the notice-and-takedown process retains a safety valve for free expression. Along with measures to correct error and deter abuse, these carefully structured procedural steps “balance the need for rapid response to potential infringement with the end-users[’] legitimate interests in not having material removed without recourse.”

---

17 This intention is clear from the DMCA notification procedures, which “place the burden of policing copyright infringement – identifying the potentially infringing material and adequately documenting infringement – squarely on the owners of the copyright.” Veoh, 718 F.3d at 1022.

18 This section is also responsive to Question 7, “How efficient or burdensome is section 512’s notice-and-takedown process for addressing online infringement? Is it a workable solution over the long run?”

19 UMG Recordings, 620 F. Supp. 2d at 1089.


The broad adoption of the notice-and-takedown process by service providers and stakeholders is a testament to its effective balance of obligations and benefits. According to U.S. Copyright Office records, by 2013 more than 66,000 providers today have registered agents for receipt of notice with the Copyright Office.\textsuperscript{22} While the “whack-a-mole” problem continues to vex rightholders, the notice-and-takedown process has generally scaled well to the exponential growth of online content through a hybrid process of both human and automated review.\textsuperscript{23}

There are opportunities to address unintended inefficiencies for rightholders and service providers that do not require Congress to re-allocate responsibilities for notice and takedown. Service providers and rightholders can work together to standardize notice processes to avoid the transaction costs inherent in dealing with peculiarities of different processes for submitting and receiving takedown notices. This would improve the efficient submission of valid notices and reduce the number of overall notices and the likelihood of escalated disputes. Rightsholders can refine both “human” and automated processes to reduce or prevent mistaken takedown notices.\textsuperscript{24} Again, this cooperation can take place without altering the fundamental operation of the notice-and-takedown process.

9. \textit{Please address the role of both “human” and automated notice-and-takedown processes under section 512, including their respective feasibility, benefits, and limitations.}

The choice between “human” and automated notice-and-takedown process under section 512 is in essence a speed/accuracy tradeoff. Ideally, rightsholders would individually inspect all allegedly infringing content before issuing takedown notices and providers would conduct their own review before removing content and forwarding notices on to the poster. However, individual review of all infringing content may not be practical in a world where every minute Facebook users share 2.5 million pieces of content, Twitter users tweet 300,000 times, Instagram users post 220,000 new photos, and YouTube users upload 72 hours of new video content.\textsuperscript{25} Automated notice-and-takedown processes can remove infringing content more expeditiously than review by an individual, but they can also more expeditiously remove content that is entirely lawful. Rightsholders should rely on automated processes to supplement rather than replace individual review and automated processes themselves should be refined and revised continually to accommodate fair use and otherwise prevent erroneous takedowns of legitimate content.

\textsuperscript{22} Comments of the Computer & Communications Industry Association (CCIA), \textit{Request for Comments on Department of Commerce Green Paper, Copyright Policy, Creativity, and Innovation in the Digital Economy} (Nov. 13, 2013), available at \url{http://goo.gl/S9H4xl}.

\textsuperscript{23} See Section 512 Hearing at 16 (statement of Annemarie Bridy, University of Idaho College of Law).

\textsuperscript{24} In a recent study, some service providers who perform individual review of takedown notices reported rejecting more than half of such notices. Urban, Schofield & Karaganis, \textit{infra} note 45, at 30-31.

\textsuperscript{25} Susan Gunelius, \textit{The Data Explosion in 2014 Minute by Minute (Infographic)}, ACI (July 12, 2014), \url{http://aci.info/2014/07/12/the-data-explosion-in-2014-minute-by-minute-infographic/}. 

7
Individual review allows for rightsholders to determine whether content is properly licensed, or subject to a limitation or exception before issuing a takedown notice. As the Ninth Circuit held in *Lenz v. Universal Music*, this isn’t just a good idea; it’s the law. The notice-and-takedown process is aimed solely at unauthorized content and section 512 “unambiguously contemplates fair use as a use authorized by law.” Copyright holders therefore must consider fair use before sending a takedown notice. Individual review is the best way to conduct the contextual and multi-factor inquiry that a fair use determination requires.

Of course, conducting that inquiry millions of times a week is beyond the capacity of even a sizable army of copyright enforcement agents. Automated processes may be up to the task in terms of scale and expediency but the power to remove content from the Internet is no small power to place in private hands. A process that is too automatic or too frictionless raises due process concerns. Rightsholders have readily admitted “that mistakes do occur” and there a number of examples of downright sloppiness in setting the parameters for takedown notices.

Given the potential for errors in or abuse of automated processes, neither rightsholders nor providers should rely on them exclusively. They are better cast as a supplement to review by trained individuals to handle issues related to the volume of infringing content. Even as a supplement to individual review that accounts for fair use or other circumstances that make the posting of content authorized by law, automated processes should be continually reassessed and improved to incorporate limitations and exceptions. Automated processes are best suited to cases where there is a 100-percent match between the infringed and the infringing content. CDT and R Street reassert CDT’s prior recommendations to incorporate into automated processes tools to exempt small excerpts of content embedded in longer works and mechanisms for posters to assert fair use and thereby sidestep automatic blocking.

---

27 *Id.* at *13. The rightsholder in *Lenz* also conceded that it must consider “other uses authorized by law such as compulsory licenses.” *Id.* at *16.
28 *Id.* at *20-21.
10. Does the notice-and-takedown process sufficiently address the reappearance of infringing material previously removed by a service provider in response to a notice? If not, what should be done to address this concern?

Rightsholders’ frustration with the reappearance of infringing content previously removed by a service provider is understandable and calls for further cooperation between all parties to address the “whack-a-mole” problem. But it does not warrant revising the essential balance Congress struck in the DMCA, giving rightsholders a powerful tool to remove content without resort to judicial process but expressly relieving service providers of an obligation to monitor their services for infringing activity. That balance has been hugely successful in making the Internet an engine of economic activity, innovation, and free expression. Shifting to a “notice-and-staydown” regime will do more harm than good while still failing to achieve the unrealistic goal of eradicating infringing content from the Internet. Effort would be better focused on voluntary measures to strengthen enforcement of existing law than attempting to change it.

By some accounts, “[t]he highest volume of [DMCA] notices seem to be for reposted works, i.e., ones that have already been taken down on notice, yet reappear within hours often on the same site.” Rightsholders have long called for addressing reposted content by amending the DMCA “to add an affirmative duty for online service providers to monitor for, and remove reposted works that they had already received notice on[,]” or to amend the DMCA’s “red flag knowledge” provision to evict from the safe harbor service providers who prohibit or discourage monitoring of their services for reposted content.

Even without the explicit imposition of a duty to monitor, a relaxed actual knowledge standard would upend the core of section 512’s balance between rightsholders, online service providers, and users, as well as the purposes that balance serves. Section 512 makes explicit that the safe harbor shall not be conditioned on “a service provider monitoring its service or affirmatively seeking facts indicating infringing activity[].” Congress recognized that providing rightsholders with tools to remove content without the burden and expense of judicial process raised due process concerns. To provide “all the process that it is due,” Congress put in place the notification requirements of subsection 512(c)(3) and the “provisions for the replacement of removed or disabled material in subsection 512(f).” A notice-and-staydown regime would place on service providers a duty to monitor for previously

33 See Section 512 Hearing at 6 (statement of Sean M. O’Connor, Professor of Law and Founding Director, Entrepreneurial Law Clinic, University of Washington (Seattle)).
37 Id. at 21.
removed content that would short-circuit both of these due process protections. Indeed, “notice-and-staydown” is simply a duty to monitor by another name.

However burdensome, requiring rightsholders to separately identify instances of infringement places that responsibility in the hands of the party with the best information about whether posted content is infringing – a determination that may change over time. Shifting that burden to the service provider undermines two key concerns of section 512. First, it requires service providers to monitor their users. As suggested by the title of section 512(m) – “PROTECTION OF PRIVACY” – this is not a role Congress intended or wanted service providers to undertake. Barring reappearance of previously flagged content would require ongoing, pervasive scrutiny and filtering of material posted by users. Pervasive scrutiny raises serious privacy concerns. Similarly, pervasive filtering raises serious free expression concerns, particularly considering that under a notice-and-staydown regime content flagged once must disappear from a service provider’s platform permanently.

Second, a service provider would lose the protection of section 512’s limitation on liability in the event of previously removed content reappearing. As the Ninth Circuit explained in Veoh, Congress “was loath to permit the specter of liability to chill innovation that could also serve substantial socially beneficial functions.”³⁸ A duty to monitor for reappearing content would raise that very specter of liability and chill innovation in online services that allow for the creation and posting of user-generated content. As CDT explained in comments to the European Commission as it considered the imposition of a duty to monitor, “mandating new policing obligations would create new barriers to innovation and competition in communications offerings and force existing service providers to focus on gatekeeping and surveillance functions instead of investing in valuable new services.”³⁹

A duty to monitor would fall especially hard on startups and other small entities, particularly those operating on a nonprofit basis. Larger and better-established firms can devote significant resources to content identification systems and automated “trusted partner” programs that allow rightsholders to flag content for removal before it is posted.⁴⁰ However, as explained by the Internet Archive’s comments in this proceeding, “the vast majority of service providers do not have the resources to develop such technology, and instead rely on human review and responses to notices of claimed

---

³⁸ Veoh, 718 F.3d at 1014.
⁴⁰ The cost of developing these technologies can be significant. For example, YouTube’s proprietary Content ID system reportedly cost more than $30 million and 50,000 hours to develop. Booz & Co., The Impact of U.S. Internet Copyright Regulations on Early-Stage Investment: A Quantitative Study 13 (2011), http://www.strategyand.pwc.com/media/uploads/Strategyand-Impact-US-Internet-Copyright-Regulations-Early-Stage-Investment.pdf (citing Eric Schmidt, Executive Chairman, Google, MacTaggart Lecture, Edinburgh International Television Festival, Aug. 26, 2011).
A duty to monitor could cause smaller entities to either refrain from allowing users to create or post content, or face bet-the-company liability if they allow users to do so.

Rejecting a “notice-and-staydown” duty to monitor is not tantamount to doing nothing to address the “whack-a-mole” problem. While the DMCA does not impose a requirement to prevent the reposting of infringing content, it also does not prevent service providers from taking steps to do so. Major online service providers can and do take measures to stop previously removed content from reappearing. However, it is essential that such measures are voluntary and not a prerequisite for section 512’s limitation on liability. Mandatory monitoring would raise serious legal and technical issues that would be a net loss to the Internet’s role as an engine of innovation and free expression. CDT and R Street are in strong agreement with the Department of Commerce that “[v]oluntary cooperation between ISPs and rights holders would offer a more flexible way of addressing this problem.”

12. Does the notice-and-takedown process sufficiently protect against fraudulent, abusive or unfounded notices? If not, what should be done to address this concern?

Safe harbor protection creates a powerful incentive for service providers to promptly remove content in response to a takedown notice. Although users have recourse to the counter-notice process, not every user who believes her content has been erroneously removed will avail herself of this remedy. Some commenters use counter-notice or “put-back” rates as a proxy for error rates in takedown notices, leading to the conclusion that erroneous takedown “is actually quite rare.” That conclusion rests on a flawed assumption that the failure to send a counter-notice necessarily means that the notice was valid, rather than the consequence of fear of liability, poorly designed systems for receiving counter-notices, or lack of technical or legal sophistication on the user’s part. The accuracy of takedown notices should be assessed by looking at notices, not the response to them.

New research suggests that unfounded takedown notices are common. In a report on the notice-and-takedown process, Urban, Schofield, and Karaganis evaluated 108.3 million takedown requests received by search engines, social media, and music services participating in the Lumen

---


42 See H.R. Rep. No. 105-796, at 73 (1998) (“This legislation is not intended to discourage the service provider from monitoring its service for infringing material.”).


transparency project over a six-month period.\textsuperscript{45} Nearly one third of the notices “had characteristics that raised concerns about the validity of the claim,” and approximately one in twenty-five notices were “fundamentally flawed.”\textsuperscript{46} Adjusting for the sample size, the researchers concluded that 30.1 million notices were of “questionable” validity and would “benefit from human review.”\textsuperscript{47} The researchers also found that 7.3 percent of notices targeted content that could be considered fair use—an error rate that worked out to nearly 8 million takedown requests in the six-month reporting period.\textsuperscript{48}

Improper notices have long concerned service providers and their community of users. Inaccurate or incomplete notices slow down the review process for service providers and lengthen the wait for rightsholders with legitimate copyright claims. The notice-and-takedown process can be abused to remove access to a competitor’s works or tie up a competitor’s content-review system.\textsuperscript{49} Abusive notices deliberately suppress public access to culture, information, and critical commentary, often for reasons unrelated to copyright.\textsuperscript{50} And they can stifle search engines, libraries, research archives, and other information services that depend on fair use.\textsuperscript{51}

Service providers are taking voluntary steps to improve counter-notice and increase transparency reporting around their takedown practices.\textsuperscript{52} Open-ended formats like email are being replaced by webforms that can filter out non-copyright concerns like trademark, defamation, and privacy.\textsuperscript{53} They can also educate notice-sendners about their rights under the DMCA and their duty to consider fair use. More and better data reporting on the part of service providers, rightsholders, and commercial takedown services will improve policy responses to improper notices and takedowns.


\textsuperscript{46} \textit{Id.} at 78, 88, 90.

\textsuperscript{47} \textit{Id.} at 88, 90.

\textsuperscript{48} \textit{Id.} at 96.


\textsuperscript{51} Internet Archive Comments at 2.

\textsuperscript{52} Urban, Schofield & Karaganis at 37-38, 40.

13. Has section 512(d), which addresses “information location tools,” been a useful mechanism to address infringement that occurs as a result of a service provider’s referring or linking to infringing content? If not, what should be done to address this concern?

The activities that the term “information location tools” encompasses — “referring or linking users to an online location” — are essential to the economic and social benefits that the Internet provides. It would be impossible to engage in meaningful use of the Internet without information location tools to purposefully navigate the World Wide Web’s billions of pages.\(^\text{54}\) Any assessment of whether section 512(d) is a “useful mechanism” must remain cognizant of the essential role of information location tools in empowering both Internet users and content creators.

That assessment must also remain cognizant of the limited role of information location tools in addressing infringement on unrelated sites or services. Many discussions of the role and responsibility of information location tools overstate the causal connection between those tools and infringement on other sites. Indeed, the Office’s Notice of Inquiry asks respondents to address “infringement that occurs as a result of a service provider’s referring or linking to infringing content.” While information location tools make it easier for users to access infringing content, it is neither factually correct nor advisable as a policy matter to treat those tools as proximate causes of infringement. Search is not the primary means by which users access infringing content, accounting for less than 16 percent of traffic to major pirate sites.\(^\text{55}\) Addressing infringement that “occurs as a result of” information location tools has a limited impact on addressing online infringement generally.

Of greater concern, treating information location tools as causes of infringement echoes troubling legal developments in other jurisdictions where unauthorized linking to content has been challenged as a potential act of infringement.\(^\text{56}\) It is unrealistic to expect providers of information tools — particularly search engines that index the entire web — to seek authorization before linking to content. Requiring search engines to “do more” to enforce domestic intellectual property laws invites other jurisdictions to require search engines to do more to enforce their own national priorities, which may lead to the disappearance of content that is lawful outside of that country.

Proposals for mandated impairment or alteration of web indexing or searching has proven deeply unpopular with Internet users. The Stop Online Privacy Act’s (SOPA) provision for court orders directing search engine to take measures “designed to prevent the foreign infringing site . . . or portion of such site specified in the order, from being served as a direct hypertext link” generated nearly as much

---

\(^{54}\) By one estimate, the indexed web currently contains more than 4.63 billion pages. *The Size of the World Wide Web (The Internet)*, WorldWideWebSize.com, [http://www.worldwidewebsize.com](http://www.worldwidewebsize.com).


opposition as SOPA’s provision for site blocking by ISPs. Given the potential threats to free expression and access to knowledge that attend mandated impairment of users’ ability to find Internet content, the due process protections in current section 512(d) should not be weakened.

There are ways for information tools to play a more proactive role in combatting online infringement without alterations to the safe harbor. Research conducted by Carnegie Mellon University’s Initiative for Digital Entertainment Analytics supports the conclusion that search engines can take steps to reduce the likelihood that users will click on a link that takes them to infringing content. Search providers are already moving in this direction. Microsoft’s Bing search engine is currently experimenting with modifications to both its ranking algorithm and auto-suggest features to lead users away from infringing content. Google likewise uses DMCA removal notices to demote sites in search results. As with voluntary responses to infringement by hosting providers, voluntary initiatives by search providers can combat online infringement without introducing the host of legal and technical difficulties that come with mandated search filtering.

15. Please describe, and assess the effectiveness or ineffectiveness of, voluntary measures and best practices—including financial measures, content “filtering” and takedown procedures—that have been undertaken by interested parties to supplement or improve the efficacy of section 512’s notice-and-takedown process.

The proliferation of voluntary measures that supplement section 512’s notice-and-takedown process make any assessment of intermediaries’ response to infringement that focuses solely on section 512 necessarily incomplete. A representative list of those measures includes:

- **Content identification and hashing**: Some hosting providers such as Dropbox place a unique “fingerprint” on files that allow it to detect and prevent the reposting of infringing content. Other proprietary systems like Audible Magic or Content ID allow rightsholders to flag content and then make determinations about how the service provider treats their content (such as removing or monetizing the content).

---

60 Google, How Google Fights Piracy at 18.
62 See Urban, Schofield & Karaganis at 58.
● **Search demotion**: As discussed above, major search providers like Google and Microsoft factor takedown notices into their search algorithms and demote search results associated with infringing activity.

● **Notice-forwarding**: A number of U.S.-based Internet service providers participate in notice forwarding programs, such as the Copyright Alert System, that notify users when their accounts have been associated with infringing activity and respond with a variety of measures intended to deter infringement from that account.63

● **“Trusted submitter” programs**: Some service providers offer trusted submitter (or partner or flagger) programs that facilitate the submission of bulk takedown notices and remove limits or technical requirements placed on other notice-senders (such as CAPTCHAs).64

● **Financial best practices**: Working with the Intellectual Property Enforcement Coordinator, ad networks have implemented practices to prevent websites “principally dedicated to selling counterfeit goods or engaging in copyright piracy and have no substantial non-infringing uses” from participating in advertising programs.65

The lack of comprehensive reporting of certain voluntary measures implemented by service providers or other third parties complicates efforts to render a full assessment of their effectiveness.66 This points to transparency as a critical feature that should be part of any extrajudicial process that results in content either disappearing or never appearing on the Internet or attaches other consequences for alleged infringing activity (such as economic loss or termination from online platforms). The more we know about voluntary measures, the more accurate our assessment of their performance in both deterring infringement and facilitating the creation of and access to lawful content.

Voluntariness is as critical as transparency. Governmental bodies can facilitate the creation of voluntary best practices, such as the Department of Commerce’s multistakeholder process on DMCA notice-and-takedown practices.67 However, it is essential that government facilitation does not shade

66 Some voluntary measures, such as Google’s trusted submitter programs, do feature consistent reporting and access to data through transparency reports. See Urban, Schofield & Karaganis at 9 & n.2.
into government coercion by attaching — or threatening to attach — legal consequences to nonparticipation. That coercion raises substantial concerns regarding due process and the protection of free speech. In other contexts, courts have properly found that coercion by law enforcement to “voluntarily” take action against illicit content without legal process can violate the constitutional rights of intermediaries.68

Finally, voluntary measures should be adopted and refined through an inclusive process open to all affected parties. The DMCA’s notice-and-takedown process is a carefully constructed balance of the rights of interests of rightsholders, service providers, and users. Voluntary measures that serve as supplements or adjuncts to the DMCA’s formal process should accommodate and reflect that balance.

III. Legal Standards

19. Assess courts’ interpretations of the “actual” and “red flag” knowledge standards under the section 512 safe harbors, including the role of “willful blindness” and section 512(m)(1) (limiting the duty of a service provider to monitor for infringing activity) in such analyses. How are judicial interpretations impacting the effectiveness of section 512?

Courts have correctly interpreted the “actual knowledge” and “red flag” provisions of section 512 to refer to “specific and identifiable instances of infringement.”69 A general knowledge standard, particularly when coupled with an understanding of willful blindness that would require service providers to seek such knowledge, would evict nearly any service provider from the safe harbor if they do not either prevent the posting of user-generated content or monitor that content and the users who post it. That obligation would be at odds with the clear language of the statute and Congress’ intent not to require service providers to engage in such monitoring.

The Notice of Inquiry describes section 512(m)(1) as “limiting the duty of a service provider to monitor for infringing activity.” But section 512(m)(1) does not “limit” service provider’s duty to monitor. It states that service providers have no such duty (other than to accommodate standard technical measures). As the district court in Viacom explained, a general knowledge standard would impose a responsibility to ferret out instances of infringement at odds with the respective roles and duties of rightsholders and service providers under section 512: “To let knowledge of a generalized practice of infringement in the industry, or a proclivity of users to post infringing materials, impose responsibility on service providers to discover which of their users’ postings infringe a copyright would contravene the structure and operation of the DMCA.”70

68 See, e.g., Backpage.com, LLC v. Dart, 807 F.3d 229 (7th Cir. 2015) (law enforcement pressure on online payment processors to suppress speech constituted government action and a First Amendment violation).
69 Viacom, 676 F.3d at 31.
70 Viacom, 718 F. Supp. 2d at 522.
Every website or service that allows user-generated content operating at any scale knows that some users will inevitably post infringing content. Congress also knew this, which is why it created the DMCA safe harbor. If such general knowledge disqualified a service provider for the safe harbor, no service provider allowing users to post their own content would qualify for it. If service providers were deemed to have constructive knowledge of infringing activity because they failed to seek it out, section 512’s limitation on liability would lie beyond the reach of both those who investigate infringement on their services and those who do not. The safe harbor would become a mirage.

Fortunately, courts have consistently interpreted actual and red flag knowledge to refer to specific instances of infringement. The DMCA’s notice process is the proper framework for rightsholders, who are “better able to efficiently identify infringing copies” to communicate with providers regarding acts of infringement. Congress intended this framework to provide “strong incentives for service providers and copyright owners to cooperate to detect and deal with copyright infringement.” A framework pursuant to which rightsholders could use information about instances of infringement to evict service providers from the safe harbor rather than initiate a takedown pursuant to section 512(c) would destroy the cooperation between rightsholders and service providers envisaged by the statute.

Interpreting actual and red flag knowledge to require specific knowledge of particular infringing activity allows service providers to investigate potential infringement on their services without risking loss of their protection under the safe harbor. In this sense, section 512 resembles section 230 of the Communications Act, which allows service providers to investigate potentially defamatory or otherwise unlawful content without that investigation placing them at risk of liability as the publisher of that content. Section 512 and section 230 have been hugely successful in fostering the Internet as a place for vibrant commercial, innovative, and expressive activity. An expansive reading of section 512’s actual and red flag knowledge provisions would put that success greatly at risk.

IV. Repeat Infringers

22. Describe and address the effectiveness of repeat infringer policies as referenced in section 512(i)(A).

The DMCA’s repeat-infringer provision provides the essential flexibility to accommodate the many different types of intermediaries who are necessary to allow users to access information and creative content via the Internet. The provision also leaves room for the due process protections needed to ensure that users and content creators are not wrongfully shut off from reaching one another. While specific cases may present novel interpretive issues, the fundamental language and structure of section 512(i)(A) is sound.

---

71 UMG Recordings, 620 F. Supp. 2d at 1022.
73 This section is also responsive to Question 23, “Is there sufficient clarity in the law as to what constitutes a repeat infringer policy for purposes of section 512’s safe harbors? If not, what should be done to address this concern?”
To maintain safe-harbor eligibility, a service provider must have “adopted and reasonably implemented . . . a policy that provides for the termination in appropriate circumstances of subscribers and account holders . . . who are repeat infringers.” Rightsholders and service providers definitely should cooperate to ensure that measures are taken to stop those who repeatedly engage in blatant infringement, particularly where such infringement is commercial in nature. At the same time, the key qualifiers of a service provider’s obligations under section 512(i)(A) – that a policy need only be “reasonably implemented” and that repeat infringers need only be terminated in “appropriate circumstances” – create essential flexibility for service providers to account for specific facts and circumstances involved in a case of repeat infringement without putting their protection under section 512 on the line. 

*Capitol Records v. Vimeo* demonstrates the wisdom of section 512’s flexibility. As Vimeo’s service grew, so did the volume of takedown requests. Vimeo revised its policy to adapt to this increase, which the court took as indicia of the reasonableness of Vimeo’s implementation of a repeat infringer policy. Although Capitol Records objected to particulars of the policy (such as not blocking IP addresses) and the sufficiency of employees’ knowledge of it, the court noted that implementation must be reasonable, not perfect. If repeat infringer policies had inflexible, prescribed criteria, Vimeo would have been constrained or simply incapable of adapting its policy to the evolving use of its service. If deviation from a strict implementation of a repeat infringer policy knocked service providers out of the safe harbor, Vimeo would have a strong disincentive to develop more than a minimal policy, or to make revisions and improvements to that policy.

Moreover, strict implementation could lead to wrongful termination of alleged infringers. CDT raised this concern in its 2010 study on takedown notices sent to political campaigns. Noting that campaigns are “serial fair users” because of their reliance on news footage, we discussed the potential nightmare scenario that campaigns may face if strict implementation of a repeat infringer policy results in a ban from popular user-generated content platforms entirely. Since 2010, the importance of hosting platforms to reach the public has only grown, making procedural protections for users all the more important in the implementation of repeat infringer policies.

The need for procedural safeguards for Internet users, and leeway for service providers, is even greater in the case of network providers entitled to safe harbor protection under section 512(a). While termination of an account by a section 512(c) content-hosting platform can have significant consequences, those consequences pale in comparison to termination of an account by a section 512(a) “conduit” Internet service provider (ISP). Internet access is essential to work, education, e-commerce, access to information, and civic engagement. Accordingly, great care should be taken in

---

76 Vimeo, 972 F. Supp. at 516.
77 CDT, Campaign Takedown.
78 Id. at 17.
applying precedents regarding termination policies of hosting providers to those who provide transitory digital network communications. Indeed, given that there is no corollary to section 512(c)’s notice provision in section 512(a), an ISP should not be expected to terminate an account holder simply because it receives a set number of notices. This is particularly true when those notices pertain to activity at a particular IP address assigned to the account holder but not necessarily involving misconduct by the account holder herself.

What may be an “appropriate circumstance” for termination from a hosting platform may be an inappropriate circumstance for termination from an ISP, particularly when there are educational or technical alternatives to termination to address repeat infringement. Termination of accounts with section 512(a) conduit service providers should be a last resort, and service providers should have latitude to apply graduated response processes. While CDT and R Street take no position here on whether section 512(i)(A) requires an adjudication of infringement before termination in every case involving every category of service provider, any reasonable termination policy for an ISP’s subscribers must include strong notice and procedural protections against wrongful or disproportionate termination. Particularly when a user has limited broadband service options, or where termination by one ISP may make a user ineligible to subscribe to another, the consequences of being denied Internet access by one’s provider are profound.

V. Standard Technical Measures

24. Does section 512(i) concerning service providers’ accommodation of “standard technical measures” (including the definition of such measures set forth in section 512(i)(2)) encourage or discourage the use of technologies to address online infringement?

The DMCA’s provision regarding standard technical measures bears the same hallmarks of flexibility and cooperation that have made the notice-and-takedown process a major contributor to the growth of the Internet, and the creativity and innovation it fosters. Although no measure has ever been judicially determined to be “standard” within the meaning of the statute, the continued development and refinement of technologies to address online infringement, discussed above, show that the provision has not obstructed appropriate technological responses to infringement as the nature of


80 This section is also responsive to Question 25, “Are there any existing or emerging ‘standard technical measures’ that could or should apply to obtain the benefits of section 512’s safe harbors?”
online activity evolves. Most importantly, section 512(i)’s insistence on an inclusive and open process in developing technological measures has averted the imposition of technological mandates that would harm the development of the Internet and hamstring the flexibility built into the DMCA.

Some rightsholder advocates read section 512(i) to require service providers to “put ‘standard technical measures’ in place to identify and protect copyrighted works.” This is not correct. The statute requires only that a service provider “accommodates and does not interfere with a standard technical measure.” There is a world of difference between a non-interference standard to accommodate measures used by rightsholders to identify infringing works and a technological mandate requiring service providers to implement those technical measures themselves. Such a mandate would be profoundly unwise as a matter of technology policy.

Just as troubling as efforts to read a technological mandate into section 512(i) is the attempt to read the clear requirement for broad consensus and an open process out of it. The contention that “progress should trump consensus” is as out of keeping with the clear text and purpose of the DMCA as the contention that expediency should trump due process. The text of section 512(i) is explicit: standard technical measures are those “developed pursuant to a broad consensus of copyright owners and service providers in an open, fair, voluntary, multi-industry standards process.” The legislative history is also clear that Congress intended any standard technical measures to be developed in “recognized open standards bodies” or similarly open and fair ad hoc groups.

Open standards bodies have been critical to the successful development of a decentralized and open Internet. Entities like the Internet Engineering Task Force and the World Wide Web Consortium have worked to foster interoperability, nondiscrimination, and innovation in the content and services made available via the Internet and also in the devices and methods through which Internet-delivered content and services are accessed. Inclusive open standards bodies also have been a bulwark against attempts by governments to prescribe or limit the technologies through which online content and services are accessed. Short-circuiting open and voluntary multi-stakeholder processes in the name of progress in addressing the concerns of one constituency would be a profoundly ill-advised departure from the Internet’s successful governance model.

81 ITIF Comments at 2.
83 ITIF Comments at 5.
85 S. Rep. No. 105-190, at 52.
86 See CDT, The Importance of Voluntary Technical Standards for the Internet and Its Users at 3 (Aug. 29, 2012) (opposing efforts to impose Internet technical standards via the International Telecommunications Union, and noting that “[a]doption of technical standards on the Internet has always been voluntary, and for good reason”), available at https://www.cdt.org/files/pdfs/Importance%20of%20Voluntary%20Technical%20Standards.pdf.
Conclusion

CDT and R Street strongly advise caution in considering proposed alterations to the DMCA’s now well-understood framework. In an era in which copyright holders perceive an increasing threat from digital technologies, the temptation to alter the DMCA’s balance of duties and obligations to address the perceived threat is understandable. Copyright holders want Internet intermediaries to work more actively to police copyright interests, but shifting copyright-protection burdens further onto online service providers will jeopardize the free expression and access-to-knowledge benefits provided to Internet users in the United States and around the world. Online service providers have continued to cooperate and adapt in complying with their obligations under section 512. That process of cooperation and adaptation should be allowed to continue without disturbing the fundamental balance built into the DMCA’s framework that has allowed our modern Internet to flourish.

Respectfully submitted,

Erik Stallman
Stan Adams
Rita Cant

Center for Democracy & Technology

Mike Godwin

R Street Institute